UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

Form 10-K

☒ ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d)
OF THE SECURITIES EXCHANGE ACT OF 1934
For the fiscal year ended December 31, 2021
OR
☐ TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d)
OF THE SECURITIES EXCHANGE ACT OF 1934
For the transition period from to
Commission file number 1-8974

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Honeywell International Inc.

(Exact name of registrant as specified in its charter)

Delaware	22-2640650
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
855 South Mint Street Charlotte, North Carolina	28202
(Address of principal executive offices)	(Zip Code)

Registrant's telephone number, including area code (704) 627-6200

Securities registered pursuant to Section 12(b) of the Act:

Title of Each Class	Trading Symbols	Name of each exchange on which registered
Common Stock, par value $1 per share*	HON	The Nasdaq Stock Market LLC
1.300% Senior Notes due 2023	HON 23A	The Nasdaq Stock Market LLC
0.000% Senior Notes due 2024	HON 24A	The Nasdaq Stock Market LLC
2.250% Senior Notes due 2028	HON 28A	The Nasdaq Stock Market LLC
0.750% Senior Notes due 2032	HON 32	The Nasdaq Stock Market LLC

* The common stock is also listed on the London Stock Exchange.

Securities registered pursuant to Section 12(g) of the Act: None

Indicate by check mark if the Registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☒ No ☐

Indicate by check mark if the Registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Exchange Act. Yes ☐ No ☒

Indicate by check mark whether the Registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the Registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the Registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☒ No ☐

Indicate by check mark whether the Registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	☒		Accelerated filer ☐	Non-accelerated filer ☐	Smaller reporting company	☐	Emerging growth company	☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report. ☒

Indicate by check mark whether the Registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes ☐ No ☒

The aggregate market value of the voting stock held by nonaffiliates of the Registrant was approximately $152.8 billion at June 30, 2021.

There were 685,818,771 shares of Common Stock outstanding at January 28, 2022.

Documents Incorporated by Reference

Part III: Proxy Statement for Annual Meeting of Shareowners to be held April 25, 2022.

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ORGANIZATION OF OUR ANNUAL REPORT ON FORM 10-K

The order and presentation of content in our Annual Report on Form 10-K (Form 10-K) differs from the traditional U.S. Securities and Exchange Commission (SEC) Form 10-K format. We believe that our format improves readability and better presents how we organize and manage our business. See Form 10-K Cross-Reference Index for a cross-reference to the traditional SEC Form 10-K format.

CAUTIONARY STATEMENT ABOUT FORWARD-LOOKING STATEMENTS

We describe many of the trends and other factors that drive our business and future results in the section titled Management's Discussion and Analysis of Financial Condition and Results of Operations and in other parts of this report (including under the section titled Risk Factors). Such discussions contain forward-looking statements within the meaning of Section 21E of the Securities Exchange Act of 1934, as amended (the Exchange Act). Forward-looking statements are those that address activities, events or developments that management intends, expects, projects, believes or anticipates will or may occur in the future. They are based on management's assumptions and assessments in light of past experience and trends, current economic and industry conditions, expected future developments and other relevant factors. They are not guarantees of future performance, and actual results, developments and business decisions may differ significantly from those envisaged by our forward-looking statements. We do not undertake to update or revise any of our forward-looking statements, except as required by applicable securities law. Our forward-looking statements are also subject to risks and uncertainties, including the impact of the COVID-19 pandemic, that can affect our performance in both the near- and long-term. In addition, no assurance can be given that any plan, initiative, projection, goal commitment, expectation, or prospect set forth in this Form 10-K can or will be achieved. These forward-looking statements should be considered in light of the information included in this Form 10-K, including, in particular, the factors discussed within the section titled Risk Factors. Such factors may be revised or supplemented in subsequent reports on Forms 10-Q and 8-K.

ABOUT HONEYWELL

Honeywell International Inc. (Honeywell or the Company) invents and commercializes technologies that address some of the world’s most critical challenges around energy, safety, security, air travel, productivity, and global urbanization. We are a leading software-industrial company committed to introducing state of the art technology solutions to improve efficiency, productivity, sustainability, and safety in high growth businesses in broad-based, attractive industrial end markets. As a diversified technology and manufacturing company, we are uniquely positioned to blend physical products with software to serve customers worldwide with aerospace products and services, energy efficient products and solutions for businesses, specialty chemicals, electronic and advanced materials, process technology for refining and petrochemicals, and productivity, sensing, safety and security technologies for buildings and industries. Our products and solutions enable a safer, more comfortable, and more productive world, enhancing the quality of life of people around the globe. The Honeywell brand dates back to 1906, and the Company was incorporated in Delaware in 1985.

Our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and any amendments to those reports, are available free of charge on our website (honeywell.com) under the heading Investors (see SEC Filings) immediately after they are filed with, or furnished to, the SEC. Honeywell uses our Investor Relations website, investor.honeywell.com, as a means of disclosing information which may be of interest or material to our investors and for complying with disclosure obligations under Regulation FD. Accordingly, investors should monitor our Investor Relations website, in addition to following our press releases, SEC filings, public conference calls, webcasts, and social media. Information contained on or accessible through, including any reports available on, our website is not a part of, and is not incorporated by reference into, this Form 10-K or any other report or document we file with the SEC. Any reference to our website in this Form 10-K is intended to be an inactive textual reference only.

In addition, in this Form 10-K, the Company incorporates by reference certain information from its definitive Proxy Statement for the 2022 Annual Meeting of Stockholders, which we expect to file with the SEC on or about March 11, 2022 (the Proxy Statement), and which will also be available free of charge on our website.

EXECUTIVE SUMMARY

The COVID-19 pandemic continued to impact the global economy and certain of our business; however, our execution during 2021 allowed us to grow our market share, exceed our financial commitments, and strategically position our business for continued success. In 2021, we delivered sales growth of 5% to $34.4 billion, led by strong demand in our Warehouse and Workflow Solutions, Productivity Solutions and Services, Advanced Materials, and Commercial Aviation businesses.

We deepened focus on our three transformation initiatives to actively deploy capital to achieve portfolio optimization, drive a culture of innovation enabling growth, and lead in Environmental, Social, and Governance objectives. In executing on these initiatives, we completed four acquisitions, drove growth in sustainable technologies and positively impacted our communities that face continued challenges from the COVID-19 pandemic and other socioeconomic factors. While executing our strategy, we maintained our commitment to create long-term shareowner value by realizing the benefits of operating efficiencies and deploying $8.2 billion to capital expenditures, dividends, share repurchases, and mergers and acquisitions, which was approximately $2.2 billion in excess of our operating cash flow for the year.

As we look forward, we intend to continue deploying capital to high-return opportunities, including software and services with recurring revenue streams, and sustainable technologies, positioning our business for future growth. Overall, our orders were up 11%, compared to 2020, and we carry a robust backlog of $27.7 billion as of December 31, 2021. We continue to monitor and respond to several ongoing macroeconomic factors, including supply chain constraints accompanied by shortages and rising costs for materials and labor. We implemented and continue to identify actions to mitigate the effect of these factors and reduce the impact on our businesses.

YEAR IN REVIEW

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Sales up by **5%** to

$34.4 BILLION

led by strong demand in certain of our businesses as result of the recovery from the global recession created by the COVID-19 pandemic

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Diluted EPS up by

17.7%

reflecting strong earnings in our core businesses and continued deployment of capital for share repurchases

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Operating cash flows of

$6 BILLION

as we remain focused on increasing operating cash flows through revenue growth, margin expansion, and improved working capital turnover

BUSINESS OBJECTIVES

Our businesses are focused on the following objectives:

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Driving profita
products throu
technological
enhancement
regions;

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Continuing to
premier softwa
ongoing expan
solutions for a
plants, and wo
revenue mode
Forge is an en
solution for dig
Honeywell For
products and
companies use
that improve p
support sustai
workers;

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Expanding ma
performance t
and Honeywel
commercial ex
manufacturing
improvements

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Executing disc
through rigoro
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Controlling co
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Increasing ava
cash flow gene
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expenditures;

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Committing to
and governanc
responsible co

MAJOR BUSINESSES

We globally manage our business operations through four reportable segments: Aerospace, Honeywell Building Technologies, Performance Materials and Technologies, and Safety and Productivity Solutions. The remainder of Honeywell's operations is presented in Corporate and All Other, which is not a reportable business segment. Financial information related to our segments is included in Note 22 Segment Financial Data of Notes to Consolidated Financial Statements. The major products and services, including Honeywell Forge solutions supported by Honeywell Connected Enterprise, customers, uses and key competitors of each of our reportable segments are:

AEROSPACE

Aerospace is a leading global supplier of products, software and services for aircrafts that it sells to original equipment manufacturers (OEM) and other customers in a variety of end markets including: air transport, regional, business and general aviation aircraft, airlines, aircraft operators, and defense and space contractors. Aerospace products and services include auxiliary power units, propulsion engines, environmental control systems, integrated avionics, wireless connectivity services, electric power systems, engine controls, flight safety, communications, navigation hardware, data and software applications, radar and surveillance systems, aircraft lighting, management and technical services, advanced systems and instruments, satellite and space components, aircraft wheels and brakes, repair and overhaul services, and thermal systems. Aerospace also provides spare parts, repair, overhaul, and maintenance services (principally to aircraft operators) for the aftermarket. Honeywell Forge solutions are leveraged by our customers as tools to turn data into predictive maintenance and predictive analytics to enable better fleet management and make flight operations more efficient.

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HONEYWELL BUILDING TECHNOLOGIES

Honeywell Building Technologies is a leading global provider of products, software, solutions and technologies that enable building owners and occupants to ensure their facilities are safe, energy efficient, sustainable and productive. Honeywell Building Technologies products and services include advanced software applications for building control and optimization; sensors, switches, control systems and instruments for energy management; access control; video surveillance; fire products; and installation, maintenance and upgrades of systems. Honeywell Forge solutions enable our customers to digitally manage buildings, connecting data from different assets to enable smart maintenance, improve building performance and even protect from incoming security threats.

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PERFORMANCE MATERIALS AND TECHNOLOGIES

Performance Materials and Technologies is a global leader in developing and manufacturing high-quality performance chemicals and materials, process technologies and automation solutions. The segment is comprised of Process Solutions, UOP, and Advanced Materials. Process Solutions provides automation control, instrumentation, advanced software and related services for the oil and gas, refining, pulp and paper, industrial power generation, chemicals and petrochemicals, biofuels, life sciences, and metals, minerals and mining industries. Through its smart energy products, Process Solutions enables utilities and distribution companies to deploy advanced capabilities to improve operations, reliability, and environmental sustainability. UOP provides process technology, products, including catalysts and adsorbents, equipment, and consulting services that enable customers to efficiently produce gasoline, diesel, jet fuel, petrochemicals and renewable fuels for the petroleum refining, gas processing, petrochemical, and other industries. Advanced Materials manufactures a wide variety of high-performance products, including materials used to manufacture end products such as bullet-resistant armor, nylon, computer chips and pharmaceutical packaging, and provides reduced and low global-warming-potential materials based on hydrofluoro-olefin technology. In the industrial environment, Honeywell Forge solutions enable integration and connectivity to provide a holistic view of operations and turn data into clear actions to maximize productivity and efficiency. Honeywell Forge's cybersecurity capabilities help identify risks and act on cyber-related incidents, together with enabling improved operations and protecting processes, people, and assets.

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SAFETY AND PRODUCTIVITY SOLUTIONS

Safety and Productivity Solutions is a leading global provider of products and software that improve productivity, workplace safety, and asset performance to customers around the globe. Safety products include personal protection equipment (PPE), apparel, gear, and footwear; gas detection technology; and cloud-based notification and emergency messaging. Productivity Solutions products and services include mobile devices and software for computing, data collection and thermal printing; supply chain and warehouse automation equipment, software and solutions; custom-engineered sensors, switches, and controls for sensing and productivity solutions; and software-based data and asset management productivity solutions. Honeywell Forge solutions digitally automate processes to improve efficiency while reducing downtime and safety costs.

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COMPETITION

We are subject to competition in substantially all product and service areas. Some of our key competitors include but are not limited to:

AEROSPACE

- Garmin
- L3 Harris
- Northrop Grumman
- Raytheon Technologies
- Safran
- Thales

HONEYWELL BUILDING TECHNOLOGIES

- Carrier Global
- Johnson Controls
- Schneider Electric
- Siemens

PERFORMANCE MATERIALS AND TECHNOLOGIES

- Arkema
- Axens
- Chemours
- DSM
- Emerson Electric
- Haldor Topsoe
- Lummus Technology
- Rockwell Automation

SAFETY AND PRODUCTIVITY SOLUTIONS

- 3M
- Kion Group
- MSA Safety Incorporated
- TE Connectivity
- Zebra Technologies

Our businesses compete on a variety of factors such as performance, applied technology, product innovation, product recognition, quality, reliability, customer service, delivery, and price. Brand identity, service to customers, and quality are important competitive factors for our products and services. Our products face considerable price competition. While our competitive position varies among our products and services, we are a significant competitor in each of our major product and service classes.

BACKLOG

Our backlog represents the estimated remaining value of work to be performed under firm contracts. Backlog is equal to our remaining performance obligations under the contracts that meet the guidance on revenue from contracts with customers as discussed in Note 3 Revenue Recognition and Contracts with Customers of Notes to Consolidated Financial Statements. Backlog was $27,682 million and $25,769 million at December 31, 2021 and 2020. The backlog previously disclosed as of December 31, 2020, is revised to reflect a prior period correction, which had no impact on our results of operations. We expect to recognize approximately 59% of our remaining performance obligations as revenue in 2022, and the remaining balance thereafter.

U.S. GOVERNMENT SALES

The Company, principally through our Aerospace segment, sells to the U.S. government acting through its various departments and agencies and through prime contractors, including the U.S. Department of Defense (as both a prime contractor and subcontractor). We do not expect our overall operating results to be significantly affected by any proposed changes in 2022 federal defense spending due to the varied mix of the government programs which impact us (OEM production, engineering development programs, aftermarket spares and repairs, and overhaul programs), as well as our diversified customer base.

	Years Ended December 31,		
U.S. Government Sales ($ in millions)	**2021**	**2020**	**2019**
Sales to the U.S. Department of Defense	$ 3,219	$ 3,661	$ 3,491
Sales to other U.S. government departments and agencies	703	557	566
Total Sales to the U.S. Government	**$3,922**	**$4,218**	**$4,057**

INTERNATIONAL OPERATIONS

We engage in manufacturing, sales, service and research and development globally. U.S. exports and non-U.S. manufactured products are significant to our operations. U.S. exports represented 12% of our total sales in in 2021 and 2020, and 15% in 2019. Non-U.S. manufactured products and services, mainly in Europe and Asia, were 40% of our total sales in 2021, 2020, and 2019.

	Year Ended December 31, 2021			
Manufactured Products and Systems and Performance of Services	**Aerospace**	**Honeywell Building Technologies**	**Performance Materials and Technologies**	**Safety and Productivity Solutions**
	(% of Segment Sales)			
U.S. exports	23 %	2 %	13 %	1 %
Non-U.S. manufactured products/services	15 %	66 %	57 %	35 %

Information related to risks related to our foreign operations is included in the section titled Risk Factors under the caption "Macroeconomic and Industry Risks."

RAW MATERIALS

The vast majority of principal raw materials used in our operations are readily available; however, during 2021, we experienced supply chain constraints for certain raw materials. While the current supply chain constraints have not significantly impacted our business, to reduce the impact of current and future disruptions we have implemented short-term and long-term strategies to reduce the impact of current and future disruptions, and digital solutions to manage shortages and prioritize mitigation actions. We continue to leverage existing supplier relationships, and are not dependent on any one supplier for a material amount of our raw materials.

Prices of certain key raw materials, including copper, fluorspar, tungsten salts, ethylene, aluminum, and molybdenum in Performance Materials and Technologies and nickel, steel, titanium, and other metals in Aerospace, are expected to fluctuate. We offset raw material cost increases with formula-driven or long-term supply agreements, price increases and hedging activities where feasible. We anticipate that supply chain constraints for certain raw materials will continue into 2022; however, we believe our short-term and long-term strategies position us well to mitigate and reduce the impact these factors may have on our businesses. As such, we do not presently anticipate that a shortage of raw materials will cause any material adverse impacts during 2022.

PATENTS, TRADEMARKS, LICENSES AND DISTRIBUTION RIGHTS

Our segments are not dependent upon any single patent or related group of patents, trademarks, or any licenses or distribution rights. In our judgment, our intellectual property rights are adequate for the conduct of our business. We believe that, in the aggregate, the rights under our patents, trademarks, licenses and distribution rights are generally important to our operations, but we do not consider any individual patent, trademark or any licensing or distribution rights related to a specific process or product to be of material importance in relation to our total business.

REGULATIONS

The Company's operations are subject to various federal, state, local, and foreign government regulations, including requirements regarding the protection of human health and the environment. Our policies, practices and procedures are designed to prevent unreasonable risk of environmental damage, and of resulting financial liability, in connection with our business. Some risk of environmental damage is, however, inherent in some of our operations and products, as it is with other companies engaged in similar businesses.

We engage in the handling, manufacturing, use, and disposal of many substances classified as hazardous by one or more regulatory agencies. Our policies, practices and procedures are designed to prevent unreasonable risk of environmental damage and personal injury, and to ensure that our handling, manufacture, use, and disposal of these substances meet or exceed environmental and safety laws and regulations. It is possible that future knowledge or other developments, such as improved capability to detect substances in the environment or increasingly strict environmental laws and standards and enforcement policies, could bring into question our current or past handling, manufacture, use or disposal of these substances.

Among other environmental requirements, we are subject to the Federal Superfund and similar state and foreign laws and regulations, under which we have been designated as a potentially responsible party that may be liable for cleanup costs associated with current and former operating sites and various hazardous waste sites, some of which are on the U.S. Environmental Protection Agency's National Priority List. While there is a possibility that a responsible party might be unable to obtain appropriate contribution from other responsible parties, we do not anticipate having to bear significantly more than our proportional share in multi-party situations taken as a whole.

We do not believe that Federal, State, and local provisions regulating the discharge of materials into the environment, or otherwise relating to the protection of the environment, or any existing or pending climate change legislation, regulation, or international treaties or accords are reasonably likely to have a material effect in the foreseeable future on the Company's business and we will continue to monitor emerging developments in this area.

Beyond our compliance requirements with environmental regulations, compliance with other government regulations has not had, and based on laws and regulations currently in effect, is not expected to have a material effect on the Company's capital expenditures, earnings or competitive position. See section titled Risk Factors for additional information on government regulation that could impact our business.

SUSTAINABLE COMMITMENTS AND SOLUTIONS

In April 2021, we committed to become carbon neutral in our operations and facilities by 2035. We plan to accomplish this through a combination of innovative investments in energy savings projects, conversion to renewable energy sources, completion of capital improvement projects at our sites, upgrading our fleet of vehicles, and, if necessary, using credible carbon credits. Our greenhouse gas reduction program initially began in 2004, in our view setting us well on our way to achieving this commitment.

We see ourselves as a responsible corporate citizen, leading sustainable change within the global marketplace. While we focus on our own sustainability commitments, we seek to partner as an agent of change with our customers around the world through sustainable products, services, and solutions.

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[1] Available through the Honeywell Partnership Ecosystem.

Additional information regarding our sustainability initiatives and strategy is included in our 2021 Corporate Citizenship Report, which can be found on our website (honeywell.com); this report is not incorporated into this Form 10-K by reference and should not be considered part of this Form 10-K.

HUMAN CAPITAL MANAGEMENT

We believe a commitment to and investment in human capital management enables better decision making, helps us build competitive advantage, and furthers our long-term success. As of December 31, 2021, we employed approximately 99,000[(1)] employees across 82 countries, 34,000[(1)] of whom are in the United States. Human capital management is the key driver of our performance culture, which enables our workforce to respond to the fast-changing needs of our customers. Our performance culture is defined by a set of eight Honeywell Behaviors, which reflect the bold, entrepreneurial spirit we seek to foster while emphasizing our goal to operate with speed and precision. At their foundation is a commitment to Integrity and Ethics, Inclusion and Diversity, and Workplace Respect, fundamental values that underlie everything we do.

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As of **December 31, 2021**, we employed approximately

99,000 EMPLOYEES[(1)]

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Across

82 COUNTRIES

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34,000[(1)]

of whom are in the United States.

[(1)] Excludes Sandia National Laboratories (Sandia) and Kansas City National Security Campus (KCNSC) work forces of approximately 21,000 employees. Sandia and KCNSC are U.S. Department of Energy facilities. Honeywell manages these facilities as a contract operator and does not establish or control their human resource policies.

HONEYWELL BEHAVIORS

HAVE A PASSION FOR WINNING	hon-20211231_g20.jpg	BE COURAGEOUS	hon-20211231_g21.jpg
BE A ZEALOT FOR GROWTH	hon-20211231_g22.jpg	BECOME YOUR BEST	hon-20211231_g23.jpg
THINK BIG... THEN MAKE IT HAPPEN	hon-20211231_g24.jpg	BE COMMITTED	hon-20211231_g25.jpg
ACT WITH URGENCY	hon-20211231_g26.jpg	BUILD EXCEPTIONAL TALENT	hon-20211231_g27.jpg

In 2021, we furthered our foundational principles of Inclusion and Diversity by appointing a Chief Inclusion and Diversity Officer and Inclusion and Diversity leaders for each business unit focusing on three key priorities:

Representation	Retention	Recognition
Cultivate a workforce that reflects our communities and the world	Create employee development and advancement opportunities	Be a global employer of choice for Inclusion and Diversity
Sustain a pipeline of diverse talent from campus to the C-Suite	Foster community engagement and belonging	Leverage our culture as a competitive advantage
Promote a culture of inclusion, accessibility, and respect	Offer competitive compensation, rewards, and recognition	Lead on Inclusion and Diversity practices

Our commitment to these fundamental values and the Honeywell Behaviors starts at the top with a diverse Board of Directors and executive management team, who represent a broad spectrum of backgrounds and perspectives. We believe that the diversity of our current Board of Directors (four women, and two Hispanic, two African American, and one Asian American director) and the diversity of Honeywell's executive leadership (more than half of the Company's nine executive officers are diverse by ethnic background, non-U.S. place of birth or gender) supports our evolving business strategy and is a testament to Honeywell's ongoing commitment to hiring, developing, and retaining diverse talent. The Company's commitment to Inclusion and Diversity enables better decision-making, helps build competitive advantages, and furthers long-term success.

In 2020, we established a Global Inclusion and Diversity Steering Committee co-sponsored by our Chairman and CEO, Senior Vice President and General Counsel, and Senior Vice President and Chief Human Resources Officer and fortified our inclusion and diversity governance structure by embedding Inclusion and Diversity Councils in each of our business groups. The governance structure provides a scalable model that supports our seven affinity group employee networks and facilitates the introduction of new networks to reflect the diverse characteristics of our workforce. These networks are designed to provide training and development opportunities and expand internal networks for promotional opportunities.

Employee Networks

- Honeywell AllAbilities Employee Network
- Honeywell Asian Employee Network
- Honeywell Black Employee Network
- Honeywell Women's Employee Network
- Honeywell LGBTQ+ Employee Network
- Honeywell Veterans Employee Network
- Honeywell Hispanic Employee Network

Commitment to Inclusion and Diversity

Board Gender Diversity	Board Ethnic or Racial Diversity	Executive Officer Diversity[1]
hon-20211231_g28.jpg	hon-20211231_g29.jpg	hon-20211231_g30.jpg

Global Workforce[2]	U.S. Workforce[2]
hon-20211231_g31.jpg	hon-20211231_g32.jpg

[1] Reflects Executive Officers as of December 31, 2021.

[2] As of December 31, 2021. Excludes work forces at Sandia and KCNSC.

In addition, our people managers are expected to model behaviors that promote a culture that is open and inclusive for all employees. We help managers develop this skill as they do any other leadership skill, though training programs, interactive learning and real time events, including the hiring and talent review processes. Our Leadership Edge program provides training in core management skills to leaders across the organization.

Training programs are available to all employees through our internal learning and development platform, which assigns curriculum tailored to an employee’s job responsibilities. Employees can also access additional trainings on-demand to continue to enhance their skills. We deploy unconscious bias and inclusive leadership training to our global workforce to educate and influence behavior.

Our internal talent acquisition and management platform is a key component to recruiting, hiring, and developing top-performing talent. Our hiring practices consider a diverse slate of candidates and our hiring managers are provided training and toolkits to reinforce their role in bringing diverse talent into the Company. Further, we partner with top academic institutions and external professional organizations to enhance the diversity of our workforce to attract and retain top talent. Our talent review process requires our people managers to have semi-annual career discussions with each member of their teams to discuss the best opportunity for growth and development, which enhances our identification of candidates for internal promotion and succession planning.

Finally, our Code of Business Conduct establishes the baseline requirements of our integrity and compliance program and promotes an environment where everyone is treated ethically and with respect. It outlines our pledge to recognize the dignity of each individual, respect each employee, provide compensation and benefits that are competitive, promote self-development through training, and value diversity of perspectives and ideas. All employees must complete Code of Business Conduct training and, where permitted by law, must also certify each year that they will comply with the Code.

Overall, we believe our culture, along with our internal tools and initiatives, enable us to effectively execute our human capital strategy. For discussion on the risks relating to our inability to attract and retain top-performing talent, please see section titled Risk Factors.

SELECTED FINANCIAL DATA

This selected financial data should be read in conjunction with the Company's Consolidated Financial Statements and related Notes included elsewhere in this Annual Report as well as the section Management's Discussion and Analysis of Financial Condition and Results of Operations.

	Years Ended December 31,				
	2021	**2020**	**2019**	**2018(1)(2)**	**2017(1)**
	(Dollars in millions, except per share amounts)				
Results of Operations					
Net sales	$ 34,392	$ 32,637	$ 36,709	$ 41,802	$ 40,534
Net income attributable to Honeywell	5,542	4,779	6,143	6,765	1,545
Earnings Per Common Share					
Earnings from operations:					
Basic	8.01	6.79	8.52	9.10	2.03
Assuming dilution	7.91	6.72	8.41	8.98	2.00
Dividends per share	3.77	3.63	3.36	3.06	2.74
Balance Sheet Data					
Property, plant and equipment—net	5,562	5,570	5,325	5,296	5,926
Total assets	64,470	64,586	58,679	57,773	59,470
Short-term debt	5,345	6,042	4,892	6,458	5,309
Long-term debt	14,254	16,342	11,110	9,756	12,573
Total debt	19,599	22,384	16,002	16,214	17,882
Redeemable noncontrolling interest	7	7	7	7	5
Shareowners’ equity	19,242	17,790	18,706	18,358	16,665

(1) 2018 and 2017 Net Income attributable to Honeywell and Earnings Per Common Share were impacted by the U.S. Tax Cuts and Jobs Act.

(2) The results of operations for the Transportation Systems and Homes and Global Distribution businesses are included in the Consolidated Statement of Operations through the effective dates of the respective spin-offs, which occurred in 2018.

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

(Dollars in tables and graphs in millions)

The following Management’s Discussion and Analysis of Financial Condition and Results of Operations is intended to help the reader understand the results of operations and financial condition of Honeywell International Inc. and its consolidated subsidiaries (Honeywell or the Company) for the three years ended December 31, 2021. All references to Notes relate to Notes to Consolidated Financial Statements in the section titled Financial Statements and Supplementary Data.

On November 29, 2021, Honeywell Quantum Solutions, a wholly-owned subsidiary of Honeywell, which was previously reported within the Aerospace reportable business segment, combined with Cambridge Quantum Computing, to form Quantinuum. Following the combination, Honeywell consolidated and reported Quantinuum within Corporate and All Other. Quantinuum is considered a separate operating segment, but does not meet aggregation criteria for presentation as a separate reportable segment. For this reason, it is reported within Corporate and All Other, which is not considered a reportable business segment. For the eleven months ended November 30, 2021 and the years ended December 31, 2020 and 20219, Honeywell Quantum Solutions incurred operating losses of $50 million, $41 million, and $36 million, respectively. Prior to November 29, 2021, our Aerospace business segment included the operating results of Honeywell Quantum Solutions.

Quantinuum is well-positioned to lead the quantum computing industry by offering advanced, fully integrated hardware and software solutions at an unprecedented pace, scale, and level of performance to large high-growth markets worldwide. Quantinuum supports customer needs for improved computation in cyber security, drug discovery and delivery, material science, finance, and optimization across all major industrial markets.

A detailed discussion of the prior year 2020 to 2019 year-over-year changes is not included herein and can be found in the Management's Discussion and Analysis of Financial Condition and Results of Operations section in the 2020 **Annual Report on Form 10-K filed February 12, 2021.**

COVID-19 UPDATE

In 2021, the COVID-19 pandemic continues to have a significant impact around the world. Many jurisdictions worldwide continue to distribute vaccines as a method to limit and control infections; however, the pandemic continues to impact our business as vaccine efforts face challenges and new variants of the virus emerge. Select governments continue to place restrictions on businesses (impacting manufacturing capabilities and distribution channels). Global supply shortages emerged for certain products (including electrical components), leading to delays in delivery schedules. Historically reliable supply chains were disrupted, impacting certain of our businesses. In certain parts of the world, labor shortages intensified.

These events continue to impact our business operations. As new variants of the virus emerge, we remain cautious as many factors remain unpredictable. We actively monitor and respond to the changing conditions created by the pandemic, with focus on prioritizing the health and safety of our employees, dedicating resources to support our communities, and innovating to address our customers’ needs.

In 2021, we actively promoted vaccines as a mechanism to protect the health of our employees. We supported several large-scale vaccination events to provide vaccines to our employees, their families, and the surrounding communities. In situations when local medical care was unavailable, we provided additional support to our employees to ensure they received the medical care needed. We continue to adapt our safety and hygiene protocols to enable our manufacturing employees to operate safely through the pandemic. We also continue to utilize our procedures for a phased return of our employees to our office sites, and in many parts of the world, we returned our non-manufacturing employees to the workplace. However, in certain countries, our non-manufacturing employees continue to work from home (for roles that allow for remote work).

On September 9, 2021, President Biden announced several initiatives to drive higher vaccination rates in the U.S., including an executive order for U.S. Government contractors to mandate vaccination against COVID-19. In response to these initiatives, we implemented a vaccine mandate requiring all U.S.-based employees at work locations that work on or in support of contracts with the U.S. Government to receive their first vaccine dose, or a medical or religious exemption, by January 4, 2022. Similarly, the Company adopted a vaccine mandate for all prospective and future employees and announced a timeline for a vaccine mandate for our remaining U.S. employees.

We continue to monitor and respond to the changing conditions created by the pandemic.

EMPLOYEE HEALTH, SAFETY, AND ECONOMIC WELLNESS

We continue to monitor the COVID-19 situation and its impacts globally. We are prioritizing the health and safety of our employees. Out of an abundance of caution for the health of our employees and to support local government initiatives to stem the spread of the virus, we implemented several precautions at various sites around the world. These include, but are not limited to:

- Limiting visitor site access to business-essential purposes;
- Enabling employees to work from home wherever and whenever required or appropriate;
- Continuously updating travel guidance, according to latest developments; and
- Complying with all local health authority guidance or regulations and our own protocols, including requesting employees to comply with self-quarantine requirements whenever advisable.

PLANT PRODUCTIVITY AND SAFETY

We continue to operate our manufacturing facilities with minimal disruption in our productivity. As of December 31, 2021, all of our manufacturing sites were operating at normal production levels. We continue to provide essential services and produce essential goods around the world. We employ standards such as screening checks, use of masks, face coverings, and other safety equipment and social distancing practices along production lines in our production facilities at all times in compliance with local government requirements and CDC guidelines. We take appropriate actions including disinfecting and quarantine procedures when a suspected COVID-19 case is identified.

CUSTOMERS AND SUPPLIERS

Current global economic conditions due to COVID-19 continue to impact our customers' and suppliers' ability to operate at normal levels. We continue to work with our suppliers to manage our supply chain disruptions and limit our exposure. We also work closely with our customers to manage expectations and meet their demand needs.

See the section titled Risk Factors for a discussion of risks associated with the potential adverse effects of the COVID-19 pandemic, including the impact of any applicable vaccine mandates.

RESULTS OF OPERATIONS

Consolidated Financial Results

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Net Sales by Segment

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Segment Profit by Segment

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CONSOLIDATED OPERATING RESULTS

Net Sales

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Volume
Price
Foreign Currency Translation
Acquisitions/Divestitures

The change in net sales was attributable to the following:

2021 compared with 2020

A discussion of net sales by segment can be found in the Review of Business Segments section of this Management Discussion and Analysis.

Net sales increased due to the following:

- Favorable pricing and price increases to offset the rising cost of materials,
- The favorable impact of foreign currency translation, driven by the weakening of the U.S. Dollar against the currencies of the majority of our international markets, primarily the Euro, British Pound, Chinese Renminbi, Canadian Dollar, and Australian Dollar, and
- Higher sales volumes due to an increase in demand for certain products and services as the global economy showed signs of recovery from the COVID-19 pandemic.

Cost of Products and Services Sold

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2021 compared with 2020

Cost of products and services sold increased in 2021 primarily due to the following:

- Higher direct and indirect material costs of approximately $1,350 million, due in part to supply chain constraints, and
- Higher repositioning and other costs of approximately $150 million,
- Partially offset by cost actions to improve productivity of approximately $380 million.

Gross Margin

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2021 compared with 2020

Gross margin increased due to the following:

- Favorable pricing,
- Higher productivity,
- The favorable impact of foreign currency translation, and
- Increased demand for our products,
- Partially offset by higher direct and indirect material costs, higher repositioning and other costs of approximately $150 million, and a larger portion of our sales being driven by our Safety and Productivity Solutions segment.

Selling, General and Administrative Expenses

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2021 compared with 2020

Selling, general and administrative expenses and Selling, general and administrative expenses as a percentage of net sales changed due to the following:

- Higher expenses due to increased sales volumes and labor expense,
- Partially offset by higher productivity, including lower costs resulting from repositioning actions.

Other (Income) Expense

	2021	2020	2019
Other (Income) Expense	$(1,378)	$ (675)	$(1,065)

2021 compared with 2020

Other (income) expense increased due to the following:

- Prior year non-cash charges associated with the reduction in value of reimbursement receivables due from Garrett,
- Higher pension income, and
- Gain on sale of the retail footwear business,
- Partially offset by the recognition of an expense related to UOP matters and increased foreign exchange expense. See Note 19 Commitments and Contingencies of Notes to the Consolidated Financial Statements for additional information on UOP Matters.

Tax Expense

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2021 compared with 2020

The effective tax rate for 2021 was higher than the U.S. federal statutory rate of 21% primarily due to the following:

- Accrued withholding taxes related to unremitted foreign earnings,
- The establishment of a valuation allowance for deferred tax assets not expected to be realized, and
- Incremental tax reserves and state taxes,
- Partially offset by the tax impact of restructuring.

For further discussion of changes in the effective tax rate, see Note 5 Income Taxes of Notes to Consolidated Financial Statements.

Net Income Attributable to Honeywell

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2021 compared with 2020

Earnings per share of common stock–assuming dilution increased due to the following:

- Higher segment profit,
- Prior year non-cash charges associated with the reduction in value of reimbursement receivables due from Garrett,
- Higher pension income,
- Gain on sale of the retail footwear business, and
- Favorable impact of lower share count,
- Partially offset by higher income taxes, an expense related to UOP matters, and higher foreign exchange expense.

REVIEW OF BUSINESS SEGMENTS

We globally manage our business operations through four segments: Aerospace, Honeywell Building Technologies, Performance Materials and Technologies, and Safety and Productivity Solutions.

AEROSPACE

Net Sales

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	2021	2020	Change 2021 vs. 2020	2019	Change 2020 vs. 2019
Net sales	$11,026	$11,544	(4)%	$14,054	(18)%
Cost of products and services sold	7,191	7,813		9,398	
Selling, general and administrative and other expenses	784	827		1,049	
Segment profit	**$ 3,051**	**$ 2,904**	**5 %**	**$ 3,607**	**(19)%**

	2021 vs. 2020		2020 vs. 2019	
Factors Contributing to Year-Over-Year Change	**Net Sales**	**Segment Profit**	**Net Sales**	**Segment Profit**
Organic[1]	(5)%	4 %	(18)%	(20)%
Foreign currency translation	1 %	— %	— %	— %
Acquisitions, divestitures and other, net	— %	1 %	— %	1 %
Total % Change	**(4)%**	**5 %**	**(18)%**	**(19)%**

[1] Organic sales % change, presented for all of our reportable business segments, is defined as the change in net sales, excluding the impact on sales from foreign currency translation and acquisitions, net of divestitures, for the first 12 months following the transaction date. We believe this non-GAAP measure is useful to investors and management in understanding the ongoing operations and analysis of ongoing operating trends.

2021 compared with 2020

Sales decreased due to lower demand from our commercial OEMs, and domestic and international defense, partially offset by higher demand for our aftermarket products and services, and favorable pricing.

- Commercial Aviation Original Equipment sales decreased 11% (decreased 12% organic) due to lower demand in air transport and regional and business aviation.
- Commercial Aviation Aftermarket sales increased 9% (increased 9% organic) due to higher demand in business aviation.
- Defense and Space sales decreased 11% (decreased 12% organic) driven by lower demand in U.S. and international defense and supply chain constraints.

Cost of products and services sold decreased due to lower sales volumes and higher productivity.

Segment profit increased due to favorable pricing, higher productivity, and higher sales volume of higher margin products and services, partially offset by overall lower sales volume.

HONEYWELL BUILDING TECHNOLOGIES

Net Sales

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	2021	2020	Change 2021 vs. 2020	2019	Change 2020 vs. 2019
Net sales	$ 5,539	$ 5,189	7 %	$ 5,717	(9)%
Cost of products and services sold	3,242	3,067		3,444	
Selling, general and administrative and other expenses	1,059	1,023		1,108	
Segment profit	**$1,238**	**$1,099**	**13 %**	**$1,165**	**(6)%**

	2021 vs. 2020		2020 vs. 2019	
Factors Contributing to Year-Over-Year Change	**Net Sales**	**Segment Profit**	**Net Sales**	**Segment Profit**
Organic	4 %	11 %	(9)%	(5)%
Foreign currency translation	3 %	3 %	— %	(1)%
Acquisitions, divestitures and other, net	— %	(1)%	— %	— %
Total % Change	**7 %**	**13 %**	**(9)%**	**(6)%**

2021 compared with 2020

Sales increased primarily due to the favorable impact of foreign currency translation and favorable pricing.

- Sales in Products increased 9% (increased 6% organic) due to higher demand for certain of our product offerings, and the favorable impact of foreign currency translation.
- Sales in Building Solutions increased 4% (flat on an organic basis) due to higher demand for our services businesses, and the favorable impact of foreign currency translation.

Cost of products and services sold increased primarily due to the rising cost of materials and the unfavorable impact of foreign currency translation, partially offset by higher productivity.

Segment profit increased primarily due to higher productivity, higher demand for certain products and services, favorable pricing, and the favorable impact of foreign currency translation, partially offset by the rising cost of materials.

PERFORMANCE MATERIALS AND TECHNOLOGIES

Net Sales

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	2021	2020	Change 2021 vs. 2020	2019	Change 2020 vs. 2019
Net sales	$10,013	$ 9,423	6 %	$10,834	(13)%
Cost of products and services sold	6,637	6,331		6,989	
Selling, general and administrative and other expenses	1,256	1,241		1,412	
Segment profit	**$ 2,120**	**$1,851**	**15 %**	**$ 2,433**	**(24)%**

	2021 vs. 2020		2020 vs. 2019	
Factors Contributing to Year-Over-Year Change	**Net Sales**	**Segment Profit**	**Net Sales**	**Segment Profit**
Organic	3 %	14 %	(13)%	(24)%
Foreign currency translation	2 %	2 %	— %	— %
Acquisitions, divestitures and other, net	1 %	(1)%	— %	— %
Total % Change	**6 %**	**15 %**	**(13)%**	**(24)%**

2021 compared with 2020

Sales increased due to the impact of foreign currency translation, higher demand for certain products, and the acquisition of Sparta Systems.

- UOP sales increased 8% (increased 6% organic) due to higher demand for oil and gas products and services, and the favorable impact of foreign currency translation.
- Process Solutions sales were flat (decreased 4% organic). The acquisition of Sparta Systems and the favorable impact of foreign currency translation was offset by lower demand for projects and services.
- Advanced Materials sales increased 15% (increased 13% organic) due to higher demand for fluorine products and the favorable impact of foreign currency translation.

Cost of products and services sold increased due to the rising cost of materials, partially offset by higher productivity.

Segment profit increased due to higher demand for certain products, favorable pricing, partially offset by the rising cost of materials.

SAFETY AND PRODUCTIVITY SOLUTIONS

Net Sales

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	2021	2020	Change 2021 vs. 2020	2019	Change 2020 vs. 2019
Net sales	$ 7,814	$ 6,481	21 %	$ 6,104	6 %
Cost of products and services sold	5,738	4,532		4,158	
Selling, general and administrative and other expenses	1,047	1,042		1,156	
Segment profit	**$1,029**	**$ 907**	**13 %**	**$ 790**	**15 %**

	2021 vs. 2020		2020 vs. 2019	
Factors Contributing to Year-Over-Year Change	**Net Sales**	**Segment Profit**	**Net Sales**	**Segment Profit**
Organic	22 %	14 %	6 %	16 %
Foreign currency translation	2 %	2 %	— %	(1)%
Acquisitions, divestitures and other, net	(3)%	(3)%	— %	— %
Total % Change	**21 %**	**13 %**	**6 %**	**15 %**

2021 compared with 2020

Sales increased due to increased demand for certain products and favorable pricing.

- Sales in Safety and Retail decreased 1% (increased 5% organic) due to the sale of the retail footwear business, partially offset by increased demand for certain products.
- Sales in Productivity Solutions and Services increased 27% (increased 25% organic) due to higher demand on certain products.
- Sales in Warehouse and Workflow Solutions increased 50% (increased 49% organic) due to higher demand for warehouse automation and services.
- Sales in Advanced Sensing Technologies increased 5% (increased 3% organic) due to higher demand for certain products and the favorable impact of foreign currency translation.

Cost of products and services sold increased primarily due to higher sales volumes, higher sales on lower margin products, the rising cost of materials, partially offset by the sale of the retail footwear business.

Segment profit increased due to higher sales volumes and favorable pricing, partially offset by higher sales of lower margin products and the rising cost of materials.

CORPORATE AND ALL OTHER

Corporate and All Other primarily includes unallocated corporate costs, interest expense on holding-company debt and the controlling majority-owned interest in Quantinuum. Corporate and All Other is not considered a separate reportable business segment as segment reporting criteria is not met for the activities reported with Corporate and All Other and the Company does not believe the results of operations are meaningful to investors. The Company continues to monitor the activities in Corporate and All Other to determine the need for further reportable business segment disaggregation.

REPOSITIONING CHARGES

See Note 4 Repositioning and Other Charges of Notes to Consolidated Financial Statements for a discussion of our repositioning actions and related charges incurred in 2021, 2020, and 2019. Cash spending related to our repositioning actions was $382 million, $564 million and $249 million in 2021, 2020, and 2019, and was funded through operating cash flows.

RISK FACTORS

Our business, operating results, cash flows and financial condition are subject to the material risks and uncertainties set forth below, any one of which could cause our actual results to vary materially from recent results or from our anticipated future results.

MACROECONOMIC AND INDUSTRY RISKS

Each of our businesses is subject to unique industry and economic conditions that may adversely affect the markets and operating conditions of our customers, which in turn can affect demand for our products and services and our results of operations.

- ***Aerospace***—Our Aerospace business is impacted by customer buying patterns of aftermarket parts, supplier stability, factory transitions, and global supply chain capacity constraints that may lead to shortages of crucial components. Operating results may be adversely affected by downturns in the global demand for air travel, which may impact new aircraft production or result in the delay or cancellation of new aircraft orders, delays in launch schedules for new aircraft, the retirement of aircraft and reductions in global flying hours, which impacts air transport and regional, business, and general aviation aircraft utilization rates. Operating results may also be adversely affected by any decrease in air travel demand due to regional restrictions or suspension of service for public health, safety, or environmental events, such as the effects of the COVID-19 pandemic, which impacted our operating results. Operating results could also be impacted by changes in overall trends related to end market demand for the product portfolio, as well as new entrants and non-traditional players entering the market. Operating results in our Defense and Space business unit may be affected by the mix of U.S. and foreign government appropriations for defense and space programs and by compliance risks. Results may also be impacted by the potential introduction of counterfeit parts into our global supply chain.
- ***Honeywell Building Technologies***—Operating results may be adversely impacted by downturns in the level of global commercial construction activity (including retrofits and upgrades), lower capital spending and operating expenditures on building projects, changes in the competitive landscape including new market entrants and new technologies, and fluctuations in inventory levels in distribution channels.
- ***Performance Materials and Technologies***—Operating results may be adversely impacted by downturns in capacity utilization for chemical, industrial, refining, petrochemical, and semiconductor plants, our customers' availability of capital for refinery construction and expansion, raw material demand and supply, product commoditization, continued illegal imports of hydrofluorocarbons into Europe, and our ability to maximize our facilities' production capacity and minimize downtime. Periods of increased volatility in oil and natural gas prices may result in less investment by our customers and therefore, lower demand for our products and services.
- ***Safety and Productivity Solutions***—Operating results may be adversely impacted by reduced investments in process automation, safety monitoring, and plant capacity utilization initiatives, fluctuations in retail markets, a slowdown in demand for safety products, changes in the competitive landscape, including new market entrants and technology that may lead to product commoditization, and adverse industry economic conditions, all of which could result in lower market share, reduced selling prices and lower margins.

The global COVID-19 pandemic and related impacts have adversely affected and may continue to adversely affect, our business, financial condition, results of operations, liquidity, and cash flow.

The continued global spread of COVID-19 creates significant volatility, uncertainty and economic disruption that have impacted our business, operations, and financial results and may continue to do so. The extent to which the COVID-19 pandemic will continue to impact our business, operations and financial results will depend on numerous evolving factors that we may not be able to accurately predict, including: the duration, scope and severity of the pandemic, including emergence and impact of new variants; some of which have been, and may be in the future, more virulent or transmissible than the initial strain, and any continued increase in cases globally and across the United States in particular, including breakthrough infections among the fully vaccinated population, as well as the timing, availability, and acceptance of effective medical treatments and vaccines; the pace of vaccine deployment; the impact of vaccine mandates, governmental, business and individual decisions and actions; the impact of the pandemic on economic activity; and the extent to which we or our employees, customers, suppliers, service providers or other business partners may be prevented from conducting normal business activities, including due to shutdowns or other restrictive measures that may be requested or mandated by governmental authorities. These factors could, among other things, continue to disrupt (i) the purchasing, contracting and payment behaviors of our customers and their end-users; (ii) our operations, including our manufacturing activities, the shipment of our products, and the performance of our suppliers and service providers; and (iii) our liquidity and cash flow.

Risks arising from the COVID-19 pandemic impacting our business and that may continue to impact our business, financial condition, results of operations and prospects include, among other things:

- ***Customer Risk***—Existing and potential customers and their end-users may continue to take actions to reduce or suspend operations, reduce or delay spending, cancel contracts, or cut costs in a manner that reduces demand for our products and services. In particular, lower demand for air travel may continue to cause our customers to delay or suspend spending in connection with the manufacturing, repair, overhaul or servicing of aircraft, and there may be long-term deterioration in demand for air travel that could impact our business beyond the current COVID-19 health crisis. Customers may also continue to attempt to renegotiate contracts and obtain concessions, face financial constraints on their ability to make payments to us on a timely basis or at all, or enter into bankruptcy or discontinue their business operations, and we may continue to be required to discount the pricing of our products. In addition, unfavorable customer site conditions, such as closure of or access restrictions to customer facilities, and disruptions to our customers' third-party logistics, warehousing, inventory management, and distribution services may continue to limit our ability to sell products, meet billing milestones, or provide services.
- ***Operations Risk***—The closure of our facilities, restrictions inhibiting our employees' ability to access those facilities, materials and labor shortages, and disruptions to the ability of our suppliers or service providers to deliver goods or services to us (including as a result of supplier facility closures or access restrictions, disruptions to their supply chains, and supplier liquidity or bankruptcy risk) could further disrupt our ability to provide our services and solutions and result in, among other things, higher costs which may not be recoverable under customer contracts, claims for liquidated damages in the event of delays, terminations of customer contracts and losses of revenue. Because the COVID-19 pandemic could adversely affect our near-term and long-term revenues, earnings, liquidity, and cash flows, we have taken and may be required to redeploy significant cost actions, including but not limited to reducing discretionary expenses (such as non-essential travel, contractors, and consultants), reducing hiring, canceling annual merit increases, reducing executive and board of director pay, reducing work schedules across the enterprise, shortening or staggering work schedules to match production with demand, and reducing staffing levels, as well as increasing supplier-based productivity and enhancing spending-limit controls. However, the extent to which our mitigation efforts are successful, if at all, is not currently ascertainable; also, our costs may not decrease at the same pace as revenue declines as many of our costs are less variable in nature, and we may not be able to or may not choose to significantly reduce them in an effort to remain focused on long-term outlook and growth opportunities. Further, our management of the impact of COVID-19 will continue to require significant investment of time from our management and employees, as well as resources across our global enterprise. The focus on managing and mitigating the impacts of COVID-19 on our business may cause us to divert or delay the application of our resources toward new initiatives or investments, which may adversely impact our future results of operations. Issues relating to the COVID-19 pandemic may also result in legal claims or litigation against us. In addition, remote work has increased the frequency of cybersecurity attacks, including phishing, and malware attempts that utilize COVID-19-related strategies, increasing the risk of a material cybersecurity incident that could result in the loss of proprietary or personal data, render us more vulnerable to future cybersecurity attacks, disrupt our operations, or otherwise cause us reputational or financial harm.
- ***Liquidity and Cash Flow Risk***—Because of the customer and operations risks described above, our business may not continue to generate sufficient cash flow from operations in the future to service our debt and make necessary capital expenditures. If we are unable to generate such cash flow, we may need to use existing cash balances to service our debt, and if such balances are insufficient, then we may be required to engage in one or more alternatives, such as selling assets,

restructuring of existing debt, issuing new debt, or obtaining additional equity capital on terms that may be onerous or highly dilutive. Our ability to refinance our indebtedness will depend on the capital markets and our financial condition at such time.

Due to the changing landscape of the COVID-19 pandemic and the responses to curb its spread, we cannot predict the ultimate impact the COVID-19 pandemic will have on our business, financial condition, results of operations, liquidity, and cash flow. Any recovery from the COVID-19 pandemic and related economic impact may be slowed or reversed by a variety of factors. In addition, even after the COVID-19 pandemic has subsided, we may continue to experience adverse impacts to our business as a result of its global economic impact, including any recession that may occur in the future. Further, many of the factors disclosed under Risk Factors in this Form 10-K are, and we anticipate will continue to be further, heightened or exacerbated by the impact of the COVID-19 pandemic.

A significant percentage of our sales and operations is in non-U.S. jurisdictions and is subject to the economic, political, regulatory, foreign exchange, and other risks of international operations.

Our international operations, including U.S. exports, represent more than half of the Company’s sales. Risks related to international operations include exchange control regulations, wage and price controls, antitrust regulations, employment regulations, foreign investment laws, import, export and other trade restrictions (such as sanctions and embargoes), differing levels of protection of intellectual property, acts of industrial espionage, violations by our employees of anti-corruption laws (despite our efforts to mitigate such risk), changes in regulations regarding transactions with state-owned enterprises, nationalization of private enterprises, acts of terrorism, acts of war, civil strife, and our ability to hire and maintain qualified staff and maintain the safety of our employees in these regions. Instability and uncertainties arising from the global geopolitical environment and the evolving international and domestic political, regulatory, and economic landscape, including the potential for changes in global trade policies, including sanctions and trade barriers, and trends such as populism, economic nationalism and negative sentiment toward multinational companies, as well as the cost of compliance with increasingly complex and often conflicting regulations worldwide, can impair our flexibility in modifying product, marketing, pricing or other strategies for growing our businesses, as well as our ability to improve productivity and maintain acceptable operating margins.

Existing free trade laws and regulations provide certain beneficial duties and tariffs for qualifying imports and exports. Changes in laws or policies governing the terms of foreign trade, and in particular increased trade restrictions, tariffs or taxes on imports from countries where we manufacture products or from where we import products or raw materials, either directly or through our suppliers, could have an impact on our competitive position and financial results.

The United States continues to implement certain trade actions, including imposing tariffs on certain goods imported from China and other countries, which has resulted in retaliatory tariffs by China and other countries. Additional tariffs, export controls and sanctions laws imposed by the United States on a broader range of imports, or further retaliatory trade measures taken by China or other countries in response, could increase the cost of our products. The United States and other countries may implement actions, including trade actions, tariffs, export controls, and sanctions, against other countries or localities, including potentially against certain Russian government, government-related, or other entities or individuals related to actions in Ukraine, which along with any retaliatory measures could increase costs, adversely affect our operations, or adversely affect our ability to meet contractual and financial obligations.

Operating outside of the United States also exposes us to foreign exchange risk, which we monitor and seek to reduce through hedging activities. However, foreign exchange hedging activities bear a financial cost and may not always be available to us or be successful in eliminating such volatility. Finally, we generate significant amounts of cash outside of the United States that is invested with financial and non-financial counterparties. While we employ comprehensive controls regarding global cash management to guard against cash or investment loss and to ensure our ability to fund our operations and commitments, a material disruption to the counterparties with whom we transact business could expose Honeywell to financial loss.

Operating outside the United States also exposes us to additional intellectual property risk. The laws and enforcement practices of certain jurisdictions in which we operate may not protect our intellectual property rights to the same extent as in the United States and may impose joint venture, technology transfer, local service or other foreign investment requirements, and restrictions that potentially compromise control over our technology and proprietary information. Failure of foreign jurisdictions to protect our intellectual property rights, an inability to effectively enforce such rights in foreign jurisdictions, or the imposition of foreign jurisdiction investment or sourcing restrictions or requirements could result in loss of valuable proprietary information and could impact our competitive position and financial results.

Risks related to our defined benefit pension plans may adversely impact our results of operations and cash flow.

Significant changes in actual investment return on pension assets, discount rates, and other factors could adversely affect our results of operations and require cash pension contributions in future periods. Changes in discount rates and actual asset returns different than our anticipated asset returns can result in significant non-cash actuarial gains or losses, which we record in the fourth quarter of each fiscal year, and, if applicable, in any quarter in which an interim re-measurement is triggered. With regard to cash pension contributions, funding requirements for our pension plans are largely dependent upon interest rates, actual investment returns on pension assets and the impact of legislative or regulatory changes related to pension funding obligations.

OPERATIONAL RISKS

Raw material price fluctuations, inflation, the ability of key suppliers to meet quality and delivery requirements, or catastrophic events can increase the cost of our products and

services, impact our ability to meet commitments to customers and cause us to incur significant liabilities.

The cost of raw materials is a key element in the cost of our products, particularly in Performance Materials and Technologies (copper, fluorspar, tungsten salts, ethylene, aluminum, and molybdenum) and in Aerospace (nickel, steel, titanium and other metals). As of December 31, 2021, Aerospace and Performance Materials and Technologies had 80% and 63%, respectively, of raw materials supply base under contract. Due to supply chain constraints and labor shortages, including as a result of the ongoing COVID-19 pandemic, there have been recent inflationary trends in the cost of raw materials, including increases in labor and freight costs, for the transportation of raw materials. Our inability to offset material price or labor inflation through increased prices to customers, formula-driven or long-term fixed price contracts with suppliers, productivity actions or commodity hedges could adversely affect our results of operations.

Many major components, product equipment items, and raw materials, particularly in Aerospace, are procured or subcontracted on a single or sole-source basis. Although we maintain a qualification and performance surveillance process and we believe that sources of supply for raw materials and components are generally adequate, it is difficult to predict what effects shortages or price increases, in addition to other supply chain disruptions, may have in the future. Our ability to manage inventory and meet delivery requirements may be constrained by our suppliers' inability to scale production and adjust delivery of long-lead time products during times of volatile demand. In addition, current or future global economic uncertainty, including the ongoing COVID-19 pandemic, may affect the financial stability of our key suppliers or their access to financing, which may in turn affect their ability to perform their obligations to us. If one or more of our suppliers experiences financial difficulties, delivery delays or other performance problems, our resulting inability to fill our supply needs would jeopardize our ability to fulfill obligations under commercial and government contracts, which could, in turn, result in reduced sales and profits, contract penalties or terminations, and damage to customer relationships.

We may be unable to successfully execute or effectively integrate acquisitions, and divestitures may not occur as planned.

We regularly review our portfolio of businesses and pursue growth through acquisitions and seek to divest non-core businesses. We may not be able to complete transactions on favorable terms, on a timely basis, or at all. In addition, our results of operations and cash flows may be adversely impacted by (i) the failure of acquired businesses to meet or exceed expected returns, including risk of impairment; (ii) the failure to integrate multiple acquired businesses into Honeywell simultaneously and on schedule and/or to achieve expected synergies; (iii) the inability to dispose of non-core assets and businesses on satisfactory terms and conditions; and (iv) the discovery of unanticipated liabilities, labor relations difficulties, cybersecurity concerns, compliance issues, or other problems in acquired businesses for which we lack contractual protections, insurance or indemnities, or, with regard to divested businesses, claims by purchasers to whom we have provided contractual indemnification.

Our future growth is largely dependent upon our ability to develop new technologies and introduce new products that achieve market acceptance in increasingly competitive markets with acceptable margins.

Our future growth rate depends upon a number of factors, including our ability to (i) identify and evolve with emerging technological and broader industry trends in our target end-markets; (ii) develop and maintain competitive products; (iii) defend our market share against an ever-expanding number of competitors, including many new and non-traditional competitors; (iv) enhance our products by adding innovative features that differentiate our products from those of our competitors and prevent commoditization of our products; (v) develop, manufacture, and bring compelling new products to market quickly and cost-effectively; (vi) monitor disruptive technologies and business models; (vii) achieve sufficient return on investment for new products introduced based on capital expenditures and research and development spending; (viii) respond to changes in overall trends related to end-market demand; and (ix) attract, develop, and retain individuals with the requisite technical expertise and understanding of customers' needs to develop new technologies and introduce new products. Competitors may also develop after-market services and parts for our products which attract customers and adversely affect our return on investment for new products. The failure of our technologies or products to gain market acceptance due to more attractive offerings by our competitors or the failure to address any of the above factors could significantly reduce our revenues and adversely affect our competitive standing and prospects.

Failure to increase productivity through sustainable operational improvements, as well as an inability to successfully execute repositioning projects or to effectively manage our workforce, may reduce our profitability or adversely impact our businesses.

Our profitability and margin growth are dependent upon our ability to drive sustainable improvements. We seek productivity and cost savings benefits through repositioning actions and projects, such as consolidation of manufacturing facilities, transitions to cost-competitive regions, and product line rationalizations. Risks associated with these actions include delays in execution, additional unexpected costs, realization of fewer than estimated productivity improvements, and adverse effects on employee morale. We may not realize the full operational or financial benefits we expect, the recognition of these benefits may be delayed, and these actions may potentially disrupt our operations. In addition, organizational changes, increased attrition, failure to create and implement a succession plan for key Company positions, not retaining key talent, inability to attract new employees with unique skills, trends in rising labor costs and labor availability, labor relations difficulties, or workforce stoppage could have a material adverse effect on our business, reputation, financial position and results of operations.

As a supplier to the U.S. government, we are subject to unique risks, such as the right of the U.S. government to terminate contracts for convenience and to conduct audits and investigations of our operations and performance.

U.S. government contracts are subject to termination by the government, either for the convenience of the government or for our failure to perform consistent with the terms of the applicable contract. Our contracts with the U.S. government are also subject to government audits that may recommend downward price adjustments and other changes. When appropriate and prudent, we made adjustments and paid voluntary refunds in the past and may do so in the future.

We are also subject to government investigations of business practices and compliance with government procurement and security regulations. If, as a result of any such investigation or other government investigations (including investigation of violations of certain environmental, employment or export laws), Honeywell or one of its businesses were found to have violated applicable law, then it could be suspended from bidding on or receiving awards of new government contracts, suspended from contract performance pending the completion of legal proceedings and/or have its export privileges suspended.

Our operations and the prior operations of predecessor companies expose us to the risk of material environmental liabilities.

Mainly because of past operations and operations of predecessor companies, we are subject to potentially material liabilities related to the remediation of environmental hazards and to claims of personal injuries or property damages that may be caused by hazardous substance releases and exposures. We continue to incur remedial response and voluntary clean-up costs for site contamination and are a party to lawsuits and claims associated with environmental and safety matters, including past production of products containing hazardous substances. Additional lawsuits, claims and costs involving environmental matters are likely to continue to arise in the future. Various federal, state, local and foreign governments regulate the use of certain materials, the discharge of materials into the environment, and/or communications respecting certain materials in our products, and can impose substantial fines and criminal sanctions for violations, and require injunctive relief measures, including installation of costly equipment, implementation of operational changes to limit emissions and/or decrease the likelihood of accidental hazardous substance releases, or limiting access of our products to markets, among others. In addition, changes in laws, regulations and enforcement of policies, the discovery of previously unknown contamination or new technology or information related to individual sites, the establishment of stricter toxicity standards with respect to certain contaminants, or the imposition of new clean-up requirements or remedial techniques could require us to incur additional costs in the future that would have a negative effect on our financial condition or results of operations.

Cybersecurity incidents could disrupt business operations, result in the loss of critical and confidential information, and adversely impact our reputation and results of operations.

Global cybersecurity threats and incidents can range from uncoordinated individual attempts to gain unauthorized access to information technology (IT) systems to sophisticated and targeted measures known as advanced persistent threats, directed at the Company, its products, its customers and/or its third party service providers, including cloud providers. Our customers, including the U.S. government, are increasingly requiring cybersecurity protections and mandating cybersecurity standards in our products, and we may incur additional costs to comply with such demands. While we have experienced, and expect to continue to experience, these types of threats and incidents, none of them to date have been material to the Company. We seek to deploy comprehensive measures to deter, prevent, detect, respond to and mitigate these threats, including identity and access controls, data protection, vulnerability assessments, continuous monitoring of our IT networks and systems and maintenance of backup and protective systems. Despite these efforts, cybersecurity incidents (against us or parties with whom we contract), depending on their nature and scope, could potentially result in the misappropriation, destruction, corruption or unavailability of critical data and confidential or proprietary information (our own or that of third parties) and the disruption of business operations. The potential consequences of a material cybersecurity incident and its effects include financial loss, reputational damage, litigation with third parties, theft of intellectual property, fines levied by the Federal Trade Commission or other government agencies, diminution in the value of our investment in research, development and engineering, and increased cybersecurity protection and remediation costs due to the increasing sophistication and proliferation of threats, which in turn could adversely affect our competitiveness and results of operations. In addition, cybersecurity laws and regulations continue to evolve, and are increasingly demanding, both in the U.S. and globally, which adds compliance complexity and may increase our costs of compliance and expose us to reputational damage or litigation, monetary damages, regulatory enforcement actions or fines in one or more jurisdictions. While we carry cyber insurance, we cannot be certain that our coverage will be adequate for liabilities actually incurred, that insurance will continue to be available to us on economically reasonable terms, or at all, or that any insurer will not deny coverage as to any future claim.

The development of technology products and services presents security and safety risks.

An increasing number of our products, services, and technologies are delivered with Internet of Things (IoT) capabilities and the accompanying interconnected device networks, which include sensors, data and advanced computing capabilities. We have developed product software designs that we believe are less susceptible to cyber-attacks, but despite these efforts, if our products and services that include IoT solutions do not work as intended or are compromised, the possible consequences include financial loss, reputational damage, exposure to legal claims or enforcement actions, theft of intellectual property, and diminution in the value of our investment in research, development and engineering, which in turn could adversely affect our competitiveness and results of operations.

Data privacy, data protection, and information security may require significant resources and present certain risks.

We collect, store, have access to and otherwise process certain confidential or sensitive data, including proprietary business information, personal data or other information that is subject to privacy and security laws, regulations and/or customer-imposed controls. Despite our efforts to protect such data, we may be vulnerable to material security breaches, theft, misplaced or lost data, programming errors, or employee errors that could potentially lead to the compromising of such data, improper use of our systems, software solutions or networks, unauthorized access, use, disclosure, modification or destruction of information, defective products, production downtimes and operational disruptions. In addition, we operate in an environment in which there are different and potentially conflicting data privacy laws in effect in the various U.S. states and foreign jurisdictions in which we operate and we must understand and comply with each law and standard in each of these jurisdictions while ensuring the data is secure. For example, European laws require us to have an approved legal mechanism to transfer personal data out of Europe; the European Union General Data Protection Regulation, which became enforceable in May 2018, superseded prior European Union data protection legislation and imposes more stringent requirements in how we collect and process personal data and provides for significantly greater penalties for noncompliance; and several other states and countries have passed or are considering laws that require personal data relating to their residents or citizens to be maintained on local servers and impose additional data transfer restrictions. Government enforcement actions can be costly and interrupt the regular operation of our business, and violations of data privacy laws can result in fines, reputational damage and civil lawsuits, any of which may adversely affect our business, reputation and financial statements.

A material disruption of our operations, particularly at our manufacturing facilities or within our information technology infrastructure, could adversely affect our business.

Our facilities, supply chains, distribution systems, and information technology systems are subject to catastrophic loss due to natural disasters or other disruptions, including hurricanes and floods, power outages, fires, explosions, terrorism, equipment failures, sabotage, cyber incidents, any potential effects of climate change and adverse weather conditions, labor disputes, critical supply failure, inaccurate downtime forecast, political disruption, public health crises, like a regional or global pandemic, and other reasons, which can result in undesirable consequences, including financial losses and damaged relationships with customers. The ongoing COVID-19 pandemic has disrupted and may continue to disrupt our supply chain, distribution channels, production facilities, operations and customer demand, which has negatively impacted our operations and adversely affected our business and could continue to do so. We employ information technology systems and networks to support the business and rely on them to process, transmit and store electronic information, and to manage or support a variety of business processes and activities. Disruptions to our information technology infrastructure from system failures, shutdowns, power outages, telecommunication or utility failures, cybersecurity incidents, and other events, including disruptions at our cloud computing, server, systems and other third party IT service providers, could interfere with our operations, interrupt production and shipments, damage customer and business partner relationships, and negatively impact our reputation.

Concentrations of credit, counterparty and market risk may adversely affect our results of operations and financial condition.

We maintain long-term contractual relationships with many of our customers, suppliers, and other counterparties. While we monitor the financial health of these counterparties, we are exposed to credit and market risks of such counterparties, including those concentrated in the same or similar industries and geographic regions. Changes in economic conditions, including the impact of the COVID-19 pandemic, could also lead to concerns about the creditworthiness of counterparties in the same or similar industry or geography, impacting our ability to renew our long-term contractual arrangements or collect amounts due under these arrangements. Among other factors, changes in economic conditions could also result in the credit deterioration or insolvency of a significant counterparty.

We are impacted by increasing stakeholder interest in public company performance, disclosure, and goal-setting with respect to environmental, social, and governance (ESG) matters.

In response to growing customer, investor, employee, governmental, and other stakeholder interest in our ESG practices, including our procedures, standards, performance metrics, and goals, we have increased reporting of our ESG programs and performance and have established and announced goals and other objectives related to ESG matters. These goal statements reflect our current plans and aspirations and are not guarantees that we will be able to achieve them. Our ability to achieve any goal or objective, including with respect to ESG initiatives, is subject to numerous risks, many of which are outside of our control. Examples of such risks include: (1) the availability and cost of low- or non-carbon-based energy sources and technologies, (2) evolving regulatory requirements affecting ESG standards or disclosures, (3) the availability of suppliers that can meet our sustainability, diversity and other standards, (4) our ability to recruit, develop, and retain diverse talent in our labor markets, and (5) the impact of our organic growth and acquisitions or dispositions of businesses or operations. In addition, standards for tracking and reporting on ESG matters have not been harmonized and continue to evolve. Our processes and controls for reporting of ESG matters may not always comply with evolving and disparate standards for identifying, measuring, and reporting ESG metrics, our interpretation of reporting standards may differ from those of others, and such standards may change over time, any of which could result in significant revisions to our performance metrics, goals or reported progress in achieving such goals. In addition, certain of our products and services, including offerings in our Defense and Space business unit, are unattractive to certain investors and may cause us to be increasingly subject to ESG-driven investment practices that preclude investment in our debt and equity.

If our ESG practices or business portfolio do not meet evolving investor or other stakeholder expectations and standards, then our reputation, our ability to attract or retain employees and our attractiveness as an investment, supplier, business partner, or acquiror could be negatively impacted. In addition, our failure or perceived failure to pursue or fulfill our goals, targets, and objectives or to satisfy various reporting standards within the timelines we announce, or at all, could have similar negative impacts and expose us to government enforcement actions and private litigation.

LEGAL AND REGULATORY RISKS

Our U.S. and non-U.S. tax liabilities are dependent, in part, upon the distribution of income among various jurisdictions in which we operate.

Our future results of operations could be adversely affected by changes in the effective tax rate as a result of a change in the mix of earnings in countries with differing statutory tax rates, changes in tax laws (e.g., potential tax law changes in the United States to increase the U.S. Corporate tax rate), regulations and judicial rulings (or changes in the interpretation thereof), potential taxation of digital services, changes in generally accepted accounting principles, changes in the valuation of deferred tax assets and liabilities, changes in the amount of earnings permanently reinvested offshore, the results of audits and examinations of previously filed tax returns and continuing assessments of our tax exposures, and various other governmental enforcement initiatives. Our tax expense includes estimates of tax reserves and reflects other estimates and assumptions, including assessments of future earnings of the Company, which could impact the valuation of our deferred tax assets.

Changes in legislation or government regulations or policies can have a significant impact on our results of operations.

The sales and margins of each of our segments are directly impacted by government regulations, including environmental, safety, performance, and product certification regulations. Within Aerospace, the operating results of Commercial Original Equipment and Commercial Aftermarket may be impacted by, among other things, mandates of the Federal Aviation Administration and other similar international regulatory bodies requiring the installation of equipment on aircraft. Our Defense and Space business unit may be affected by changes in government procurement regulations. Within Honeywell Building Technologies and Safety and Productivity Solutions, the demand for and cost of providing products, services and solutions can be impacted by fire, security, safety, health care, environmental, and energy efficiency standards and regulations. Performance Materials and Technologies' results of operations can be impacted by environmental standards, regulations, and judicial determinations. Growth in all our businesses within emerging markets may be adversely impacted by the inability to acquire and retain qualified employees where local employment law mandates may be restrictive. Changes in such regulations and government policies could negatively impact us; for instance, noncompliance with legislation and regulations can result in fines and penalties, and compliance with any new regulations or policies may be burdensome and/or require significant expenditures.

Increased public awareness and concern regarding global climate change and other ESG matters may result in more international, regional and/or federal regulatory or other stakeholder requirements or expectations that could mandate more restrictive or expansive standards, such as stricter limits on greenhouse gas emissions or more prescriptive reporting of environmental, social, and governance metrics, practices and targets, than the voluntary commitments that the Company has adopted or require such changes on a more accelerated time frame. There continues to be a lack of consistent climate legislation, which creates economic and regulatory uncertainty; however, there has been an increasing amount of legislative and regulatory activity, particularly in the European Union, United Kingdom, and U.S. If environmental laws or regulations are either changed or adopted and impose significant operational restrictions and compliance requirements upon the Company or its products, they could negatively impact the Company's business, capital expenditures, results of operations, financial condition and competitive position.

We cannot predict with certainty the outcome of litigation matters, government proceedings and other contingencies and uncertainties.

We are subject to a number of lawsuits, investigations, and disputes (some of which involve substantial amounts claimed) arising out of the conduct of our business, including matters relating to commercial transactions, government contracts, product liability (including asbestos), prior acquisitions and divestitures, employment, employee benefits plans, intellectual property, antitrust, anti-corruption, accounting, import and export, and environmental, health and safety matters. Our potential liabilities are subject to change over time due to new developments, changes in settlement strategy or the impact of evidentiary requirements, and we may become subject to or be required to pay damage awards or settlements that could have a material adverse effect on our results of operations, cash flows and financial condition. While we maintain insurance for certain risks, the amount of our insurance coverage may not be adequate to cover the total amount of all insured claims and liabilities. The incurrence of significant liabilities for which there is no or insufficient insurance coverage could adversely affect our results of operations, cash flows, liquidity and financial condition.

Vaccine mandates applicable to us, including the U.S. presidential executive order concerning mandatory COVID-19 vaccination of U.S.-based employees of companies that work on or in support of federal contracts could have a material adverse impact on our business and results of operations.

On September 9, 2021, President Biden issued an executive order for U.S. government contractors to mandate vaccination against COVID-19. The executive order covers U.S.-based employees at work locations that directly work on or in support of contracts with the U.S. government. On December 7, 2021, the U.S. District Court for the Southern District of Georgia imposed a nationwide injunction of the executive order, temporarily staying all requirements in the executive order. The District Court's order was appealed to the Eleventh Circuit Court of Appeals, which declined to lift the injunction. It is expected that the U.S. government will appeal the stay to the United States Supreme Court. We implemented a vaccine mandate requiring all U.S.-based employees at work locations that work on or in support of contracts with the U.S. government to receive their first vaccine dose, or a medical or religious exemption, by January 4, 2022. Employees who did not satisfy these requirements, which represented less than 1% of eligible employees, were placed on unpaid leave effective January 10, 2022, and were terminated if they had not taken steps to comply by January 28, 2022. The Company has adopted a vaccine mandate for all U.S.-based prospective and future employees.

In addition, on September 9, 2021, President Biden announced that he directed the OSHA to develop an ETS mandating either the full vaccination or weekly testing of employees for employers with 100 or more employees. The OSHA ETS was published in the federal register on November 5, 2021, and mandates that employees of employers with 100 or more employees either become fully vaccinated by receiving the final dose of an approved COVID-19 vaccine on or before January 4, 2022, or undergo weekly testing. On January 13, 2022, the U.S. Supreme Court re-imposed a stay of the ETS and returned the case to the Sixth Circuit Court of Appeals. The majority of the Supreme Court held that the challengers to the ETS were likely to prevail on the merits because OSHA exceeded its statutory authority. While the Supreme Court's ruling enjoined OSHA from imposing its mandate, the ruling has no impact on the ability of private employers to impose their own vaccine mandate. On January 25, 2022, OSHA announced it was withdrawing the ETS as a result of the U.S. Supreme Court ruling. However, Honeywell has implemented a vaccine mandate for its U.S. employees who were not subject to the executive order described in the above paragraph.

Additional vaccine mandates, or the requirement for employees to receive vaccine booster doses, may be announced in other jurisdictions in which our businesses operate. Our implementation of existing or additional vaccine mandates may result in attrition, including attrition of critically skilled labor, and difficulty securing future labor needs, which could have a material adverse effect on our business, financial condition, and results of operations.

QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISKS

Information relating to market risks is included within Liquidity and Capital Resources of our Form 10-K under the caption “Financial Instruments”.

LIQUIDITY AND CAPITAL RESOURCES

(Dollars in tables in millions)

We continue to manage our businesses to maximize operating cash flows as the primary source of liquidity. Each of our businesses is focused on increasing operating cash flows through revenue growth, margin expansion, and improved working capital turnover. Additional sources of liquidity include committed credit lines, short-term debt from the commercial paper market, long-term borrowings, access to the public debt and equity markets, U.S. cash balances, and the ability to access non-U.S. cash balances.

CASH

We monitor the third-party depository institutions that hold our cash and cash equivalents on a daily basis. Our emphasis is primarily safety of principal and secondarily maximizing yield of those funds. We diversify our cash and cash equivalents among counterparties to minimize exposure to any one of these entities. As of December 31, 2021 and 2020, we held $11.5 billion and $15.2 billion, respectively, of cash and cash equivalents, including our short-term investments.

BORROWINGS

Consolidated total borrowings were $19.6 billion and $22.4 billion as of December 31, 2021 and 2020, respectively.

	December 31,	
	2021	**2020**
Commercial paper and other short-term borrowings	$ 3,542	$ 3,597
Variable rate notes	622	1,122
Fixed rate notes	15,314	17,399
Other	121	266
Total borrowings	**$19,599**	**$22,384**

A source of liquidity is our ability to access the commercial paper market. Commercial paper notes are sold at a discount or premium and have a maturity of not more than 365 days from date of issuance. Borrowings under the commercial paper program are available for general corporate purposes as well as for financing acquisitions. The weighted average interest rate on commercial paper and other short-term borrowings outstanding were 0.07% and 0.27% as of December 31, 2021 and 2020.

We also have the following revolving credit agreements:

- A $1.5 billion 364-Day Credit Agreement (the 364-Day Credit Agreement) with a syndicate of banks, dated March 31, 2021, and amended on November 18, 2021. This 364-Day Credit Agreement is maintained for general corporate purposes. The 364-Day Credit Agreement replaced the 364-day credit agreement dated as of April 10, 2020, which was terminated on March 31, 2021. As of December 31, 2021, there were no outstanding borrowings under our 364-Day Credit Agreement.
- A $4.0 billion Five Year Credit Agreement (the 5-Year Credit Agreement) with a syndicate of banks, dated March 31, 2021, and amended on November 18, 2021. This 5-Year Credit Agreement is

maintained for general corporate purposes. Commitments under the 5-Year Credit Agreement can be increased pursuant to the terms of the 5-Year Credit Agreement to an aggregate amount not to exceed $4.5 billion. The 5-Year Credit Agreement amended and restated the previously reported $4.0 billion amended and restated five-year credit agreement dated as of April 26, 2019. As of December 31, 2021, there were no outstanding borrowings under our 5-Year Credit Agreement.

We also have a current shelf registration statement filed with the SEC under which we may issue additional debt securities, common stock, and preferred stock that may be offered in one or more offerings on terms to be determined at the time of the offering. We anticipate that net proceeds of any offering would be used for general corporate purposes, including repayment of existing indebtedness, share repurchases, capital expenditures and acquisitions.

CREDIT RATINGS

Our ability to access the global debt capital markets and the related cost of these borrowings, is affected by the strength of our credit rating and market conditions. Our credit ratings are periodically reviewed by the major independent debt-rating agencies. As of December 31, 2021, S&P Global Inc. (S&P), Fitch Ratings Inc. (Fitch), and Moody's Investor Service (Moody's) have ratings on our debt set forth in the table below:

	S&P	Fitch	Moody's
Outlook	Stable	Stable	Stable
Short-term	A-1	F1	P1
Long-term	A	A	A2

CASH FLOW SUMMARY

Our cash flows from operating, investing, and financing activities, as reflected in the Consolidated Statement of Cash Flows, are summarized as follows:

	Years Ended December 31,		
	2021	2020	2019
Cash provided by (used for):			
Operating activities	$ 6,038	$ 6,208	$ 6,897
Investing activities	(1,061)	(987)	(533)
Financing activities	(8,254)	(81)	(6,600)
Effect of exchange rate changes on cash	(39)	68	16
Net increase (decrease) in cash and cash equivalents	**$(3,316)**	**$5,208**	**$(220)**

2021 compared with 2020

Cash provided by operating activities decreased primarily due to an unfavorable impact to working capital, partially offset by the increase in net income attributable to Honeywell during 2021, which excludes the 2020 non-cash charges associated with the reduction in value of the reimbursement receivables due from Garrett Motion Inc. (Garrett).

Cash used for investing activities increased by $74 million primarily due to a $1,065 million increase in cash paid for acquisitions, net of cash acquired, and $120 million net increase in investments, partially offset by $586 million cash receipts from Garrett, $341 million increase in cash receipts from settlements of derivative contracts, and $203 million in proceeds from the sale of the retail footwear business.

Cash used for financing activities increased by $8,173 million primarily due to a $7,608 million decrease in proceeds from the issuance of long-term debt and a $609 million increase in repayments of long-term debt, partially offset by a decrease in repurchases of common stock of $334 million.

CASH REQUIREMENTS AND ASSESSMENT OF CURRENT LIQUIDITY

In addition to our normal operating cash requirements, our principal future cash requirements will be to fund capital expenditures, share repurchases, dividends, strategic acquisitions, and debt repayments. Specifically, we expect our primary cash requirements in 2022 to be as follows:

- Capital expenditures—we expect to spend approximately $1.2 billion for capital expenditures in 2022 primarily for growth, production and capacity expansion, implementation of cost reduction measures, maintenance, and replacement.
- Share repurchases—under our share repurchase program, $7.1 billion was available as of December 31, 2021 for additional share repurchases. We expect to repurchase outstanding shares from time to time to offset the dilutive impact of employee stock-based compensation plans, including option exercises, restricted unit vesting and matching contributions under our savings plans. Additionally, we will seek to reduce share count via share repurchases as and when attractive opportunities arise. The amount and timing of future repurchases may vary depending on market conditions and our level of operating, financing and other investing activities.
- Dividends—we increased our quarterly dividend rate by 5% to $0.98 per share of common stock effective with the fourth quarter 2021 dividend. We intend to continue to pay quarterly dividends in 2022.

We continue to identify opportunities to improve our liquidity and working capital efficiency, which includes the extension of payment terms with our suppliers. In addition, multiple third-party financial institutions offer a voluntary supply chain financing (SCF) program which enables our suppliers, at their sole discretion, to sell their receivables from the Company to these financial institutions on terms that are negotiated between the supplier and the respective financial institution. We agree on commercial terms for the goods and services we procure from our suppliers, including prices, quantities and payment terms, regardless of whether the supplier elects to participate in the SCF program. Our suppliers' voluntary participation in the SCF program has no bearing on our payment terms and we have no economic interest in a supplier's decision to participate in the SCF program.

Amounts due to our suppliers that elected to participate in the SCF programs are included in Accounts payable on the Consolidated Balance Sheet. At December 31, 2021, Accounts payable included approximately $700 million payable to suppliers who have elected to participate in the SCF program. Amounts settled with third-party financial institutions through the SCF program increased approximately $300 million for the year ended December 31, 2021. The increase for the year ended December 31, 2021, reflects a combination of an extension of payment terms with suppliers and increased utilization of our SCF program. All activity related to amounts due to suppliers that elected to participate in the SCF program is reflected in Cash flows from operating activities in our Consolidated Statement of Cash Flows. While access to SCF could decrease if our credit ratings are downgraded, we do not believe that changes in the availability of SCF will have a significant impact on our liquidity. The impact of this program is not material to our overall liquidity.

We sell trade receivables to unaffiliated financial institutions without recourse. Transfers of the receivables are accounted for as sales and, accordingly, receivables sold are excluded from Accounts receivable—net on the Consolidated Balance Sheet and are reflected in Cash flows from operating activities on the Consolidated Statement of Cash Flows. The difference between the carrying amount of the trade receivables sold and the cash received is recorded in Cost of products and services sold on the Consolidated Statement of Operations.

Finally, we continue to assess the relative strength of each business in our portfolio as to strategic fit, market position, profit and cash flow contribution in order to identify target investment and acquisition opportunities in order to upgrade our combined portfolio. We identify acquisition candidates that will further our strategic plan and strengthen our existing core businesses. We also identify businesses that do not fit into our long-term strategic plan based on their market position, relative profitability or growth potential. These businesses are considered for potential divestiture, restructuring, or other repositioning actions, subject to regulatory constraints.

Based on past performance and current expectations, we believe that our operating cash flows will be sufficient to meet our future operating cash needs. Our available cash, committed credit lines and access to the public debt and equity markets provide additional sources of short-term and long-term liquidity to fund current operations, debt maturities, and future investment opportunities.

See Note 9 Long-term Debt and Credit Agreements of Notes to Consolidated Financial Statements for additional discussion of items impacting our liquidity.

CONTRACTUAL OBLIGATIONS

Following is a summary of our significant contractual obligations and probable liability payments at December 31, 2021:

		Payments by Period			
	Total[(6)(7)]	2022	2023 - 2024	2025 - 2026	Thereafter
Long-term debt, including finance leases[(1)]	$ 16,057	$ 1,803	$ 3,154	$ 2,761	$ 8,339
Interest payments on long-term debt, including finance leases	4,030	356	679	586	2,409
Operating lease liabilities	1,164	215	341	204	404
Purchase obligations[(2)]	2,585	1,067	784	562	172
Estimated environmental liability payments[(3)]	618	225	241	115	37
Asbestos related liability payments[(4)]	2,061	261	456	396	948
Asbestos insurance recoveries[(5)]	(363)	(41)	(74)	(54)	(194)
	$26,152	**$3,886**	**$5,581**	**$4,570**	**$12,115**

(1) Assumes all long-term debt is outstanding until scheduled maturity.

(2) Purchase obligations are entered into with various vendors in the normal course of business and are consistent with our expected requirements.

(3) The payment amounts in the table only reflect the environmental liabilities which are probable and reasonably estimable as of December 31, 2021.

(4) These amounts are estimates of asbestos related cash payments for NARCO and Bendix based on our asbestos related liabilities which are probable and reasonably estimable as of December 31, 2021. See Asbestos Matters in Note 19 Commitments and Contingencies of Notes to Consolidated Financial Statements for additional information.

(5) These amounts represent our insurance recoveries that are deemed probable for asbestos related liabilities as of December 31, 2021. See Asbestos Matters in Note 19 Commitments and Contingencies of Notes to Consolidated Financial Statements for additional information.

(6) The table excludes tax liability payments, including those for unrecognized tax benefits. See Note 5 Income Taxes of Notes to Consolidated Financial Statements for additional information.

(7) The table excludes expected proceeds from the indemnification and reimbursement agreements entered into with Resideo. See Note 19 Commitments and Contingencies of Notes to Consolidated Financial Statements for additional information.

ASBESTOS MATTERS

Payments, net of insurance recoveries, related to known asbestos matters were $240 million, $229 million and $163 million for the years ended December 31, 2021, 2020 and 2019, respectively, and are estimated to be approximately $220 million in 2022. We expect to make payment associated with these asbestos matters from operating cash flows. The timing of these payments depends on several factors, including the timing of litigation and settlements of liability claims.

ENVIRONMENTAL MATTERS

Accruals during the year for environmental matters deemed probable and reasonably estimable were $168 million, $173 million and $213 million for the years ended December 31, 2021, 2020 and 2019, respectively. In addition, for the years ended December 31, 2021, 2020 and 2019, we incurred operating costs for ongoing businesses of approximately $88 million, $88 million and $99 million, respectively, relating to compliance with environmental regulations.

Payments related to known environmental matters were $210 million, $216 million and $256 million for the years ended December 31, 2021, 2020 and 2019, respectively, and are estimated to be approximately $225 million in 2022. We expect to make payment associated with these environmental matters from operating cash flows. The timing of these payments depends on several factors, including the timing of litigation and settlements of remediation liability, personal injury and property damage claims, regulatory approval of cleanup projects, execution timeframe of projects, remedial techniques to be utilized and agreement with other parties.

Reimbursements from Resideo for payments related to environmental matters at certain sites, as defined in the indemnification and reimbursement agreement, were $140 million in 2021 and are expected to be $140 million in 2022.

See Note 19 Commitments and Contingencies of Notes to Consolidated Financial Statements for further discussion of our environmental matters and the indemnification and reimbursement agreement entered into with Resideo.

FINANCIAL INSTRUMENTS

The Company uses derivative financial instruments to reduce our risks from interest and foreign currency exchange rate fluctuations. Derivative financial instruments are not used for trading or other speculative purposes and we do not use leveraged derivative financial instruments.

The following table illustrates the potential change in fair value for interest rate sensitive instruments based on a hypothetical immediate one percentage point increase in interest rates across all maturities and the potential change in fair value for foreign exchange rate sensitive instruments based on a 10% weakening of the U.S. Dollar versus local currency exchange rates across all maturities at December 31, 2021 and 2020.

	Face or Notional Amount	Carrying Value(1)	Fair Value(1)	Estimated Increase (Decrease) in Fair Value(2)
December 31, 2021				
Interest Rate Sensitive Instruments				
Long-term debt (including current maturities)	$16,057	$(16,057)	$(17,022)	$(1,148)
Interest rate swap agreements	3,150	60	60	(112)
Foreign Exchange Rate Sensitive Instruments				
Foreign currency exchange contracts(3)	12,671	92	92	(628)
Cross currency swap agreements	1,200	39	39	(116)
December 31, 2020				
Interest Rate Sensitive Instruments				
Long-term debt (including current maturities)	$18,787	$(18,787)	$(20,176)	$(1,063)
Interest rate swap agreements	3,950	194	194	(148)
Foreign Exchange Rate Sensitive Instruments				
Foreign currency exchange contracts(3)	16,123	52	52	(334)
Cross currency swap agreements	1,200	(50)	(50)	(125)

(1) Asset or (liability).

(2) A hypothetical immediate one percentage point decrease in interest rates across all maturities and a potential change in fair value of foreign exchange rate sensitive instruments based on a 10% strengthening of the U.S. dollar versus local currency exchange rates across all maturities will result in a change in fair value approximately equal to the inverse of the amount disclosed in the table.

(3) Changes in the fair value of foreign currency exchange contracts are offset by changes in the fair value, cash flows, or net investments of underlying hedged foreign currency transactions or foreign operations.

See Note 11 Derivative Instruments and Hedging Transactions to Consolidated Financial Statements for further discussion.

CRITICAL ACCOUNTING ESTIMATES

The preparation of our consolidated financial statements in accordance with generally accepted accounting principles is based on the selection and application of accounting policies that require us to make significant estimates and assumptions about the effects of matters that are inherently uncertain. Many estimates and assumptions involved in the application of accounting principles have a material impact on reported financial condition and operating performance and on the comparability of such reported information over different reporting periods. Critical accounting estimates or assumptions are those where the nature of the estimates or assumptions is material due to the levels of subjectivity and judgment necessary to account for highly uncertain matters or the susceptibility of such matters to change, and the impact of the estimates and assumptions on financial condition or operating performance is material. We consider the estimates and assumptions discussed below to be critical to the understanding of our financial statements. Actual results could differ from our estimates and assumptions, and any such differences could be material to our consolidated financial statements.

Sales Recognition on Long-Term Contracts—We recognize sales for long-term contracts with performance obligations satisfied over time using either an input or output method. We recognize revenue over time as we perform on these contracts based on the continuous transfer of control to the customer. With control transferring over time, revenue is recognized based on the extent of progress towards completion of the performance obligation. We generally use the cost-to-cost input method of progress for our contracts because it best depicts the transfer of control to the customer that occurs as we incur costs. Under the cost-to-cost input method, the extent of progress towards completion is measured based on the proportion of costs incurred to date to the total estimated costs at completion of the performance obligation. Due to the nature of the work required to be performed on many of our performance obligations, the estimation of total revenue and cost at completion requires judgment. Contract revenues are largely determined by negotiated contract prices and quantities, modified by our assumptions regarding contract options, change orders, incentive and award provisions associated with technical performance and price adjustment clauses (such as inflation or index-based clauses). Cost estimates are largely based on negotiated or estimated purchase contract terms, historical performance trends and other economic projections. Significant factors that influence these estimates include inflationary trends, technical and schedule risk, internal and subcontractor performance trends, business volume assumptions, asset utilization, and anticipated labor agreements. Revenue and cost estimates are regularly monitored and revised based on changes in circumstances. Impacts from changes in estimates of net sales and cost of sales are recognized on a cumulative catch-up basis, which recognizes in the current period the cumulative effect of the changes on current and prior periods based on a performance obligation's percentage of completion. Anticipated losses on long-term contracts are recognized when such losses become evident. We maintain financial controls over the customer qualification, contract pricing and estimation processes to reduce the risk of contract losses.

Income Taxes—On a recurring basis, we assess the need for a valuation allowance against our deferred tax assets by considering all available positive and negative evidence, such as past operating results, projections of future taxable income, enacted tax law changes and the feasibility and impact of tax planning initiatives. Our projections of future taxable income include a number of estimates and assumptions regarding our volume, pricing and costs, as well as the timing and amount of reversals of taxable temporary differences.

We recognize tax benefits from uncertain tax positions only if it is more likely than not that the tax position will be sustained on examination by the taxing authorities, including resolution of any related appeals and litigation. We assess our income tax positions based upon our evaluation of the facts, circumstances and information available at the reporting date. The tax benefits recognized in the financial statements from such positions are then measured based on the largest benefit that has a greater than 50% likelihood of being realized upon ultimate settlement with a taxing authority that has full knowledge of all relevant information. For those income tax positions where it is not more likely than not that a tax benefit will be sustained, no tax benefit has been recognized in the financial statements.

For further discussion of additional income tax policies, see Note 1 Summary of Significant Accounting Policies of Notes to Consolidated Financial Statements.

Goodwill and Indefinite-Lived Intangible Assets Impairment Testing—Goodwill and intangible assets deemed to have indefinite lives are not amortized, but are subject to annual, or more frequent if necessary, impairment testing. In testing goodwill and indefinite-lived intangible assets, the fair value is estimated utilizing a discounted cash flow approach utilizing cash flow forecasts, including strategic and annual operating plans, adjusted for terminal value assumptions. These impairment tests involve the use of accounting estimates and assumptions, changes in which could materially impact our financial condition or operating performance if actual results differ from such estimates and assumptions. To address this uncertainty, we perform sensitivity analyses on key estimates and assumptions. Once the fair value is determined, if the carrying amount exceeds the fair value, it is impaired. Any impairment is measured as the difference between the carrying amount and its fair value.

Finite-Lived Intangible Assets—The determination of useful lives (for depreciation/amortization purposes) and whether or not intangible assets are impaired involves the use of accounting estimates and assumptions, changes in which could materially impact our financial condition or operating performance if actual results differ from such estimates and assumptions. We evaluate the recoverability of the carrying amount of our finite-lived intangible assets whenever events or changes in circumstances indicate that the carrying amount of a finite-lived intangible asset group may not be fully recoverable. The principal factors in considering when to perform an impairment review are as follows:

- Significant under-performance (i.e., declines in sales, earnings or cash flows) of a business or product line in relation to expectations;
- Annual operating plans or strategic plan outlook that indicate an unfavorable trend in operating performance of a business or product line;
- Significant negative industry or economic trends; or
- Significant changes or planned changes in our use of the assets.

Once it is determined that an impairment review is necessary, recoverability of assets is measured by comparing the carrying amount of the asset grouping to the estimated future undiscounted cash flows. If the carrying amount exceeds the estimated future undiscounted cash flows, the asset grouping is considered to be impaired. The impairment is then measured as the difference between the carrying amount of the asset grouping and its fair value. We endeavor to utilize the best information available to measure fair value, which is usually either market prices (if available), level 1 or level 2 of the fair value hierarchy, or an estimate of the future discounted cash flow, level 3 of the fair value hierarchy. The key estimates in our discounted cash flow analysis include assumptions as to expected industry and business growth rates, sales volume, selling prices and costs, cash flows, and the discount rate selected. These estimates are subject to changes in the economic environment, including market interest rates and expected volatility. Management believes the estimates of future cash flows and fair values are reasonable; however, changes in estimates due to variance from assumptions could materially affect the valuations.

Defined Benefit Pension Plans—We sponsor both funded and unfunded U.S. and non-U.S. defined benefit pension plans. For financial reporting purposes, net periodic pension (income) expense is calculated annually based upon various actuarial assumptions, including a discount rate for plan obligations and an expected long-term rate of return on plan assets. Changes in the discount rate and expected long-term rate of return on plan assets could materially affect the annual pension (income) expense amount. Annual pension (income) expense is comprised of service and interest cost, assumed return on plan assets, prior service amortization (Pension ongoing (income) expense) and a potential mark-to-market adjustment (MTM Adjustment).

The key assumptions used in developing our net periodic pension (income) expense for our U.S. plans included the following:

	2021	2020	2019
Discount Rate:			
Projected benefit obligation	2.50 %	3.22 %	4.35 %
Service cost	2.68 %	3.33 %	4.47 %
Interest cost	1.76 %	2.76 %	3.94 %
Assets:			
Expected rate of return	6.15 %	6.15 %	6.75 %
Actual rate of return	6.84 %	13.81 %	21.20 %
Actual 10 year average annual compounded rate of return	11.37 %	10.64 %	11.10 %

The MTM Adjustment represents the recognition of net actuarial gains or losses in excess of 10% of the greater of the fair value of plan assets or the plans' projected benefit obligation (the corridor). Net actuarial gains and losses occur when the actual experience differs from any of the various assumptions used to value our pension plans or when assumptions change. The primary factors contributing to actuarial gains and losses are changes in the discount rate used to value pension obligations as of the measurement date each year and the difference between expected and actual returns on plan assets. The mark-to-market accounting method results in the potential for volatile and difficult to forecast MTM Adjustments. MTM Adjustments were expenses of $40 million, $44 million and $123 million for the years ended December 31, 2021, 2020 and 2019, respectively.

We determine the expected long-term rate of return on plan assets utilizing historical plan asset returns over varying long-term periods combined with our expectations of future market conditions and asset mix considerations (see Note 20 Pension and Other Postretirement Benefits of Notes to Consolidated Financial Statements for details on the actual various asset classes and targeted asset allocation percentages for our pension plans). We plan to use an expected rate of return on plan assets of 6.40% for 2022, which is an increase in the assumption used for 2021.

The discount rate reflects the market rate on December 31 (measurement date) for high-quality fixed-income investments with maturities corresponding to our benefit obligations and is subject to change each year. The discount rate can be volatile from year to year as it is determined based upon prevailing interest rates as of the measurement date. We used a 2.87% discount rate to determine benefit obligations as of December 31, 2021, reflecting an increase in the market interest rate environment since the prior year-end.

In addition to the potential for MTM Adjustments, changes in our expected rate of return on plan assets and discount rate resulting from economic events also affects future Pension ongoing (income) expense. The following table highlights the sensitivity of our U.S. pension obligations and ongoing (income) expense to changes in these assumptions, assuming all other assumptions remain constant. These estimates exclude any potential MTM Adjustment:

Change in Assumption	Impact on 2022 Pension Ongoing Expense	Impact on PBO
0.25 percentage point decrease in discount rate	Decrease $29 million	Increase $500 million
0.25 percentage point increase in discount rate	Increase $27 million	Decrease $475 million
0.25 percentage point decrease in expected rate of return on assets	Increase $50 million	—
0.25 percentage point increase in expected rate of return on assets	Decrease $50 million	—

Pension ongoing income for our world-wide pension plans is expected to be approximately $1,008 million in 2022 compared with Pension ongoing income of $1,083 million in 2021. The expected decrease in pension income is primarily due to lower expected return on plan assets caused by a change in allocation of UK plan assets and higher interest costs caused by increased discount rates in our U.S. and UK plans. Also, if required, a MTM Adjustment will be recorded in the fourth quarter of 2022 in accordance with our pension accounting method as previously described. It is difficult to reliably forecast or predict whether there will be a MTM Adjustment in 2022, and if one is required, what the magnitude of such adjustment will be. MTM Adjustments are primarily driven by events and circumstances beyond the control of the Company such as changes in interest rates and the performance of the financial markets.

Asbestos Related Liabilities and Insurance Recoveries—In connection with the recognition of liabilities for asbestos related matters, we record asbestos related insurance recoveries that are deemed probable. In assessing the probability of insurance recovery, we make judgments concerning insurance coverage that we believe are reasonable and consistent with our historical dealings and our knowledge of any pertinent solvency issues surrounding insurers. While the substantial majority of our insurance carriers are solvent, some of our individual carriers are insolvent, which has been considered in our analysis of probable recoveries. Projecting future events is subject to various uncertainties that could cause the insurance recovery on asbestos related liabilities to be higher or lower than that projected and recorded. Given the inherent uncertainty in making future projections, we reevaluate our projections concerning our probable insurance recoveries considering any changes to the projected liability, our recovery experience or other relevant factors that may impact future insurance recoveries.

Our involvement in asbestos related personal injury actions relates to two predecessor companies. Regarding North American Refractories Company (NARCO) asbestos related claims, we estimate our NARCO asbestos liability for the resolution of asserted NARCO-related asbestos claims which qualify for payment under the NARCO Trust Distribution Procedures (Annual Contribution Claims) and for amounts owed pursuant to settlement agreements reached during the pendency of the NARCO bankruptcy proceedings that provide for the right to submit claims to the NARCO Trust subject to qualification under the terms of the settlement agreements and Trust Distribution Procedures (Pre-Established Unliquidated Claims) using average payment values for the relevant historical period. We estimate our NARCO asbestos liability for unasserted claims based on historic and anticipated claims filing experience and payment rates, disease classifications and type of claim, and average payment values by the NARCO Trust for the relevant historical period. Our estimate also includes all years of epidemiological disease projection through 2059. Regarding Bendix Friction Materials (Bendix) asbestos related claims, we accrued for the estimated value of pending claims using average resolution values for the previous five years. We also accrued for the estimated value of future claims related to Bendix over the full term of epidemiological disease projection through 2059 based on historic and anticipated claims filing experience and dismissal rates, disease classifications, and average resolution values in the tort system for the previous five years. We update our assumptions on average payment values and average resolution values in the fourth quarter of each year.

See Note 19 Commitments and Contingencies of Notes to Consolidated Financial Statements for a discussion of management’s judgments applied in the recognition and measurement of our asbestos related liabilities and related insurance recoveries.

Contingent Liabilities—We are subject to a number of lawsuits, investigations and claims (some of which involve substantial dollar amounts) that arise out of the conduct of our global business operations or those of previously owned entities, including matters relating to commercial transactions, government contracts, product liability (including asbestos), prior acquisitions and divestitures, employee benefit plans, intellectual property, legal and environmental, health and safety matters. We continually assess the likelihood of any adverse judgments or outcomes to our contingencies, as well as potential amounts or ranges of probable losses, and recognize a liability, if any, for these contingencies based on a thorough analysis of each matter with the assistance of outside legal counsel and, if applicable, other experts. Such analysis includes making judgments concerning matters such as the costs associated with environmental matters, the outcome of negotiations, the number and cost of pending and future asbestos claims, and the impact of evidentiary requirements. Because most contingencies are resolved over long periods of time, liabilities may change in the future due to new developments (including new discovery of facts, changes in legislation and outcomes of similar cases through the judicial system), changes in assumptions or changes in our settlement strategy. See Note 19 Commitments and Contingencies of Notes to Consolidated Financial Statements for a discussion of management's judgment applied in the recognition and measurement of our environmental and asbestos liabilities which represent our most significant contingencies.

OTHER MATTERS

LITIGATION

See Note 19 Commitments and Contingencies of Notes to Consolidated Financial Statements for a discussion of environmental, asbestos and other litigation matters.

RECENT ACCOUNTING PRONOUNCEMENTS

See Note 1 Summary of Significant Accounting Policies of Notes to Consolidated Financial Statements for a discussion of recent accounting pronouncements.

INFORMATION ABOUT OUR EXECUTIVE OFFICERS

The executive officers of Honeywell, listed as follows, are elected annually by the Board of Directors. There are no family relationships among them.

Name, Age, Year First Elected an Executive Officer		Business Experience
hon-20211231_g46.jpg	**Darius Adamczyk**, 56 2017[(a)]	Chairman of the Board and Chief Executive Officer since April 2018. President and Chief Executive Officer from April 2017 to April 2018. Chief Operating Officer from April 2016 to March 2017. President and Chief Executive Officer Performance Materials and Technologies from April 2014 to April 2016. President of Honeywell Process Solutions from April 2012 to April 2014.
hon-20211231_g47.jpg	**Que Thanh Dallara**, 48 2018	President and Chief Executive Officer, Connected Enterprise since October 2018. Vice President and Chief Commercial Officer from January 2017 to October 2018. From 2007 to 2016, Ms. Dallara served in multiple leadership positions at TE Connectivity Ltd., most recently as Senior Vice President, Corporate Strategy and Analytics.
hon-20211231_g48.jpg	**Vimal Kapur**, 56 2018	President and Chief Executive Officer, Performance Materials and Technologies since July 2021. President and Chief Executive Officer, Honeywell Building Technologies from June 2018 to June 2021. President of Honeywell Process Solutions from 2014 to May 2018.
hon-20211231_g49.jpg	**George Koutsaftes**, 52 April 2022[(b)]	Chief Operating Officer, Safety and Productivity Solutions since January 2022. President of the Advanced Materials business in Honeywell's Performance Materials and Technologies segment from November 2017 to January 2022 and interim global leader of Business Development and Mergers and Acquisitions from May 2019 to December 2019.
hon-20211231_g50.jpg	**Gregory P. Lewis**, 54 2018	Senior Vice President and Chief Financial Officer since August 2018. Vice President of Enterprise Information Management from October 2016 to April 2018, prior to being named Vice President, Corporate Finance in May 2018. Chief Financial Officer of Automation and Control Solutions from April 2013 to September 2016.
hon-20211231_g51.jpg	**Anne T. Madden**, 57 2017	Senior Vice President and General Counsel since October 2017. Corporate Secretary from February 2018 to September 2019. Vice President of Corporate Development

[a] Also a Director.

[b] Mr. Koutsaftes will become President and Chief Executive Officer of Safety and Productivity Solutions and an Executive Officer of the Company effective April 1, 2022, succeeding Mr. Waldron in such position

UNRESOLVED STAFF COMMENTS

None.

PROPERTIES

We have approximately 750 locations, of which 210 are manufacturing sites. Our properties and equipment are in good operating condition and are adequate for our present needs. We do not anticipate difficulty in renewing existing leases as they expire or in finding alternative facilities.

LEGAL PROCEEDINGS

We are subject to a number of lawsuits, investigations and claims (some of which involve substantial amounts) arising out of the conduct of our business. See a discussion of environmental, asbestos and other litigation matters in **Note 19 Commitments and Contingencies of Notes to Consolidated Financial Statements.**

There were no matters requiring disclosure pursuant to the requirement to disclose certain environmental matters involving potential monetary sanctions in excess of $300,000.

MINE SAFETY DISCLOSURES

One of our wholly-owned subsidiaries has a placer claim for and operates a chabazite ore surface mine in Arizona. Information concerning mine safety and other regulatory matters associated with this mine is required by Section 1503(a) of the Dodd-Frank Wall Street Reform and Consumer Protection Act and Item 104 of Regulation S-K and is included in Exhibit 95 to this Form 10-K.

MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

Since May 11, 2021, our common stock has been listed on The Nasdaq Stock Market LLC (Nasdaq) under the ticker symbol "HON". Prior to May 11, 2021, our common stock was listed and traded on the New York Stock Exchange. We increased our quarterly dividend rate by 5% to $0.98 per share of common stock effective with the fourth quarter 2021 dividend. We intend to continue to pay quarterly dividends in 2022.

The number of record holders of our common stock at December 31, 2021 was 40,420.

Information regarding securities authorized for issuance under equity compensation plans is included the section titled Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters under the caption "Equity Compensation Plans."

We purchased 4,256,144 shares of our common stock, par value $1 per share, in the quarter ended December 31, 2021. On February 12, 2021, the Board of Directors authorized the repurchase of up to a total of $10 billion of Honeywell common stock, which included amounts remaining under, and replaced, the previously approved share repurchase program. As of December 31, 2021, $7.1 billion remained available for additional share repurchases. We expect to repurchase outstanding shares from time to time to generally offset the dilutive impact of employee stock-based compensation plans, including option exercises, restricted unit vesting and matching contributions under our savings plans. Additionally, we seek to reduce share count via share repurchases as and when attractive opportunities arise. The amount and timing of future repurchases may vary depending on market conditions and the level of our operating, financing and other investing activities.

The following table summarizes our purchases of Honeywell's common stock for the three months ended December 31, 2021:

Issuer Purchases of Equity Securities

Period	**Total Number of Shares Purchased**	**Average Price Paid per Share**	**Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs**	**Approximate Dollar Value of Shares that May Yet be Purchased Under Plans or Programs (Dollars in millions)**
October 1 - 31, 2021	189,536	$ 213.76	189,536	$ 7,946
November 1 - 30, 2021	—	$ —	—	$ 7,946
December 1 - 31, 2021	4,066,608	$ 206.51	4,066,608	$ 7,106

PERFORMANCE GRAPH

The following graph compares the five-year cumulative total return on our common stock to the total returns on the S&P 500 Stock Index, composite of S&P's Industrial Conglomerates and Aerospace and Defense indices, on a 55%/45% weighted basis (the Composite Index) and Nasdaq Industrial Select Sector (XLI Index). The weighting of the components of the Composite Index are based on our segments' relative contribution to total segment profit. The selection of the Industrial Conglomerates component of the Composite Index reflects the diverse and distinct range of non-aerospace businesses conducted by Honeywell. The annual changes for the five-year period shown in the graph are based on the assumption that $100 was invested in Honeywell stock and each index on December 31, 2016 and that all dividends were reinvested.

Comparison of Cumulative Five Year Total Return

hon-20211231_g56.jpg

		Dec. 2016	Dec. 2017	Dec. 2018	Dec
hon-20211231_g57.jpg	Honeywell	100	135.10	123.99	169
hon-20211231_g58.jpg	S&P 500 Index	100	121.83	116.49	153
hon-20211231_g59.jpg	Composite Index	100	113.96	92.97	11
hon-20211231_g60.jpg	XLI Composite Index	100	123.98	107.55	138

FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

HONEYWELL INTERNATIONAL INC.
CONSOLIDATED STATEMENT OF OPERATIONS

	Years Ended December 31,		
	2021	**2020**	**2019**
	(Dollars in millions, except per share amounts)		
Product sales	$25,643	$24,737	$27,629
Service sales	8,749	7,900	9,080
Net sales	**34,392**	**32,637**	**36,709**
Costs, expenses and other			
Cost of products sold	18,344	17,638	19,269
Cost of services sold	5,050	4,531	5,070
	23,394	**22,169**	**24,339**
Selling, general and administrative expenses	4,798	4,772	5,519
Other (income) expense	(1,378)	(675)	(1,065)
Interest and other financial charges	343	359	357
	27,157	**26,625**	**29,150**
Income before taxes	7,235	6,012	7,559
Tax expense	1,625	1,147	1,329
Net income	**5,610**	**4,865**	**6,230**
Less: Net income attributable to the noncontrolling interest	68	86	87
Net income attributable to Honeywell	**$ 5,542**	**$ 4,779**	**$ 6,143**
Earnings per share of common stock—basic	**$ 8.01**	**$ 6.79**	**$ 8.52**
Earnings per share of common stock—assuming dilution	**$ 7.91**	**$ 6.72**	**$ 8.41**

The Notes to Consolidated Financial Statements are an integral part of this statement.

HONEYWELL INTERNATIONAL INC.
CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

	Years Ended December 31,		
	2021	2020	2019
	(Dollars in millions)		
Net income	$ 5,610	$ 4,865	$ 6,230
Other comprehensive income (loss), net of tax			
Foreign exchange translation adjustment	**302**	**(211)**	**143**
Actuarial gains (losses) recognized	256	91	162
Prior service credit (cost) recognized	7	47	1
Prior service credit recognized during year	(87)	(82)	(79)
Actuarial (gains) losses recognized during year	5	41	16
Foreign exchange translation and other	5	(23)	(14)
Pensions and other postretirement benefit adjustments	**186**	**74**	**86**
Changes in fair value of available for sale investments	(3)	4	—
Cash flow hedges recognized in other comprehensive income	17	10	103
Less: Reclassification adjustment for gains (losses) included in net income	20	54	92
Changes in fair value of cash flow hedges	**(3)**	**(44)**	**11**
Other comprehensive income (loss), net of tax	482	(177)	240
Comprehensive income	**6,092**	**4,688**	**6,470**
Less: Comprehensive income attributable to the noncontrolling interest	64	89	82
Comprehensive income attributable to Honeywell	**$6,028**	**$4,599**	**$6,388**

The Notes to Consolidated Financial Statements are an integral part of this statement.

HONEYWELL INTERNATIONAL INC.
CONSOLIDATED BALANCE SHEET

	December 31,	
	2021	2020
	(Dollars in millions)	
ASSETS		
Current assets:		
Cash and cash equivalents	$ 10,959	$ 14,275
Short-term investments	564	945
Accounts receivable, less allowances of $177 and $202, respectively	6,830	6,827
Inventories	5,138	4,489
Other current assets	1,881	1,639
Total current assets	**25,372**	**28,175**
Investments and long-term receivables	1,222	685
Property, plant and equipment—net	5,562	5,570
Goodwill	17,756	16,058
Other intangible assets—net	3,613	3,560
Insurance recoveries for asbestos related liabilities	322	366
Deferred income taxes	489	760
Other assets	10,134	9,412
Total assets	**$64,470**	**$64,586**
LIABILITIES		
Current liabilities:		
Accounts payable	$ 6,484	$ 5,750
Commercial paper and other short-term borrowings	3,542	3,597
Current maturities of long-term debt	1,803	2,445
Accrued liabilities	7,679	7,405
Total current liabilities	**19,508**	**19,197**
Long-term debt	14,254	16,342
Deferred income taxes	2,364	2,113
Postretirement benefit obligations other than pensions	208	242
Asbestos related liabilities	1,800	1,920
Other liabilities	7,087	6,975
Redeemable noncontrolling interest	7	7
SHAREOWNERS' EQUITY		
Capital—common stock issued	958	958
—additional paid-in capital	8,141	7,292
Common stock held in treasury, at cost	(30,462)	(27,229)
Accumulated other comprehensive income (loss)	(2,895)	(3,377)
Retained earnings	42,827	39,905
Total Honeywell shareowners' equity	**18,569**	**17,549**
Noncontrolling interest	673	241
Total shareowners' equity	**19,242**	**17,790**
Total liabilities, redeemable noncontrolling interest and shareowners' equity	**$64,470**	**$64,586**

The Notes to Consolidated Financial Statements are an integral part of this statement.

HONEYWELL INTERNATIONAL INC.
CONSOLIDATED STATEMENT OF CASH FLOWS

	Years Ended December 31,		
	2021	2020	2019
	(Dollars in millions)		
Cash flows from operating activities:			
Net income	$ 5,610	$ 4,865	$ 6,230
Less: Net income attributable to the noncontrolling interest	68	86	87
Net income attributable to Honeywell	**5,542**	**4,779**	**6,143**
Adjustments to reconcile net income attributable to Honeywell to net cash provided by operating activities:			
Depreciation	674	644	673
Amortization	549	358	415
(Gain) loss on sale of non-strategic businesses and assets	(102)	3	1
Repositioning and other charges	569	575	546
Net payments for repositioning and other charges	(692)	(833)	(376)
Pension and other postretirement income	(1,114)	(798)	(516)
Pension and other postretirement benefit payments	(43)	(47)	(78)
Stock compensation expense	217	168	153
Deferred income taxes	178	(175)	179
Reimbursement receivables charge	—	509	—
Other	(28)	(338)	(287)
Changes in assets and liabilities, net of the effects of acquisitions and divestitures:			
Accounts receivable	(8)	669	11
Inventories	(685)	(67)	(100)
Other current assets	(276)	191	(430)
Accounts payable	744	15	118
Accrued liabilities	513	555	445
Net cash provided by (used for) operating activities	**6,038**	**6,208**	**6,897**
Cash flows from investing activities:			
Expenditures for property, plant and equipment	(895)	(906)	(839)
Proceeds from disposals of property, plant and equipment	27	57	43
Increase in investments	(2,373)	(3,236)	(4,253)
Decrease in investments	2,525	3,508	4,464
Receipts from Garrett Motion Inc.	586	—	—
Receipts (payments) from settlements of derivative contracts	192	(149)	102
Cash paid for acquisitions, net of cash acquired	(1,326)	(261)	(50)
Proceeds from sales of businesses, net of fees paid	203	—	—
Net cash provided by (used for) investing activities	**(1,061)**	**(987)**	**(533)**
Cash flows from financing activities:			
Proceeds from issuance of commercial paper and other short-term borrowings	5,194	10,474	14,199
Payments of commercial paper and other short-term borrowings	(5,190)	(10,400)	(14,199)
Proceeds from issuance of common stock	229	393	498
Proceeds from issuance of long-term debt	2,517	10,125	2,726
Payments of long-term debt	(4,917)	(4,308)	(2,903)
Repurchases of common stock	(3,380)	(3,714)	(4,400)
Cash dividends paid	(2,626)	(2,592)	(2,442)
Other	(81)	(59)	(79)

The Notes to Consolidated Financial Statements are an integral part of this statement.

HONEYWELL INTERNATIONAL INC.
CONSOLIDATED STATEMENT OF SHAREOWNERS' EQUITY

	Years Ended December 31,					
	2021		2020		2019	
	Shares	$	Shares	$	Shares	$
	(in millions, except per share amounts)					
Common stock, par value	957.6	958	957.6	958	957.6	958
Additional paid-in capital						
Beginning balance		7,292		6,876		6,452
Issued for employee savings and option plans		184		248		271
Stock-based compensation expense		217		168		153
Impact of Quantinuum contribution		448		—		—
Ending balance		8,141		7,292		6,876
Treasury stock						
Beginning balance	(260.8)	(27,229)	(246.5)	(23,836)	(228.0)	(19,771)
Reacquired stock or repurchases of common stock	(15.8)	(3,380)	(20.7)	(3,714)	(26.5)	(4,400)
Issued for employee savings and option plans	3.8	147	6.4	321	8.0	335
Ending balance	(272.8)	(30,462)	(260.8)	(27,229)	(246.5)	(23,836)
Retained earnings						
Beginning balance		39,905		37,693		33,978
Net income attributable to Honeywell		5,542		4,779		6,143
Dividends on common stock		(2,620)		(2,567)		(2,428)
Ending balance		42,827		39,905		37,693
Accumulated other comprehensive income (loss)						
Beginning balance		(3,377)		(3,197)		(3,437)
Foreign exchange translation adjustment		302		(214)		143
Pensions and other postretirement benefit adjustments		186		74		86
Changes in fair value of available for sale investments		(3)		4		—
Changes in fair value of cash flow hedges		(3)		(44)		11
Ending balance		(2,895)		(3,377)		(3,197)
Noncontrolling interest						
Beginning balance		241		212		178
Acquisitions, divestitures, and other		397		(6)		(3)
Net income attributable to noncontrolling interest		68		86		87
Foreign exchange translation adjustment		(4)		3		(5)
Dividends paid		(33)		(54)		(45)
Contributions from noncontrolling interest holders		4		—		—
Ending balance		673		241		212
Total shareowners' equity	**684.8**	**19,242**	**696.8**	**17,790**	**711.1**	**18,706**
Cash dividends per share of common stock		**$3.770**		**$3.630**		**$3.360**

The Notes to Consolidated Financial Statements are an integral part of this statement.

HONEYWELL INTERNATIONAL INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(Dollars in tables in millions, except per share amounts)

NOTE 1 . SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

ACCOUNTING PRINCIPLES

The financial statements and accompanying notes are prepared in accordance with accounting principles generally accepted in the United States of America. The following is a description of Honeywell's significant accounting policies.

PRINCIPLES OF CONSOLIDATION

The Consolidated Financial Statements include the accounts of Honeywell International Inc. and all of its subsidiaries and entities in which a controlling interest is maintained. The Company's consolidation policy requires equity investments that the Company exercises significant influence over but do not control the investee and are not the primary beneficiary of the investee's activities to be accounted for using the equity method. Investments through which the Company is not able to exercise significant influence over the investee and which the Company does not have readily determinable fair values are accounted for under the cost method. All intercompany transactions and balances are eliminated in consolidation.

RECLASSIFICATIONS

Certain prior year amounts have been reclassified to conform to the current year presentation.

RECENT ACCOUNTING PRONOUNCEMENTS

The Company considers the applicability and impact of all Accounting Standards Updates (ASUs) issued by the Financial Accounting Standards Board (FASB). ASUs not listed below were assessed and determined to be either not applicable or are expected to have minimal impact on the Company's consolidated statement of operations, balance sheet and cash flows (Consolidated Financial Statements).

In December 2019, the FASB issued ASU 2019-12, *Simplifying the Accounting for Income Taxes.* The standard's amendments include changes in various subtopics of accounting for income taxes including, but not limited to, accounting for "hybrid" tax regimes, tax basis step-up in goodwill obtained in a transaction that is not a business combination, intraperiod tax allocation exception to incremental approach, ownership changes in investments, interim-period accounting for enacted changes in tax law, and year-to-date loss limitation in interim-period tax accounting. Effective January 1, 2021, the Company adopted this standard. The adoption of this standard did not have a material impact on the Company's Consolidated Financial Statements.

In March 2020, the FASB issued ASU 2020-04, *Reference Rate Reform (Topic 848): Facilitation of the Effects of Reference Rate Reform on Financial Reporting,* which provides optional expedients and exceptions for applying generally accepted accounted principles to contracts, hedging relationships, and other transactions affected by the transition away from reference rates expected to be discontinued to alternative reference rates. In January 2021, the FASB issued ASU 2021-01, *Reference Rate Reform (Topic 848): Scope*, to expand the scope of this guidance to include derivatives. The guidance was effective upon issuance and may be applied prospectively to contract modifications made and hedging relationships entered into on or before December 31, 2022. The Company will apply the guidance to impacted transactions during the transition period. The Company does not expect the adoption of this standard to have a material impact on the Company's Consolidated Financial Statements.

In October 2021, the FASB issued ASU 2021-08, *Business Combinations (Topic 805) - Accounting for Contract Assets and Contract Liabilities from Contracts with Customers*, which requires contract assets and contract liabilities acquired in a business combination to be recognized and measured by the acquirer on the acquisition date in accordance with ASC 606, Revenue from Contracts with Customers. This ASU should be applied prospectively to acquisitions occurring on or after the effective date of December 15, 2022, and early adoption is permitted. The Company is currently evaluating the impacts of this guidance on the Company's Consolidated Financial Statements. The Company does not expect the adoption of this standard to have a material impact on the Company's Consolidated Financial Statements.

HONEYWELL INTERNATIONAL INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)
(Dollars in tables in millions, except per share amounts)

RESEARCH AND DEVELOPMENT

Research and development costs for projects are expensed as incurred, unless these costs relate to contracts with customers where the Company receives reimbursements. Amounts expensed as incurred for Company-sponsored research and development projects are included in Cost of products and services sold and were $1,333 million, $1,334 million and $1,556 million for the years ended December 31, 2021, 2020 and 2019, respectively. Costs related to contracts with customers for customer-sponsored research and development projects are included as a contract cost and included in Cost of products and services sold when revenue from such contracts is recognized, consistent with the Company's sales recognition policies. This revenue was $1,284 million, $1,200 million and $1,079 million for the years ended December 31, 2021, 2020 and 2019, respectively.

CASH AND CASH EQUIVALENTS

Cash and cash equivalents include cash on hand and highly liquid investments having an original maturity of three months or less.

INVENTORIES

Inventories are stated at the lower of cost or net realizable value, with cost determined on a first-in, first-out (FIFO) basis. Carrying value adjustments for inventory obsolescence is equal to the difference between the cost and net realizable value. Net realizable value is the estimate selling price in the ordinary course of business, less reasonably predictable costs of completion, disposal, and transportation.

PROPERTY, PLANT AND EQUIPMENT

Property, plant and equipment are recorded at cost, including any asset retirement obligations, less accumulated depreciation. For financial reporting, the straight-line method of depreciation is used over the estimated useful lives of 10 to 50 years for buildings and improvements and 3 to 16 years for machinery and equipment. Recognition of the fair value of obligations associated with the retirement of tangible long-lived assets is required when there is a legal obligation to incur such costs. Upon initial recognition of a liability, the cost is capitalized as part of the related long-lived asset and depreciated over the corresponding asset’s useful life.

GOODWILL AND INDEFINITE-LIVED INTANGIBLE ASSETS

Goodwill and indefinite-lived intangible assets are subject to impairment testing annually as of March 31, or if a triggering event occurs or changes in circumstances indicate that the carrying amount may not be fully recoverable. This testing compares carrying values to fair values and, when appropriate, the carrying value of these assets is reduced to fair value. The Company completed its annual goodwill impairment test as of March 31, 2021, and determined that there was no impairment as of that date. The Company is not aware of any additional triggering events.

FINITE-LIVED INTANGIBLE ASSETS

Other intangible assets with determinable lives consist of customer lists, technology, patents and trademarks and other intangibles and are amortized over their estimated useful lives, ranging from 2 to 22 years.

FOREIGN CURRENCY TRANSLATION

Assets and liabilities of subsidiaries operating outside the United States with a functional currency other than U.S. Dollars are translated into U.S. Dollars using year-end exchange rates. Sales, costs and expenses are translated at the average exchange rates in effect during the year. Foreign currency translation gains and losses are included as a component of Accumulated other comprehensive income (loss). For subsidiaries operating in highly inflationary environments, inventories and property, plant and equipment, including related expenses, are remeasured at the exchange rate in effect on the date the assets were acquired, while monetary assets and liabilities are remeasured at year-end exchange rates. Remeasurement adjustments for these subsidiaries are included in earnings.

HONEYWELL INTERNATIONAL INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)
(Dollars in tables in millions, except per share amounts)

DERIVATIVE FINANCIAL INSTRUMENTS

All derivative financial instruments are recorded on the balance sheet as assets or liabilities and measured at fair value. For derivatives designated as hedges of the fair value of assets or liabilities, the changes in fair values of both the derivatives and the hedged items are recorded in current earnings. For derivatives designated as cash flow hedges, the changes in fair value of the derivatives are recorded in Accumulated other comprehensive income (loss) and subsequently recognized in earnings when the hedged items impact earnings.

Derivative financial instruments designated as hedges must be designated and effective as a hedge of the identified risk exposure at the inception of the contract. Changes in fair value of the derivative contract must be highly correlated with changes in fair value of the underlying hedged item at inception and over the life of the hedge contract. Cash flows of such derivative financial instruments are classified consistent with the underlying hedged item. The Company elected to exclude the time value of the derivatives (i.e., the forward points) from the assessment of hedge effectiveness and recognize the initial value of the excluded component in earnings using the amortization approach. For derivative instruments that are designated and qualify as a net investment hedge, the gain or loss is reported as a component of Other comprehensive income (loss) and recorded in Accumulated other comprehensive income (loss). The gain or loss will be subsequently reclassified into net earnings when the hedged net investment is either sold or substantially liquidated.

LEASES

At the inception of a contract, the Company assesses whether the contract is, or contains, a lease. The assessment is based on (1) whether the contract involves the use of a distinct identified asset, (2) whether the Company obtains the right to substantially all the economic benefit from the use of the asset throughout the period, and (3) whether the Company has the right to direct the use of the asset.

All significant lease arrangements are generally recognized at lease commencement. Operating lease right-of-use (ROU) assets and lease liabilities are recognized at commencement. An ROU asset and corresponding lease liability are not recorded for leases with an initial term of 12 months or less (short-term leases), and we recognize lease expense for these leases as incurred over the lease term.

ROU assets represent the Company's right to use an underlying asset during the reasonably certain lease term, and lease liabilities represent the obligation to make lease payments arising from the lease. The Company's lease terms may include options to extend or terminate the lease when it is reasonably certain that the Company will exercise that option.

Operating lease ROU assets and liabilities are recognized at commencement date based on the present value of lease payments over the lease term. Lease payments may be fixed or variable, however, only fixed payments or in-substance fixed payments are included in determining the lease liability. Variable lease payments are recognized in operating expenses in the period in which the obligation for those payments are incurred. The operating lease ROU asset also includes any lease payments related to initial direct cost and prepayments and excludes lease incentives. Lease expense is recognized on a straight-line basis over the lease term. The Company has lease agreements with lease and non-lease components, which are generally accounted for separately.

The Company primarily uses its incremental borrowing rate, which is based on the information available at the lease commencement date, in determining the present value of the lease payments. In determining the borrowing rate, the Company considers the lease term, secured incremental borrowing rate, and for leases denominated in a currency different than U.S. dollar, the collateralized borrowing rate in the foreign currency using the U.S. dollar and foreign currency swap spread, when available.

PENSION BENEFITS

The Company presents net periodic pensions costs by disaggregating the service cost component of such costs and reports those costs in the same line item or items in the Consolidated Statement of Operations as other compensation costs arising from services rendered by the pertinent employees during the period. The other non-service components of such costs are required to be presented separately from the service cost component.

The Company records the service cost component of Pension ongoing (income) expense in Costs of products and services sold and Selling, general and administrative expenses. The remaining components of costs within Pension ongoing (income) expense, primarily interest costs and assumed return on plan assets, are recorded in Other (income) expense. The Company recognizes net actuarial gains or losses in excess of 10% of the greater of the fair value of plan assets or the plan's projected benefit obligation (the corridor) annually in the fourth quarter each year (MTM Adjustment). The MTM Adjustment is also reported in Other (income) expense. See Note 22 Segment Financial Data for a definition of Pension ongoing (income) expense.

HONEYWELL INTERNATIONAL INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)
(Dollars in tables in millions, except per share amounts)

SALES RECOGNITION

Product and service sales are recognized when or as the Company transfers control of the promised products or services to its customers. Revenue is measured as the amount of consideration the Company expects to receive in exchange for transferring goods or providing services. Service sales, principally representing repair, maintenance and engineering activities, are recognized over the contractual period or as services are rendered. Sales under long-term contracts with performance obligations satisfied over time are recognized using either an input or output method. The Company recognizes revenue over time as the Company performs on these contracts because of the continuous transfer of control to the customer. With control transferring over time, revenue is recognized based on the extent of progress towards completion of the performance obligation. The Company generally uses the cost-to-cost input method of progress for contracts because it best depicts the transfer of control to the customer that occurs as the Company incurs costs. Under the cost-to-cost input method, the extent of progress towards completion is measured based on the proportion of costs incurred to date to the total estimated costs at completion of the performance obligation. The Company reviews its cost estimates on significant contracts on a periodic basis, or when circumstances change and warrant a modification to a previous estimate. Cost estimates are largely based on negotiated or estimated purchase contract terms, historical performance trends and other economic projections. Significant factors that influence these estimates include inflationary trends, technical and schedule risk, internal and subcontractor performance trends, business volume assumptions, asset utilization, and anticipated labor agreements. Provisions for anticipated losses on long-term contracts are recorded in full when such losses become evident, to the extent required.

The customer funding for costs incurred for nonrecurring engineering and development activities of the Company's products under agreements with commercial customers is deferred and subsequently recognized as revenue as products are delivered to the customers. Additionally, expenses incurred, up to the customer agreed funded amount, are deferred as an asset and recognized as cost of sales when products are delivered to the customer. The deferred customer funding and costs result in recognition of deferred costs (asset) and deferred revenue (liability) on the Company's Consolidated Balance Sheet. Capitalized contract fulfillment costs were approximately $1.3 billion as of December 31, 2021 and 2020. The amounts recognized as Cost of products and services sold were approximately $0.1 billion for the years ended December 31, 2021, 2020 and 2019.

Revenues for the Company's mechanical service programs are recognized as performance obligations that are satisfied over time, with recognition reflecting a series of distinct services using the output method.

The terms of a contract or the historical business practice can give rise to variable consideration due to, but not limited to, cash-based incentives, rebates, performance awards, or credits. The Company estimates variable consideration at the most likely amount the Company will receive from customers. The Company includes estimated amounts in the transaction price to the extent it is probable that a significant reversal of cumulative revenue recognized for such transaction will not occur, or when the uncertainty associated with the variable consideration is resolved. The Company's estimates of variable consideration and determination of whether to include estimated amounts in the transaction price are based largely on an assessment of the Company's anticipated performance and all information (historical, current and forecasted) that is reasonably available to the Company.

STOCK-BASED COMPENSATION PLANS

The principal awards issued under the Company's stock-based compensation plans, which are described in Note 15 Stock-Based Compensation Plans, are non-qualified stock options and restricted stock units. The cost for such awards is measured at the grant date based on the fair value of the award. The value of the portion of the award that is ultimately expected to vest is recognized as expense over the requisite service periods (generally the vesting period of the equity award) and is included in Selling, general and administrative expenses. Forfeitures are estimated at the time of grant to recognize expense for those awards that are expected to vest and are based on the Company's historical forfeiture rates.

HONEYWELL INTERNATIONAL INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)
(Dollars in tables in millions, except per share amounts)

INCOME TAXES

Significant judgment is required in evaluating tax positions. The Company establishes reserves for income taxes when, despite the belief that tax positions are fully supportable, there remain certain positions that do not meet the minimum recognition threshold. The approach for evaluating certain and uncertain tax positions is defined by the authoritative guidance which determines when a tax position is more likely than not to be sustained upon examination by the applicable taxing authority. In the normal course of business, the Company and its subsidiaries are examined by various federal, state and foreign tax authorities. The Company regularly assesses the potential outcomes of these examinations and any future examinations for the current or prior years in determining the adequacy of the Company's provision for income taxes. The Company continually assesses the likelihood and amount of potential adjustments and adjust the income tax provision, the current tax liability and deferred taxes in the period in which the facts that give rise to a change in estimate become known. For additional information, see Note 5 Income Taxes.

EARNINGS PER SHARE

Basic earnings per share is based on the weighted average number of common shares outstanding. Diluted earnings per share is based on the weighted average number of common shares outstanding and all dilutive potential common shares outstanding.

ENVIRONMENTAL

The Company accrues costs related to environmental matters when it is probable that it has incurred a liability related to a contaminated site and the amount can be reasonably estimated. For additional information, see Note 19 Commitments and Contingencies.

ASBESTOS RELATED LIABILITIES AND INSURANCE RECOVERIES

The Company recognizes a liability for any asbestos related contingency that is probable of occurrence and reasonably estimable. In connection with the recognition of liabilities for asbestos related matters, the Company records asbestos related insurance recoveries that are deemed probable. For additional information, see Note 19 Commitments and Contingencies.

REIMBURSEMENT RECEIVABLES

In conjunction with the Resideo Technologies, Inc. (Resideo) spin-off, the Company entered into a reimbursement agreement under which Honeywell receives cash payments as reimbursement primarily related to net spending for environmental matters at certain sites as defined in the reimbursement agreement. Accordingly, the Company recorded receivables based on estimates of the underlying reimbursable Honeywell environmental spend, and the Company monitors the recoverability of such receivables, which are subject to the terms of applicable credit agreements and general ability to pay.

HONEYWELL INTERNATIONAL INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)
(Dollars in tables in millions, except per share amounts)

NOTE 2. ACQUISITIONS AND DIVESTITURES

ACQUISITIONS

On November 29, 2021, Honeywell Quantum Solutions, a wholly-owned subsidiary of Honeywell, and Cambridge Quantum Computing, a leading developer of quantum computing and quantum software, combined to form Quantinuum. Prior to closing the transaction, Honeywell held a 4.2% ownership interest in Cambridge Quantum Computing. At closing of the business combination, Honeywell contributed an additional $270 million of cash and is the controlling majority-owner of Quantinuum, with an overall 54% ownership in the business. Quantinuum is well positioned to lead the quantum computing industry by offering advanced, fully integrated hardware and software solutions at an unprecedented pace, scale and level of performance to large high-growth markets worldwide. Quantinuum supports customer needs for improved computation in cyber security, drug discovery and delivery, material science, finance, and optimization across all major industrial markets. The business is included within Corporate and All Other, which is not considered a reportable business segment. The combination was accounted for under the acquisition method of accounting; as such, assets and liabilities of Quantinuum are consolidated by Honeywell and included in the Consolidated Balance Sheet. Upon close of the transaction, Honeywell recorded a non-cash adjustment of $460 million in Additional paid-in-capital on the Consolidated Balance Sheet as the contribution of ownership interest in Honeywell Quantum Solutions and Cambridge Quantum Computing for the formation of Quantinuum. In addition, Honeywell recognized a gain of $22 million related to the fair value remeasurement of Honeywell's existing 4.2% ownership interest in Cambridge Quantum Computing, which was recorded in Other (income) expense on in the Consolidated Statement of Operations. At close of the transaction, the fair value of Cambridge Quantum Computing's noncontrolling interest in Quantinuum was $419 million. In December 2021, Cambridge Quantum Computing contributed cash of $12 million to Quantinuum, increasing their noncontrolling interest and decreasing Honeywell's additional-paid-in-capital. As of December 31, 2021, the assets and liabilities in Honeywell's Consolidated Balance Sheet includes $90 million of intangible assets and $943 million allocated to goodwill, which is non-deductible for tax purposes. The purchase accounting is subject to final adjustments, primarily for the valuation of intangible assets and goodwill.

On February 12, 2021, the Company acquired 100% of the shares outstanding of Sparta Systems, a leading provider of enterprise quality management software for the life sciences industry, for $1,303 million. Sparta Systems is expected to further strengthen the Company's leadership in industrial automation, digital transformation solutions, and enterprise performance management software. The business is included within the Performance Materials and Technologies segment. The assets and liabilities acquired with Sparta Systems are included in the Consolidated Balance Sheet as of December 31, 2021, including $383 million of intangible assets and $1,011 million allocated to goodwill, which is nondeductible for tax purposes. The purchase accounting is subject to final adjustment, primarily for the valuation of intangible assets, amounts allocated to goodwill, tax balances, and certain pre-acquisition contingencies.

During 2020, the Company acquired businesses for an aggregate cost (net of cash and debt assumed) of $261 million, which included the October 2020 acquisition of Rocky Research and the December 2020 acquisition of Sine Group. Rocky Research is a technology leader specializing in thermal, energy and power management solutions and is included within the Aerospace segment. Sine Group offers a

Software-as-a-Service (SaaS) that handles visitor management, workplace and supply chain solutions and is included in the Honeywell Building Technologies segment. The acquisition of Rocky Research and Sine Group included approximately $167 million allocated to goodwill, which is non-deductible for tax purposes.

During 2019, there were no significant acquisitions that closed individually or in the aggregate.

DIVESTITURES

On March 15, 2021, the Company completed the sale of its retail footwear business in exchange for gross cash consideration of $230 million. The Company recognized a pre-tax gain of $95 million for the twelve months ended December 31, 2021, which was recorded in Other (income) expense. The retail footwear business was previously included in the Safety and Productivity Solutions segment.

During 2020 and 2019, there were no significant divestitures that closed individually or in the aggregate.

HONEYWELL INTERNATIONAL INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)
(Dollars in tables in millions, except per share amounts)

NOTE 3. REVENUE RECOGNITION AND CONTRACTS WITH CUSTOMERS

The Company has a comprehensive offering of products and services, including software and technologies, that are sold to a variety of customers in multiple end markets. See the following disaggregated revenue table and related discussions by operating segment for details.

	Years Ended December 31,		
	2021	**2020**	**2019**
Aerospace			
Commercial Aviation Original Equipment	$ 1,720	$ 1,940	$ 2,999
Commercial Aviation Aftermarket	4,155	3,812	5,761
Defense and Space	5,151	5,792	5,294
	11,026	**11,544**	**14,054**
Honeywell Building Technologies			
Products	3,243	2,971	3,293
Building Solutions	2,296	2,218	2,424
	5,539	**5,189**	**5,717**
Performance Materials and Technologies			
UOP	2,348	2,177	2,890
Process Solutions	4,611	4,590	5,146
Advanced Materials	3,054	2,656	2,798
	10,013	**9,423**	**10,834**
Safety and Productivity Solutions			
Safety and Retail	2,387	2,414	2,215
Productivity Solutions and Services	1,610	1,270	1,285
Warehouse and Workflow Solutions	2,944	1,965	1,719
Advanced Sensing Technologies	873	832	885
	7,814	**6,481**	**6,104**
Corporate and All Other	—	—	—
Net sales	**$34,392**	**$32,637**	**$36,709**

Aerospace – A global supplier of products, software and services for aircrafts that it sells to OEM and other customers in a variety of end markets including: air transport, regional, business and general aviation aircraft, airlines, aircraft operators and defense and space contractors. Aerospace products and services include auxiliary power units, propulsion engines, environmental control systems, integrated avionics, wireless connectivity services, electric power systems, engine controls, flight safety, communications, navigation hardware, data and software applications, radar and surveillance systems, aircraft lighting, management and technical services, advanced systems and instruments, satellite and space components, aircraft wheels and brakes, repair, and overhaul services and thermal systems. Aerospace also provides spare parts, repair, overhaul and maintenance services (principally to aircraft operators) for the aftermarket. Honeywell Forge solutions are leveraged by the Company's customers as tools to turn data into predictive maintenance and predictive analytics to enable better fleet management and make flight operations more efficient.

Honeywell Building Technologies – A global provider of products, software, solutions, and technologies that enable building owners and occupants to ensure their facilities are safe, energy efficient, sustainable, and productive. Honeywell Building Technologies products and services include advanced software applications for building control and optimization; sensors, switches, control systems, and instruments for energy management; access control; video surveillance; fire products; and installation, maintenance and upgrades of systems. Honeywell Forge solutions enable the Company's customers to digitally manage buildings, connecting data from different assets to enable smart maintenance, improve building performance, and even protect from incoming security threats.

HONEYWELL INTERNATIONAL INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)
(Dollars in tables in millions, except per share amounts)

Performance Materials and Technologies – A global provider in developing and manufacturing high-quality performance chemicals and materials, process technologies, and automation solutions. The segment is comprised of Process Solutions, UOP, and Advanced Materials. Process Solutions provides automation control, instrumentation, advanced software, and related services for the oil and gas, refining, pulp and paper, industrial power generation, chemicals and petrochemicals, biofuels, life sciences, and metals, minerals, and mining industries. Through its smart energy products, Process Solutions enables utilities and distribution companies to deploy advanced capabilities to improve operations, reliability, and environmental sustainability. UOP provides process technology, products, including catalysts and adsorbents, equipment, and consulting services that enable customers to efficiently produce gasoline, diesel, jet fuel, petrochemicals and renewable fuels for the petroleum refining, gas processing, petrochemical, and other industries. Advanced Materials manufactures a wide variety of high-performance products, including materials used to manufacture end products such as bullet-resistant armor, nylon, computer chips, and pharmaceutical packaging, and provides reduced and low global-warming-potential materials based on hydrofluoro-olefin technology. In the industrial environment, Honeywell Forge solutions enable integration and connectivity to provide a holistic view of operations and turn data into clear actions to maximize productivity and efficiency. Honeywell Forge's cybersecurity capabilities help identify risks and act on cyber-related incidents, together enabling improved operations and protecting processes, people and assets.

Safety and Productivity Solutions – A global provider of products and software that improve productivity, workplace safety and asset performance to customers around the globe. Safety products include PPE, apparel, gear, and footwear; gas detection technology; and cloud-based notification and emergency messaging. Productivity Solutions products and services include mobile devices and software for computing, data collection, and thermal printing; supply chain and warehouse automation equipment, software and solutions; custom-engineered sensors, switches and controls for sensing and productivity solutions; and software-based data and asset management productivity solutions. Honeywell Forge solutions digitally automate processes to improve efficiency while reducing downtime and safety costs.

Corporate and All Other – Corporate and All Other includes revenue from Honeywell's majority-owned investment in Quantinuum. Through Quantinuum, Honeywell provides a wide range of service offerings of fully integrated quantum computing hardware and software solutions.

For a summary by disaggregated product and services sales for each segment, refer to Note 22 Segment Financial Data.

The Company recognizes revenue arising from performance obligations outlined in contracts with its customers that are satisfied at a point in time and over time. The disaggregation of the Company's revenue based off timing of recognition is as follows:

	Years Ended December 31,		
	2021	**2020**	**2019**
Products, transferred point in time	58 %	61 %	61 %
Products, transferred over time	17	15	14
Net product sales	**75**	**76**	**75**
Services, transferred point in time	8	8	9
Services, transferred over time	17	16	16
Net service sales	**25**	**24**	**25**
Net sales	**100 %**	**100 %**	**100 %**

CONTRACT BALANCES

The Company records progress on satisfying performance obligations under contracts with customers and the related billings and cash collections are recorded on the Consolidated Balance Sheet in Accounts receivable—net and Other assets (unbilled receivables (contract assets) and billed receivables) and Accrued liabilities and Other liabilities (customer advances and deposits (contract liabilities)). Unbilled receivables (contract assets) arise when the timing of cash collected from customers differs from the timing of revenue recognition, such as when contract provisions require specific milestones to be met before a customer can be billed. Contract assets are recognized when the revenue associated with the contract is recognized prior to billing and derecognized when billed in accordance with the terms of the contract. Contract liabilities are recorded when customers remit contractual cash payments in advance of us satisfying performance obligations under contractual arrangements, including those with performance obligations to be satisfied over a period of time. Contract liabilities are derecognized when revenue is recorded, either when a milestone is met triggering the contractual right to bill or when the performance obligation is satisfied.

HONEYWELL INTERNATIONAL INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)
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Contract balances are classified as assets or liabilities on a contract-by-contract basis at the end of each reporting period.

The following table summarizes the Company's contract assets and liabilities balances:

	2021	2020
Contract assets—January 1	$ 1,618	$ 1,602
Contract assets—December 31	2,060	1,618
Change in contract assets—increase (decrease)	**$ 442**	**$ 16**
Contract liabilities—January 1	$(4,033)	$(3,501)
Contract liabilities—December 31	(4,290)	(4,033)
Change in contract liabilities—(increase) decrease	**$ (257)**	**$ (532)**
Net change	**$ 185**	**$ (516)**

The net change in 2021 and 2020 was primarily driven by the receipt of advance payments from customers exceeding recognition of revenue as performance obligations were satisfied prior to billing. For the years ended December 31, 2021 and 2020, the Company recognized revenue of $1,925 million and $1,709 million, respectively, that was previously included in the beginning balance of contract liabilities.

Contract assets include $2,035 million and $1,589 million of unbilled balances under long-term contracts as of December 31, 2021 and 2020, respectively. These amounts are billed in accordance with the terms of customer contracts to which they relate.

When contracts are modified to account for changes in contract specifications and requirements, the Company considers whether the modification either creates new or changes the existing enforceable rights and obligations. Contract modifications for goods or services and not distinct from the existing contract, due to the significant integration with the original good or service provided, are accounted for as if they were part of that existing contract. The effect of a contract modification on the transaction price and the Company's measure of progress for the performance obligation to which it relates, is recognized as an adjustment to revenue (either as an increase in or a reduction of revenue) on a cumulative catch-up basis. When the modifications include additional performance obligations that are distinct and at relative stand-alone selling price, they are accounted for as a new contract and performance obligation, which are recognized prospectively.

PERFORMANCE OBLIGATIONS

A performance obligation is a promise in a contract to transfer a distinct good or service to the customer, and is defined as the unit of account. A contract’s transaction price is allocated to each distinct performance obligation and recognized as revenue when, or as, the performance obligation is satisfied. When the Company's contracts with customers require highly complex integration or manufacturing services that are not separately identifiable from other promises in the contracts and, therefore, not distinct, then the entire contract is accounted for as a single performance obligation. In situations when the Company's contracts includes distinct goods or services that are substantially the same and have the same pattern of transfer to the customer over time, they are recognized as a series of distinct goods or services. For any contracts with multiple performance obligations, the Company allocates the contract's transaction price to each performance obligation based on the estimated relative standalone selling price of each distinct good or service in the contract. For product sales, each product sold to a customer typically represents a distinct performance obligation. In such cases, the observable standalone sales are used to determine the stand alone selling price.

Performance obligations are satisfied as of a point in time or over time. Performance obligations are supported by contracts with customers, providing a framework for the nature of the distinct goods, services or bundle of goods and services. The timing of satisfying the performance obligation is typically indicated by the terms of the contract.

The following table outlines the Company's remaining performance obligations disaggregated by segment:

	December 31, 2021
Aerospace	$ 9,423
Honeywell Building Technologies	6,871
Performance Materials and Technologies	7,243
Safety and Productivity Solutions	4,143
Corporate and All Other[(1)]	2
	$ 27,682

(1) The remaining performance obligations within Corporate and All Other relate to the Quantinuum business.

HONEYWELL INTERNATIONAL INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)
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Performance obligations recognized as of December 31, 2021 will be satisfied over the course of future periods. The Company's disclosure of the timing for satisfying the performance obligation is based on the requirements of contracts with customers. However, from time to time, these contracts may be subject to modifications, impacting the timing of satisfying the performance obligations. Performance obligations expected to be satisfied within one year and greater than one year are 59% and 41%, respectively.

The timing of satisfaction of the Company's performance obligations does not significantly vary from the typical timing of payment. Typical payment terms of the Company's fixed-price over time contracts include progress payments based on specified events or milestones, or based on project progress. For some contracts the Company may be entitled to receive an advance payment.

The Company has applied the practical expedient for certain revenue streams to exclude the value of remaining performance obligations for (i) contracts with an original expected term of one year or less or (ii) contracts for which the Company recognizes revenue in proportion to the amount the Company has the right to invoice for services performed.

HONEYWELL INTERNATIONAL INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)
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NOTE 4. REPOSITIONING AND OTHER CHARGES

A summary of repositioning and other charges follows:

	Years Ended December 31,		
	2021	**2020**	**2019**
Severance	$ 80	$ 475	$ 260
Asset impairments	117	21	95
Exit costs	134	69	83
Reserve adjustments	(13)	(47)	(5)
Total net repositioning charge	**318**	**518**	**433**
Asbestos related litigation charges, net of insurance and reimbursements	129	50	42
Probable and reasonably estimable environmental liabilities, net of reimbursements	22	27	59
Other charges	100	(20)	12
Total net repositioning and other charges	**$ 569**	**$ 575**	**$ 546**

The following table summarizes the pre-tax distribution of total net repositioning and other charges by classification in the Consolidated Statement of Operations:

	Years Ended December 31,		
	2021	**2020**	**2019**
Cost of products and services sold	$ 457	$ 308	$ 276
Selling, general and administrative expenses	112	267	270
Other (income) expense	—	—	—
	$ 569	**$ 575**	**$ 546**

The following table summarizes the pre-tax amount of total net repositioning and other charges by segment. These amounts are excluded from segment profit as described in Note 22 Segment Financial Data.

	Years Ended December 31,		
	2021	**2020**	**2019**
Aerospace	$ 62	$ 157	$ 33
Honeywell Building Technologies	13	100	108
Performance Materials and Technologies	24	167	93
Safety and Productivity Solutions	268	41	71
Corporate and All Other	202	110	241
	$ 569	**$ 575**	**$ 546**

HONEYWELL INTERNATIONAL INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)
(Dollars in tables in millions, except per share amounts)

In 2021, the Company recognized repositioning charges totaling $331 million, including severance costs of $80 million related to workforce reductions of 6,432 manufacturing and administrative positions mainly in the Company's Safety and Productivity Solutions and Aerospace segments. The workforce reductions were primarily related to the re-alignment of a product line in the Company's Safety and Productivity Solutions segment, site transitions, mainly in Aerospace, to more cost-effective locations, and the Company's productivity and ongoing functional transformation initiatives. The repositioning charge included asset impairments of $117 million primarily related to the write-down of certain manufacturing and other equipment. The repositioning charge included exit costs of $134 million primarily for current period exit costs incurred for previously approved repositioning projects, closure obligations associated with site transitions, and lease obligations for equipment. Also, $13 million of previously established reserves, primarily for severance, were returned to income due to adjustments to the scope of previously announced repositioning actions.

In 2021, Other charges include $105 million of incremental long-term contract labor cost inefficiencies due to severe supply chain disruptions (attributable to the COVID-19 pandemic) relating to the warehouse automation business within the Safety and Productivity Solutions segment. Certain of these costs incurred include amounts and provisions for anticipated losses recognized during the fourth quarter when total estimated costs at completion for certain of the business' long-term contracts exceeded total estimated revenue. These costs represent unproductive labor costs due to unexpected supply delays and the resulting downstream installation issues, demobilization and remobilization of contract workers, and resolution of contractor disputes. These costs do not include normal operational inefficiencies experienced during a challenging operating environment in 2021.

In 2020, the Company recognized repositioning charges totaling $565 million, including severance costs of $475 million related to workforce reductions of 14,159 manufacturing and administrative positions across the Company's segments, with a majority of the workforce reductions in Aerospace and Performance Materials and Technologies. The workforce reductions primarily related to the Company aligning its cost structure with the slowdown in demand for many of its products and services due to the global recession, the Company's productivity and ongoing functional transformation initiatives, and to site consolidations and hub strategies. The repositioning charge included exit costs of $69 million primarily related to current period exit costs incurred for previously approved repositioning projects. Also, $47 million of previously established reserves, primarily for severance, were returned to income mainly as a result of higher attrition than anticipated in prior severance actions resulting in lower payments.

In 2019, the Company recognized repositioning charges totaling $438 million, including severance costs of $260 million related to workforce reductions of 5,336 manufacturing and administrative positions across the Company's segments. The workforce reductions related to the Company's productivity and ongoing functional transformation initiatives and to site transitions, mainly in Honeywell Building Technologies, as the Company transitions manufacturing to more cost-effective locations. The repositioning charge included asset impairments of $95 million largely related to a write down in connection with assets held for sale. The repositioning charge included exit costs of $83 million primarily related to current period exit costs incurred for previously approved repositioning projects, termination fees associated with the early cancellation of supply agreements for certain raw materials in Performance Materials and Technologies and Honeywell Building Technologies and for closure obligations associated with site transitions.

HONEYWELL INTERNATIONAL INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)
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The following table summarizes the status of the Company's total repositioning reserves:

	Severance Costs	Asset Impairments	Exit Costs	Total
Balance at December 31, 2018	**$ 489**	**$ —**	**$ 77**	**$ 566**
Charges	260	95	83	438
Usage—cash	(186)	—	(63)	(249)
Usage—noncash	—	(100)	—	(100)
Divestitures	—	—	—	—
Adjustments	(8)	5	(2)	(5)
Foreign currency translation	—	—	1	1
Balance at December 31, 2019	**555**	**—**	**96**	**651**
Charges	475	21	69	565
Usage—cash	(474)	—	(90)	(564)
Usage—noncash	—	(21)	—	(21)
Divestitures	—	—	—	—
Adjustments	(44)	—	(3)	(47)
Foreign currency translation	15	—	2	17
Balance at December 31, 2020	**527**	**—**	**74**	**601**
Charges	80	117	134	331
Usage—cash	(299)	—	(83)	(382)
Usage—noncash	—	(119)	—	(119)
Divestitures	—	—	—	—
Adjustments	(14)	2	(1)	(13)
Foreign currency translation	(5)	—	(2)	(7)
Balance at December 31, 2021	**$ 289**	**$ —**	**$ 122**	**$ 411**

Certain repositioning projects will recognize exit costs in future periods when the actual liability is incurred. Such exit costs incurred in 2021, 2020, and 2019 were not significant.

HONEYWELL INTERNATIONAL INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)
(Dollars in tables in millions, except per share amounts)

NOTE 5. INCOME TAXES

INCOME BEFORE TAXES

	Years Ended December 31,		
	2021	**2020**	**2019**
U.S.	$ 3,955	$ 3,318	$ 4,178
Non-U.S.	3,280	2,694	3,381
	$7,235	**$6,012**	**$7,559**

TAX EXPENSE (BENEFIT)

	Years Ended December 31,		
	2021	**2020**	**2019**
Tax expense (benefit) consists of			
Current:			
U.S. Federal	$ 415	$ 475	$ 8
U.S. State	146	79	43
Non-U.S.	886	768	1,099
	$1,447	**$1,322**	**$1,150**
Deferred:			
U.S. Federal	$ 173	$ 234	$ 332
U.S. State	37	39	63
Non-U.S.	(32)	(448)	(216)
	178	(175)	179
	$1,625	**$1,147**	**$1,329**

	Years Ende	
	3	
	2021	20
The U.S. federal statutory income tax rate is reconciled to the effective income tax rate as follows:		
U.S. federal statutory income tax rate	21.0 %	
Taxes on non-U.S. earnings[1][2]	(1.4)	
U.S. state income taxes[1]	1.5	
Reserves for tax contingencies	2.2	
Employee share-based payments	(0.7)	
Reduction of certain receivables	—	
U.S. Tax Cuts and Jobs Act	—	
Restructuring	(1.4)	
U.S. Valuation Allowance	2.0	
All other items—net	(0.7)	
	22.5 %	

(1) Net of changes in valuation allowance

(2) Includes U.S. taxes on non-U.S. earnings

HONEYWELL INTERNATIONAL INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)
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The effective tax rate increased by 3.4 percentage points in 2021 compared to 2020. The increase was primarily due to the establishment of a valuation allowance for deferred tax assets not expected to be realized, incremental tax reserves, a lower tax benefit from restructuring and the absence of prior year items including tax benefits realized as a result of the favorable resolution of a foreign tax matter related to the spin-off transactions, tax law changes in India and the resolution of certain U.S. tax matters offset by a non-cash charge related to the reduction of the aggregate carrying value of certain receivables with no corresponding tax benefit. The Company's non-U.S. effective tax rate was 26.0%, an increase of approximately 14.1 percentage points compared to 2020. The increase in the foreign effective tax rate was primarily attributable to incremental tax reserves, the tax impact of restructuring and the absence of prior year items including the favorable resolution of a foreign tax matter related to the previously completed spin-off transactions and tax law changes in India.

The effective tax rate increased by 1.5 percentage points in 2020 compared to 2019. The increase was primarily attributable to accrued withholding taxes related to unremitted foreign earnings and non-cash charges related to the reduction of the aggregate carrying value of certain receivables with no corresponding tax benefit, offset by the favorable resolution of a foreign tax matter related to the previously completed spin-off transactions, tax impact of restructuring, tax law changes in India, and the resolution of certain U.S. tax matters. The Company's non-U.S. effective tax rate was 11.9%, a decrease of approximately 14.2 percentage points compared to 2019. The decrease in the foreign effective tax rate was primarily attributable to the favorable resolution of a foreign tax matter related to the previously completed spin-off transactions, tax impact of restructuring, and tax law changes in India offset by accrued withholding taxes related to unremitted foreign earnings.

DEFERRED TAX ASSETS (LIABILITIES)

The tax effects of temporary differences and tax carryforwards which give rise to future income tax benefits and payables are as follows:

Deferred tax assets:	December 31, 2021	2020
Postretirement benefits other than pensions	$ 77	$ 85
Asbestos and environmental	468	508
Employee compensation and benefits	174	180
Lease liabilities	242	197
Other accruals and reserves	260	110
Net operating and capital losses	734	779
Capital loss limitation and carryover	151	—
Tax credit carryforwards	164	219
Gross deferred tax assets	**2,270**	**2,078**
Valuation allowance	(857)	(766)
Total deferred tax assets	**$ 1,413**	**$ 1,312**
Deferred tax liabilities:		
Pension	$ (948)	$ (548)
Property, plant and equipment	(464)	(437)
Right-of-use asset	(230)	(184)
Intangibles	(883)	(898)
Unremitted earnings of foreign subsidiaries	(426)	(398)
Other asset basis differences	(334)	(169)
Other	(2)	(31)
Total deferred tax liabilities	**(3,287)**	**(2,665)**
Net deferred tax liability	**$(1,874)**	**$(1,353)**

HONEYWELL INTERNATIONAL INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)
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The Company's gross deferred tax assets include $901 million related to non-U.S. operations comprised principally of net operating losses, capital loss and tax credit carryforwards, primarily in Canada, France, Germany, Luxembourg, and the United Kingdom, and deductible temporary differences. The Company maintains a valuation allowance of $703 million against a portion of the non-U.S. gross deferred tax assets. Additionally, a valuation allowance of $150 million was established against the U.S. gross deferred tax asset for capital losses generated from restructuring transactions during the year. The change in the valuation allowance resulted in an increase of $124 million, increase of $105 million, and a decrease of $23 million to income tax expense in 2021, 2020 and 2019, respectively. In the event the Company determines that it will not be able to realize its net deferred tax assets in the future, the Company will reduce such amounts through an increase to income tax expense in the period such determination is made. Conversely, if the Company determines that it will be able to realize net deferred tax assets in excess of the carrying amounts, the Company will decrease the recorded valuation allowance through a reduction to income tax expense in the period that such determination is made.

As of December 31, 2021, the Company recorded a $426 million deferred tax liability on all unremitted foreign earnings based on estimated earnings and profits of approximately $17.1 billion as of the balance sheet date.

As of December 31, 2021, the Company's net operating loss, capital loss and tax credit carryforwards were as follows:

Jurisdiction	Expiration Period	Net Operating and Capital Loss Carryforwards	Tax Credit Carryforwards
U.S. Federal	2040	$ 684	$ 97
U.S. State	2040	390	21
Non-U.S.	2041	466	50
Non-U.S.	Indefinite	2,185	—
		$ 3,725	**$ 168**

Many jurisdictions impose limitations on the timing and utilization of net operating loss and tax credit carryforwards. In those instances, whereby there is an expected permanent limitation on the utilization of the net operating loss or tax credit carryforward, the deferred tax asset and amount of the carryforward have been reduced.

	Years Ended December 31,		
	2021	2020	2019
Change in unrecognized tax benefits:			
Balance at beginning of year	$ 991	$ 1,164	$ 1,089
Gross increases related to current period tax positions	93	94	51
Gross increases related to prior periods tax positions	39	68	83
Gross decreases related to prior periods tax positions	(27)	(256)	(34)
Decrease related to resolutions of audits with tax authorities	(1)	(35)	(3)
Expiration of the statute of limitations for the assessment of taxes	(12)	(76)	(13)
Foreign currency translation	(22)	32	(9)
Balance at end of year	**$1,061**	**$ 991**	**$1,164**

As of December 31, 2021, 2020 and 2019, there were $1,061 million, $991 million, and $1,164 million, respectively, of unrecognized tax benefits that if recognized would be recorded as a component of Tax expense.

HONEYWELL INTERNATIONAL INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)
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The following table summarizes tax years that remain subject to examination by major tax jurisdictions as of December 31, 2021:

	Open Tax Years Based on Originally Filed Returns	
Jurisdiction	**Examination in progress**	**Examination not yet initiated**
U.S. Federal	2017-2018	2019-2021
U.S. State	2013-2019	2017-2021
Australia	n/a	2018-2021
Canada[1]	2015-2018	2019-2021
China	2011-2020	2021
France	2018-2020	2021
Germany[1]	2009-2018	2019-2021
India	1999-2020	2021
Italy	2012-2018	2019-2021
Netherlands	n/a	2018-2021
Switzerland[1]	2016-2018	2019-2021
United Kingdom	2013-2019	2020-2021

(1) Includes provincial or similar local jurisdictions, as applicable.

Based on the outcome of these examinations, or as a result of the expiration of statute of limitations for specific jurisdictions, it is reasonably possible that certain unrecognized tax benefits for tax positions taken on previously filed tax returns will materially change from those recorded as liabilities in the Company's financial statements. In addition, the outcome of these examinations may impact the valuation of certain deferred tax assets (such as net operating losses) in future periods.

Unrecognized tax benefits for examinations in progress were $592 million, $556 million, and $413 million, as of December 31, 2021, 2020 and 2019, respectively. Estimated interest and penalties related to the underpayment of income taxes are classified as a component of Tax expense in the Consolidated Statement of Operations and totaled $79 million, $80 million, and $73 million for the years ended December 31, 2021, 2020 and 2019, respectively. Accrued interest and penalties were $580 million, $507 million, and $487 million, as of December 31, 2021, 2020 and 2019, respectively.

NOTE 6. INVENTORIES

	December 31,	
	2021	**2020**
Raw materials	$ 1,352	$ 1,079
Work in process	861	798
Finished products	2,925	2,612
	$5,138	**$4,489**

HONEYWELL INTERNATIONAL INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)
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NOTE 7. PROPERTY, PLANT AND EQUIPMENT—NET

	December 31, 2021	December 31, 2020
Land and improvements	$ 226	$ 259
Machinery and equipment	10,143	10,008
Buildings and improvements	3,225	3,245
Construction in progress	856	825
	14,450	**14,337**
Less—Accumulated depreciation	(8,888)	(8,767)
	$5,562	**$5,570**

Depreciation expense was $674 million, $644 million and $673 million for the years ended December 31, 2021, 2020 and 2019, respectively.

NOTE 8. GOODWILL AND OTHER INTANGIBLE ASSETS—NET

The following table summarizes the change in the carrying amount of goodwill for the years ended December 31, 2021 and 2020 by segment.

	December 31, 2020	Acquisitions/ Divestitures	Currency Translation Adjustment	December 31, 2021
Aerospace	$ 2,378	$ 21	$ —	$ 2,399
Honeywell Building Technologies	3,385	20	(88)	3,317
Performance Materials and Technologies	5,255	1,019	(136)	6,138
Safety and Productivity Solutions	5,040	(32)	(47)	4,961
Corporate and All Other	—	943	(2)	941
	$16,058	**$ 1,971**	**$ (273)**	**$17,756**

Other intangible assets are comprised of:

	December 31, 2021			December 31, 2020		
	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
Determinable life intangibles:						
Patents and technology	$ 2,345	$ (1,678)	$ 667	$ 2,159	$ (1,595)	$ 564
Customer relationships	4,045	(2,235)	1,810	3,889	(2,050)	1,839
Trademarks	356	(261)	95	327	(247)	80
Other	298	(271)	27	298	(267)	31
	7,044	**(4,445)**	**2,599**	**6,673**	**(4,159)**	**2,514**
Indefinite life intangibles:						
Trademarks	1,014	—	1,014	1,046	—	1,046
	$ 8,058	**$ (4,445)**	**$ 3,613**	**$ 7,719**	**$ (4,159)**	**$ 3,560**

Intangible assets amortization expense was $465 million, $358 million and $415 million for the years ended December 31, 2021, 2020 and 2019, respectively. Estimated intangible asset amortization expense for each of the next five years approximates $310 million in 2022, $273 million in 2023, $250 million in 2024, $241 million in 2025 and $203 million in 2026.

HONEYWELL INTERNATIONAL INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)
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NOTE 9. LONG-TERM DEBT AND CREDIT AGREEMENTS

	December 31,	
	2021	**2020**
4.25% notes due 2021	$ —	$ 800
1.85% notes due 2021	—	1,500
0.483% notes due 2022	500	2,500
2.15% notes due 2022	600	600
Floating rate notes due 2022	600	1,100
1.30% Euro notes due 2023	1,416	1,534
3.35% notes due 2023	300	300
0.00% Euro notes due 2024	566	614
2.30% notes due 2024	750	750
1.35% notes due 2025	1,250	1,250
2.50% notes due 2026	1,500	1,500
1.10% notes due 2027	1,000	—
2.25% Euro notes due 2028	849	920
2.70% notes due 2029	750	750
1.95% notes due 2030	1,000	1,000
1.75% notes due 2031	1,500	—
0.75% Euro notes due 2032	566	614
5.70% notes due 2036	441	441
5.70% notes due 2037	462	462
5.375% notes due 2041	417	417
3.812% notes due 2047	445	445
2.80% notes due 2050	750	750
Industrial development bond obligations, floating rate maturing at various dates through 2037	22	22
6.625% debentures due 2028	201	201
9.065% debentures due 2033	51	51
Other (including capitalized leases and debt issuance costs), 8.2% weighted average interest rate maturing at various dates through 2026	121	266
	16,057	**18,787**
Less-current portion	(1,803)	(2,445)
	$14,254	**$16,342**

HONEYWELL INTERNATIONAL INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)
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The schedule of principal payments on long-term debt is as follows:

	December 31, 2021
2022	$ 1,803
2023	1,810
2024	1,344
2025	1,258
2026	1,503
Thereafter	8,339
	16,057
Less-current portion	(1,803)
	$ 14,254

On November 1, 2021, the Company repaid its 1.85% notes due 2021.

On August 16, 2021 the Company issued $1.0 billion 1.10% Senior Notes due 2027 and $1.5 billion 1.75% Senior Notes due 2031 (collectively, the Notes). The Company may redeem the Notes at any time, and from time to time, in whole or in part, at the Company's option at the applicable make-whole redemption price. The Notes are senior unsecured and unsubordinated obligations of the Company and rank equally with each other and with all of the Company's existing and future senior unsecured debt and senior to all of the Company's subordinated debt. The offering provided gross proceeds of $2.5 billion, offset by $18.0 million in discount and closing costs related to the offering. The Company used the proceeds of the offering to redeem at par $2 billion of the $2.5 billion in outstanding principal amount of the callable 0.483% Senior Notes due 2022 and to redeem in full and at par $500 million callable Floating rate Senior Notes due 2022 that the Company issued in August 2020.

On March 31, 2021, the Company entered into a $4.0 billion Amended and Restated Five Year Credit Agreement (the 5-Year Credit Agreement) and a $1.5 billion 364-Day Credit Agreement (the 364-Day Credit Agreement). The 5-Year Credit Agreement amended and restated the previously reported $4.0 billion amended and restated five-year credit agreement dated as of April 26, 2019. Commitments under the 5-Year Credit Agreement can be increased pursuant to the terms of the 5-Year Credit Agreement to an aggregate amount not to exceed $4.5 billion. The 364-Day Credit Agreement replaced the $1.5 billion 364-day credit agreement dated as of April 10, 2020, which was terminated in accordance with its terms effective March 31, 2021. Amounts borrowed under the 364-Day Credit Agreement are required to be repaid no later than March 30, 2022, unless (i) Honeywell elects to convert all then outstanding amounts into a term loan, upon which such amounts shall be repaid in full on March 30, 2023, or (ii) the 364-Day Credit Agreement is terminated earlier pursuant to its terms. The 5-Year Credit Agreement and the 364-Day Credit Agreement are maintained for general corporate purposes. On November 18, 2021, the Company amended the 364-Day Credit Agreement and the 5-Year Credit Agreement to transition from LIBOR-based benchmark rates to the appropriate replacement rates.

On March 1, 2021, the Company repaid its 4.25% notes due 2021.

As of December 31, 2021, there were no outstanding borrowings under the 364-Day Credit Agreement or 5-Year Credit Agreement.

On August 19, 2020, the Company issued $2.5 billion 0.483% Senior Notes due 2022 and $500 million Floating Rate Senior Notes due 2022 (collectively, the 2022 Callable Notes). The $500 million Floating Rate Senior Notes due 2022 were issued at a variable interest rate equal to the three-month LIBOR plus the applicable margin of 0.23%. The Company may redeem the 2022 fixed rate notes at any time, in whole or in part, at the Company's option. The Company may redeem the 2022 floating rate notes at any time, in whole or in part, on or after August 19, 2021. The 2022 Callable Notes resulted in gross proceeds of $3.0 billion, offset by $10 million in discount and closing costs related to the offering. The Company used the proceeds of the offering to repay $3.0 billion of borrowings under the Term Loan Agreement (defined below).

On May 18, 2020, the Company issued $1.25 billion 1.35% Senior Notes due 2025, $1.0 billion 1.95% Senior Notes due 2030, and $750 million 2.80% Senior Notes due 2050 (collectively, the 2020 Notes) to replace and, accordingly, permanently reduce $3.0 billion of undrawn commitments under the Term Loan Agreement, referenced below. The Company may redeem the 2020 Notes at any time, in whole or in part, at the Company's option. The offering provided gross proceeds of $3.0 billion, offset by $27 million in discount and closing costs related to the offering.

On March 10, 2020, the Company issued €500 million 0.00% Senior Notes due 2024 and €500 million 0.75% Senior Notes due 2032 (collectively, the 2020 Euro Notes). The offering provided gross proceeds of $1.1 billion, offset by $9 million in discount and closing costs related to the offering.

The 2022 Callable Notes, 2020 Notes, and 2020 Euro Notes are senior unsecured and unsubordinated obligations of the Company and rank equally with each other and with all of the Company's existing and future senior unsecured debt and senior to all of the Company's subordinated debt.

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On March 26, 2020, the Company entered into a Delayed Draw Term Loan Agreement (the Term Loan Agreement) with a syndicate of banks. The Term Loan Agreement provided for a two-year, delayed draw term loan facility in the aggregate principal amount of $6.0 billion. Effective May 22, 2020, the Company permanently reduced the undrawn commitments under the Term Loan Agreement by an aggregate amount of $3.0 billion. On June 24, 2020, the Company drew on the remaining $3.0 billion of commitments under the Term Loan Agreement at a variable interest rate equal to the one-month LIBOR plus the applicable margin of 1.25%. The draw provided gross proceeds of $3.0 billion, offset by $7 million in closing costs related to the borrowing. On August 20, 2020, the Company prepaid the outstanding principal amount of $3.0 billion, using the proceeds from the offering of the 2022 Callable Notes.

On February 21, 2020, the Company paid its 0.65% Euro notes due 2020.

NOTE 10. LEASES

A significant portion of the Company's operating and finance lease portfolio includes corporate offices, research and development facilities, manufacturing sites, information technology equipment, and automobiles. The majority of the Company's leases have remaining lease terms of 1 year to 20 years, some of which include options to extend the leases for 5 years or more. Operating lease ROU assets are included in Other assets. The current portion of operating lease liabilities are included in Accrued liabilities, and the non-current portion of operating lease liabilities are included in Other liabilities on the Consolidated Balance Sheet. Finance lease ROU assets are included in Property, plant and equipment—net. The current portion of finance lease liabilities are included in Current maturities of long-term debt, and the non-current portion of finance lease liabilities are included in Long-term debt on the Consolidated Balance Sheet.

A portion of the Company's real estate leases is generally subject to annual changes in the Consumer Price Index (CPI). The changes to the CPI are treated as variable lease payments and recognized in the period in which the obligation for those payments was incurred. In addition, a subset of the Company's automobile leases are considered variable. The variable lease payments for such automobiles leases are based on actual mileage incurred at the stated contractual rate and recognized in the period in which the obligation for those payments was incurred.

	Years Ended December 31,	
	2021	**2020**
Operating lease cost	$ 228	$ 214
Variable lease cost	14	18
Short-term lease cost	15	17
Finance lease cost:		
Amortization of right-of-use assets	65	69
Interest on lease liability	24	27
Total finance lease cost	**89**	**96**
Total lease cost	**$ 346**	**$ 345**

Supplemental cash flow information related to leases was as follows:

	Years Ended December 31,	
	2021	2020
Cash paid for amounts included in the measurement of lease liabilities:		
Operating cash flows for operating leases	$ 215	$ 206
Operating cash flows for finance leases	24	32
Financing cash flows for finance leases	67	65
Right-of-use assets obtained in exchange for lease obligations:		
Operating leases	$ 350	$ 245
Finance leases	32	27

Supplemental balance sheet information related to leases was as follows:

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	December 31,	
	2021	**2020**
Operating leases:		
Other assets	$ 947	$ 773
Accrued liabilities	185	187
Other liabilities	847	641
Total operating lease liabilities	**$1,032**	**$ 828**
Finance leases:		
Property, plant and equipment	$ 325	$ 357
Accumulated depreciation	(177)	(180)
Property, plant and equipment—net	**$ 148**	**$ 177**
Current maturities of long-term debt	$ 57	$ 60
Long-term debt	99	124
Total finance lease liabilities	**$ 156**	**$ 184**
Weighted-average remaining lease term:		
Operating leases	9 years	7 years
Finance leases	3 years	3 years
Weighted-average discount rate:		
Operating leases	2.3 %	2.9 %
Finance leases	11.0 %	16.3 %

As of December 31, 2021, maturities of lease liabilities were as follows:

	Operating Leases	**Finance Leases**
2022	$ 215	$ 77
2023	188	59
2024	153	47
2025	113	14
2026	91	—
Thereafter	404	—
Total lease payments	**1,164**	**197**
Less-interest	(132)	(41)
Total	**$1,032**	**$ 156**

NOTE 11. DERIVATIVE INSTRUMENTS AND HEDGING TRANSACTIONS

DERIVATIVES AND HEDGING ACTIVITIES

The Company uses derivative financial instruments to manage its risks related to interest rates and foreign currency exchange rate fluctuations. Derivative financial instruments are not used for trading or other speculative purposes. To qualify as a hedge, derivative financial instruments must be evaluated for hedge effectiveness at the inception of the contract and designated as a hedge. Changes in fair value of the derivative contract must be highly correlated with changes in fair value of the underlying hedged item at inception and over the life of the hedge contract.

FOREIGN CURRENCY RISK MANAGEMENT

The Company operates a global business in a wide variety of foreign currencies. The Company's exposure to market risk for changes in foreign currency exchange rates arises from international financing activities between subsidiaries, foreign currency denominated monetary assets and liabilities, and transactions arising from international trade. The Company's objective is to preserve the U.S. Dollar value of foreign currency denominated cash flows and earnings. The Company monitors its collective foreign currency exposure and enters into foreign currency exchange forward and option contracts (foreign currency exchange contracts) with third parties, when necessary, to minimize the impact of changes in foreign currency exchange rates.

The Company has monetary assets and liabilities denominated in non-functional currencies. Prior to conversion into U.S. dollars, these assets and liabilities are remeasured at spot exchange rates in effect on the balance sheet date. The effects of changes in spot rates are recognized in earnings and included in Other (income) expense. The Company uses foreign currency exchange contracts to hedge its foreign currency exposure. These contracts are marked-to-market with the resulting gains and losses recognized in earnings offsetting the gains and losses on the non-functional currency denominated monetary assets and liabilities being hedged. The Company uses foreign currency contracts to hedge forecasted sales and purchases, which are denominated in non-functional currencies. Changes in the forecasted non-functional currency cash flows due to movements in exchange rates are substantially offset by changes in the fair value of these foreign currency exchange contracts designated as hedges. Market value gains and losses on these contracts are recognized in earnings when the hedged transaction is recognized. As of December 31, 2021, and 2020, the Company held contracts with notional amounts of $12,671 million and $16,123 million to exchange foreign currencies, principally the U.S. Dollar, Euro, Canadian Dollar, British Pound, Mexican Peso, Chinese Renminbi, and Indian Rupee.

The Company also designates certain foreign currency debt and derivative contracts as hedges against portions of its net investment in foreign operations. Gains or losses of the foreign currency debt and derivative contracts designated as net investment hedges are recorded in the same manner as foreign currency translation adjustments.

INTEREST RATE RISK MANAGEMENT

Financial instruments, including derivatives, expose the Company to market risk related to changes in interest rates. The Company uses a combination of financial instruments, including long-term, medium-term, and short-term financing, variable-rate commercial paper, and interest rate swaps to convert the interest rate mix of the Company's total debt portfolio and related overall cost of borrowing.

CREDIT RISK MANAGEMENT

The Company continues to monitor the creditworthiness of its counterparties to mitigate the risk of nonperformance. Financial instruments, including derivatives, expose the Company to counterparty credit risk. In addition, the Company grants credit terms to its customers in the normal course of business. The terms and conditions of the Company's credit sales are designed to mitigate or eliminate concentrations of credit risk with any single customer. The Company's sales are not materially dependent on a single customer or a small group of customers.

HONEYWELL INTERNATIONAL INC.
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DERIVATIVE AND HEDGING INSTRUMENTS

The following table summarizes the notional amounts and fair values of the Company's outstanding derivatives by risk category and instrument type within the Consolidated Balance Sheet:

	Notional		Fair Value Asset		Fair Value (Liability)	
	December 31, 2021	December 31, 2020	December 31, 2021	December 31, 2020	December 31, 2021	December 31, 2020
Derivatives in Fair Value Hedging Relationships:						
Interest rate swap agreements	$3,150	$3,950	$ 60	$ 194	$ —	$ —
Derivatives in Cash Flow Hedging Relationships:						
Foreign currency exchange contracts	647	488	4	65	—	(58)
Derivatives in Net Investment Hedging Relationships:						
Foreign currency exchange contracts	746	806	92	45	—	(1)
Cross currency swap agreements	1,200	1,200	39	—	—	(50)
Total Derivatives Designated as Hedging Instruments	**5,743**	**6,444**	**195**	**304**	**—**	**(109)**
Derivatives Not Designated as Hedging Instruments:						
Foreign currency exchange contracts	11,278	14,829	278	92	(282)	(91)
Total Derivatives at Fair Value	**$17,021**	**$21,273**	**$ 473**	**$ 396**	**$(282)**	**$(200)**

All derivative assets are presented in Other current assets or Other assets. All derivative liabilities are presented in Accrued liabilities or Other liabilities.

In addition to the foreign currency derivative contracts designated as net investment hedges, certain of the Company's foreign currency denominated debt instruments are designated as net investment hedges. The carrying value of those debt instruments designated as net investment hedges, which includes the adjustment for the foreign currency transaction gain or loss on those instruments, was $4,074 million and $4,414 million as of December 31, 2021 and 2020, respectively.

Interest rate swap agreements are designated as hedge relationships with gains or losses on the derivative recognized in Interest and other financial charges offsetting the gains and losses on the underlying debt being hedged. Gains and losses on interest rate swap agreements recognized in earnings were $135 million of expense, $169 million of income and $70 million of expense for the years ended December 31, 2021, 2020 and 2019, respectively. Gains and losses are fully offset by losses and gains on the underlying debt being hedged.

The following table sets forth the amounts recorded on the Consolidated Balance Sheet related to cumulative basis adjustments for fair value hedges:

Line in the Consolidated Balance Sheet of Hedged Item	Carrying Amount of the Hedged Item		Cumulative Amount of Fair Value Hedging Adjustment Included in the Carrying Amount of the Hedged Item	
	December 31, 2021	December 31, 2020	December 31, 2021	December 31, 2020
Long-term debt	$3,210	$4,144	$ 60	$ 194

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The following tables summarize the location and impact to the Consolidated Statement of Operations related to derivative instruments:

	Year Ended December 31, 2021					
	Net Sales	**Cost of Products Sold**	**Cost of Services Sold**	**Selling, general and administrative expenses**	**Other (Income) Expense**	**Interest and Other Financial Charges**
	$ 34,392	$ 18,344	$ 5,050	$ 4,798	$ (1,378)	$ 343
Gain or (loss) on cash flow hedges:						
Foreign Currency Exchange Contracts:						
Amount reclassified from accumulated other comprehensive income into income	5	8	2	9	—	—
Gain or (loss) on fair value hedges:						
Interest Rate Swap Agreements:						
Hedged items	—	—	—	—	—	135
Derivatives designated as hedges	—	—	—	—	—	(135)
Gain or (loss) on net investment hedges:						
Foreign Currency Exchange Contracts:						
Amount excluded from effectiveness testing recognized in earnings using an amortization approach	—	—	—	—	—	16
Gain or (loss) on derivatives not designated as hedging instruments:						
Foreign currency exchange contracts	—	—	—	—	195	—

	Year Ended December 31, 2020					
	Net Sales	**Cost of Products Sold**	**Cost of Services Sold**	**Selling, general and administrative expenses**	**Other (Income) Expense**	**Interest and Other Financial Charges**
	$ 32,637	$ 17,638	$ 4,531	$ 4,772	$ (675)	$ 359
Gain or (loss) on cash flow hedges:						
Foreign Currency Exchange Contracts:						
Amount reclassified from accumulated other comprehensive income into income	(3)	43	11	(4)	28	—
Amount excluded from effectiveness testing recognized in earnings using an amortization approach	—	10	3	—	29	—
Gain or (loss) on fair value hedges:						
Interest Rate Swap Agreements:						
Hedged items	—	—	—	—	—	(169)
Derivatives designated as hedges	—	—	—	—	—	169
Gain or (loss) on net investment hedges:						
Foreign Currency Exchange Contracts:						
Amount excluded from effectiveness testing recognized in earnings using an amortization approach	—	—	—	—	—	18
Gain or (loss) on derivatives not designated as hedging instruments:						
Foreign currency exchange contracts	—	—	—	—	(166)	—

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)
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	Year Ended December 31, 2019					
	Net Sales	**Cost of Products Sold**	**Cost of Services Sold**	**Selling, general and administrative expenses**	**Other (Income) Expense**	**Interest and Other Financial Charges**
	$ 36,709	$ 19,269	$ 5,070	$ 5,519	$ (1,065)	$ 357
Gain or (loss) on cash flow hedges:						
Foreign Currency Exchange Contracts:						
Amount reclassified from accumulated other comprehensive income into income	3	35	9	1	73	—
Amount excluded from effectiveness testing recognized in earnings using an amortization approach	—	16	6	—	35	—
Gain or (loss) on fair value hedges:						
Interest Rate Swap Agreements:						
Hedged items	—	—	—	—	—	(70)
Derivatives designated as hedges	—	—	—	—	—	70
Gain or (loss) on net investment hedges:						
Foreign Currency Exchange Contracts:						
Amount excluded from effectiveness testing recognized in earnings using an amortization approach	—	—	—	—	—	19
Gain or (loss) on derivatives not designated as hedging instruments:						
Foreign currency exchange contracts	—	—	—	—	106	—

As of December 31, 2021, the Company estimates that approximately $10 million of net derivative gains related to its cash flow hedges included in Accumulated other comprehensive income (loss) will be reclassified into earnings within the next 12 months.

The following table summarizes the amounts of gain or (loss) on net investment hedges recognized in Accumulated other comprehensive income (loss):

	Years Ended December 31,	
Derivatives Net Investment Hedging Relationships	**2021**	**2020**
Euro-denominated long-term debt	$ 284	$ (256)
Euro-denominated commercial paper	57	(8)
Cross currency swap	88	(109)
Foreign currency exchange contracts	40	(94)

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NOTE 12. FAIR VALUE MEASUREMENTS

The accounting guidance for fair value measurements and disclosures establishes a three-level fair value hierarchy.

- Level 1 - Inputs are based on quoted prices in active markets for identical assets and liabilities.
- Level 2 - Inputs are based on observable inputs other than quoted prices in active markets for identical or similar assets and liabilities.
- Level 3 - One or more inputs are unobservable and significant.

Financial and nonfinancial assets and liabilities are classified in their entirety based on the lowest level of input that is significant to the fair value measurement.

The following table sets forth the Company's financial assets and liabilities that were accounted for at fair value on a recurring basis:

	December 31,	
	2021	**2020**
Assets:		
Foreign currency exchange contracts	$ 374	$ 202
Available for sale investments	742	1,118
Interest rate swap agreements	60	194
Cross currency swap agreements	39	—
Investments in equity securities	57	11
Liabilities:		
Foreign currency exchange contracts	$ 282	$ 150
Cross currency swap agreements	—	50

The foreign currency exchange contracts, interest rate swap agreements, and cross currency swap agreements are valued using broker quotations, or market transactions in either the listed or over-the-counter markets. As such, these derivative instruments are classified within level 2. The Company also holds investments in commercial paper, certificates of deposits, and time deposits that are designated as available for sale, as well as investments in equity securities, which are valued using published prices based on observable market data. As such, these investments are classified within level 2.

The Company holds certain available for sale investments in U.S. government and corporate debt securities, as well as investments in equity securities, which are valued utilizing published prices based on quoted market pricing, which are classified within level 1.

The carrying value of cash and cash equivalents, trade accounts and notes receivables, payables, commercial paper and short-term borrowings contained in the Consolidated Balance Sheet approximates fair value.

The following table sets forth the Company's financial assets and liabilities that were not carried at fair value:

	December 31, 2021		December 31, 2020	
	Carrying Value	Fair Value	Carrying Value	Fair Value
Assets:				
Short-term investment	$ 34	$ 34	$ —	$ —
Long-term receivables	170	152	137	132
Long-term investment	366	366	—	—
Liabilities:				
Long-term debt and related current maturities	$16,057	$17,022	$18,787	$20,176

The Company determined the fair value of the long-term receivables by utilizing transactions in the listed markets for identical or similar assets. As such, the fair value of these receivables is considered level 2.

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The fair value of the short-term and long-term investments are based on the present value of the mandatory redemptions as reflected within Garrett Motion Inc.'s (Garrett) Series B Preferred Stock (Series B Preferred Stock) Certificate of Designation, as amended. Fair Value of the Series B Preferred Stock is not impacted by early redemptions until receipt of payment. The investment is designated as held to maturity and was initially recognized at fair value. The fair value of Garrett's Series B Preferred Stock was determined using observable market data and is considered level 2. Refer to Note 19 Commitments and Contingencies for further discussion of the Company’s investment in Garrett's Series B Preferred Stock.

The Company determined the fair value of the long-term debt and related current maturities utilizing transactions in the listed markets for identical or similar liabilities. As such, the fair value of the long-term debt and related current maturities is considered level 2.

NOTE 13. ACCRUED LIABILITIES

	December 31,	
	2021	**2020**
Customer advances and deferred income	$ 3,163	$ 2,932
Compensation, benefit and other employee related	1,273	1,244
Repositioning	411	601
Asbestos related liabilities	261	300
Income taxes	393	307
Other taxes	269	281
Environmental costs	225	225
Operating lease liabilities	185	187
Product warranties and performance guarantees	180	183
Insurance	101	140
Accrued interest	100	102
Other (primarily operating expenses)	1,118	903
	$7,679	**$7,405**

NOTE 14. OTHER LIABILITIES

	December 31,	
	2021	**2020**
Income taxes	$ 2,152	$ 2,009
Pension and other employee related	1,672	1,923
Deferred income	1,324	1,356
Operating lease liabilities	847	641
Environmental	393	435
Insurance	299	280
Product warranties and performance guarantees	43	60
Asset retirement obligations	26	31
Other	331	240
	$7,087	**$6,975**

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NOTE 15. STOCK-BASED COMPENSATION PLANS

The 2016 Stock Incentive Plan of Honeywell International Inc. and its Affiliates (2016 Plan) and 2016 Stock Plan for Non-Employee Directors of Honeywell International Inc. (2016 Directors Plan) were both approved by the shareowners at the Annual Meeting of Shareowners effective on April 25, 2016. At December 31, 2021, there were 32,337,638, and 815,299 shares of Honeywell common stock available for future grants under terms of the 2016 Plan and 2016 Directors Plan, respectively.

STOCK OPTIONS

The exercise price, term and other conditions applicable to each option granted under the Company's stock plans are generally determined by the Management Development and Compensation Committee of the Board of Directors. The exercise price of stock options is set on the grant date and may not be less than the fair market value per share of the Company's stock on that date. The fair value is recognized as an expense over the employee’s requisite service period (generally the vesting period of the award). Options generally vest over a four-year period and expire after ten years.

The fair value of each option award is estimated on the date of grant using the Black-Scholes option-pricing model. Expected volatility is based on implied volatilities from traded options on our common stock and historical volatility of the Company's common stock. The Company used a Monte Carlo simulation model to derive an expected term which represents an estimate of the time options are expected to remain outstanding. Such model uses historical data to estimate option exercise activity and post-vest termination behavior. The risk-free rate for periods within the contractual life of the option is based on the U.S. treasury yield curve in effect at the time of grant.

The following table summarizes the impact to the Consolidated Statement of Operations from stock options:

	Years Ended December 31,		
	2021	**2020**	**2019**
Compensation expense	$ 55	$ 50	$ 47
Future income tax benefit recognized	11	10	10

The following table sets forth fair value per share information, including related weighted-average assumptions, used to determine compensation cost.

	Years Ended December 31,		
	2021	2020	2019
Weighted average fair value per share of options granted during the year[1]	$32.42	$21.30	$21.57
Assumptions:			
Expected annual dividend yield	2.31 %	2.59 %	2.65 %
Expected volatility	24.69 %	18.76 %	18.40 %
Risk-free rate of return	0.48 %	1.32 %	2.46 %
Expected option term (years)	4.54	4.62	4.87

(1) Estimated on date of grant using Black-Scholes option-pricing model.

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)
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The following table summarizes information about stock option activity for the three years ended December 31, 2021:

	Number of Options	Weighted Average Exercise Price
Outstanding at December 31, 2018	**22,478,581**	**$ 97.83**
Granted	3,136,058	155.43
Exercised	(5,897,060)	84.31
Lapsed or canceled	(986,017)	136.15
Outstanding at December 31, 2019	**18,731,562**	**109.87**
Granted	3,192,693	176.93
Exercised	(4,424,754)	88.96
Lapsed or canceled	(930,972)	156.62
Outstanding at December 31, 2020	**16,568,529**	**125.75**
Granted	2,065,574	204.99
Exercised	(2,016,489)	113.01
Lapsed or canceled	(764,675)	175.42
Outstanding at December 31, 2021	**15,852,939**	**$ 135.31**
Vested and expected to vest at December 31, 2021[1]	**14,694,701**	**$ 131.08**
Exercisable at December 31, 2021	**10,664,625**	**$ 113.30**

[1] Represents the sum of vested options of 10.7 million and expected to vest options of 4.0 million. Expected to vest options are derived by applying the pre-vesting forfeiture rate assumption to total outstanding unvested options of 5.2 million.

The following table summarizes information about stock options outstanding and exercisable at December 31, 2021:

	Options Outstanding				Options Exercisable		
Range of Exercise Prices	**Number Outstanding**	**Weighted Average Life**[1]	**Weighted Average Exercise Price per share**	**Aggregate Intrinsic Value**	**Number Exercisable**	**Weighted Average Exercise Price per share**	**Aggregate Intrinsic Value**
$27.00–$64.99	90,181	0.17	$ 56.97	$ 14	90,181	$ 56.97	$ 14
$65.00–$89.99	2,293,585	1.68	79.39	296	2,293,585	79.39	296
$90.00–$99.99	3,341,048	3.44	98.80	367	3,341,048	98.80	366
$100.00–$134.99	2,435,321	5.04	119.69	216	2,314,755	119.19	214
$135.00–$232.99	7,692,804	7.55	173.71	271	2,625,056	158.14	232
	15,852,939	**5.41**	**$135.28**	**$1,164**	**10,664,625**	**$113.30**	**$1,122**

[1] Average remaining contractual life in years.

There were 10,120,793 and 11,620,992 options exercisable at weighted average exercise prices of $103.89 and $92.19 at December 31, 2020 and 2019, respectively.

The following table summarizes the financial statement impact from stock options exercised:

	Years Ended December 31,		
Options Exercised	**2021**	**2020**	**2019**
Intrinsic value[(1)]	$ 219	$ 379	$ 483
Tax benefit realized	48	84	117

(1) Represents the amount by which the stock price exceeded the exercise price of the options on the date of exercise.

At December 31, 2021, there was $100 million of total unrecognized compensation cost related to non-vested stock option awards which is expected to be recognized over a weighted-average period of 2.46 years. The total fair value of options vested for the years ended December 31, 2021, 2020 and 2019 was $52 million, $55 million and $61 million, respectively.

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RESTRICTED STOCK UNITS

Restricted stock unit (RSU) awards entitle the holder to receive one share of common stock for each unit when the units vest. RSUs are issued to certain key employees and directors as compensation at fair market value at the date of grant. RSUs generally become fully vested over periods ranging from three to six years and are payable in Honeywell common stock upon vesting.

The following table summarizes information about RSU activity for the three years ended December 31, 2021:

	Number of Restricted Stock Units	Weighted Average Grant Date Fair Value Per Share
Non-vested at December 31, 2018	**3,657,873**	**$125.35**
Granted	1,200,202	162.43
Vested	(1,160,333)	104.32
Forfeited	(457,677)	134.50
Non-vested at December 31, 2019	**3,240,065**	**143.07**
Granted	1,551,675	158.52
Vested	(1,001,101)	117.84
Forfeited	(394,116)	145.42
Non-vested at December 31, 2020	**3,396,523**	**148.23**
Granted	992,854	214.61
Vested	(1,123,547)	144.34
Forfeited	(308,293)	156.74
Non-vested at December 31, 2021	**2,957,536**	**$171.73**

As of December 31, 2021, there was approximately $273 million of total unrecognized compensation cost related to non-vested RSUs granted under the Company's stock plans which is expected to be recognized over a weighted-average period of 2.23 years.

The following table summarizes the impact to the Consolidated Statement of Operations from RSUs:

	Years Ended December 31,		
	2021	**2020**	**2019**
Compensation expense	$ 162	$ 118	$ 106
Future income tax benefit recognized	23	24	21

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NOTE 16. EARNINGS PER SHARE

The details of the earnings per share calculations for the years ended December 31, 2021, 2020 and 2019 are as follows (shares in millions):

	Years Ended December 31,		
Basic	**2021**	**2020**	**2019**
Net income attributable to Honeywell	$5,542	$4,779	$6,143
Weighted average shares outstanding	692.3	704.1	721.0
Earnings per share of common stock	$ 8.01	$ 6.79	$ 8.52

	Years Ended December 31,		
Assuming Dilution	**2021**	**2020**	**2019**
Net income attributable to Honeywell	$5,542	$4,779	$6,143
Average Shares			
Weighted average shares outstanding	692.3	704.1	721.0
Dilutive securities issuable—stock plans	8.1	7.1	9.3
Total weighted average diluted shares outstanding	**700.4**	**711.2**	**730.3**
Earnings per share of common stock—assuming dilution	**$ 7.91**	**$ 6.72**	**$ 8.41**

The diluted earnings per share calculations exclude the effect of stock options when the options' assumed proceeds exceed the average market price of the common shares during the period. In 2021, 2020 and 2019 the weighted number of stock options excluded from the computations were 1.7 million, 5.5 million and 2.5 million, respectively. These stock options were outstanding at the end of each of the respective periods.

NOTE 17. ACCUMULATED OTHER COMPREHENSIVE INCOME (LOSS)

The changes in Accumulated other comprehensive income (loss) are provided in the tables below. Comprehensive income (loss) attributable to noncontrolling interest consists predominantly of net income.

	Pre-tax	Tax	After-Tax
Year Ended December 31, 2021			
Foreign exchange translation adjustment	$ 302	$ —	$ 302
Pensions and other postretirement benefit adjustments	245	(59)	186
Changes in fair value of available for sale investments	(3)	—	(3)
Changes in fair value of designated cash flow hedges	(4)	1	(3)
	$ 540	**$ (58)**	**$ 482**
Year Ended December 31, 2020			
Foreign exchange translation adjustment	$ (214)	$ —	$ (214)
Pensions and other postretirement benefit adjustments	76	(2)	74
Changes in fair value of available for sale investments	4	—	4
Changes in fair value of designated cash flow hedges	(61)	17	(44)
	$(195)	**$ 15**	**$(180)**
Year Ended December 31, 2019			
Foreign exchange translation adjustment	$ 143	$ —	$ 143
Pensions and other postretirement benefit adjustments	115	(29)	86
Changes in fair value of designated cash flow hedges	20	(9)	11
	$ 278	**$ (38)**	**$ 240**

HONEYWELL INTERNATIONAL INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)
(Dollars in tables in millions, except per share amounts)

COMPONENTS OF ACCUMULATED OTHER COMPREHENSIVE INCOME (LOSS)

	December 31,	
	2021	**2020**
Cumulative foreign exchange translation adjustment	$ (2,478)	$ (2,780)
Pensions and other postretirement benefit adjustments	(415)	(601)
Fair value adjustments of available for sale investments	1	4
Fair value adjustments of designated cash flow hedges	(3)	—
	$(2,895)	**$(3,377)**

CHANGES IN ACCUMULATED OTHER COMPREHENSIVE INCOME (LOSS) BY COMPONENT

	Foreign Exchange Translation Adjustment	Pension and Other Postretirement Adjustments	Changes in Fair Value of Available for Sale Investments	Changes in Fair Value of Cash Flow Hedges	Total
Balance at December 31, 2018	**$(2,709)**	**$ (761)**	**$ —**	**$ 33**	**$(3,437)**
Other comprehensive income (loss) before reclassifications	156	149	—	103	408
Amounts reclassified from accumulated other comprehensive income	(13)	(63)	—	(92)	(168)
Net current period other comprehensive income (loss)	143	86	—	11	240
Balance at December 31, 2019	**$(2,566)**	**$ (675)**	**$ —**	**$ 44**	**$(3,197)**
Other comprehensive income (loss) before reclassifications	(201)	115	4	10	(72)
Amounts reclassified from accumulated other comprehensive income	(13)	(41)	—	(54)	(108)
Net current period other comprehensive income (loss)	(214)	74	4	(44)	(180)
Balance at December 31, 2020	**$(2,780)**	**$ (601)**	**$ 4**	**$ —**	**$(3,377)**
Other comprehensive income (loss) before reclassifications	314	268	(3)	17	596
Amounts reclassified from accumulated other comprehensive income	(12)	(82)	—	(20)	(114)
Net current period other comprehensive income (loss)	302	186	(3)	(3)	482
Balance at December 31, 2021	**$(2,478)**	**$ (415)**	**$ 1**	**$ (3)**	**$(2,895)**

HONEYWELL INTERNATIONAL INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)
(Dollars in tables in millions, except per share amounts)

RECLASSIFICATIONS OUT OF ACCUMULATED OTHER COMPREHENSIVE INCOME (LOSS)

	Year Ended December 31, 2021						
	Affected Line in the Consolidated Statement of Operations						
	Net Sales	Cost of Products Sold	Cost of Services Sold	Selling, general and administrative expenses	Other (Income) Expense	Interest and Other Financial Charges	Total
Amortization of Pension and Other Postretirement Items:							
Actuarial losses recognized	$ —	$ —	$ —	$ —	$ 7	$ —	$ 7
Prior service (credit) recognized	—	—	—	—	(116)	—	(116)
Losses (gains) on cash flow hedges	(5)	(8)	(2)	(9)	—	—	(24)
Losses (gains) on excluded component of net investment hedges	—	—	—	—	—	(16)	(16)
Total before tax	**$ (5)**	**$ (8)**	**$ (2)**	**$ (9)**	**$ (109)**	**$ (16)**	**$ (149)**
Tax expense (benefit)							**35**
Total reclassifications for the period, net of tax							**$ (114)**

	Year Ended December 31, 2020						
	Affected Line in the Consolidated Statement of Operations						
	Net Sales	**Cost of Products Sold**	**Cost of Services Sold**	**Selling, general and administrative expenses**	**Other (Income) Expense**	**Interest and Other Financial Charges**	**Total**
Amortization of Pension and Other Postretirement Items:							
Actuarial losses recognized	$ —	$ —	$ —	$ —	$ 57	$ —	$ 57
Prior service (credit) recognized	—	—	—	—	(108)	—	(108)
Losses (gains) on cash flow hedges	3	(43)	(11)	4	(28)	—	(75)
Losses (gains) on excluded component of net investment hedges	—	—	—	—	—	(18)	(18)
Total before tax	**$ 3**	**$ (43)**	**$ (11)**	**$ 4**	**$ (79)**	**$ (18)**	**$ (144)**
Tax expense (benefit)							**36**
Total reclassifications for the period, net of tax							**$ (108)**

HONEYWELL INTERNATIONAL INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)
(Dollars in tables in millions, except per share amounts)

	Year Ended December 31, 2019						
	Affected Line in the Consolidated Statement of Operations						
	Net Sales	Cost of Products Sold	Cost of Services Sold	Selling, general and administrative expenses	Other (Income) Expense	Interest and Other Financial Charges	Total
Amortization of Pension and Other Postretirement Items:							
Actuarial losses recognized	$ —	$ —	$ —	$ —	$ 135	$ —	$ 135
Prior service (credit) recognized	—	—	—	—	(104)	—	(104)
Losses (gains) on cash flow hedges	(3)	(35)	(9)	(1)	(73)	—	(121)
Losses (gains) on excluded component of net investment hedges	—	—	—	—	—	(19)	(19)
Total before tax	**$ (3)**	**$ (35)**	**$ (9)**	**$ (1)**	**$ (42)**	**$ (19)**	**$ (109)**
Tax expense (benefit)							**(59)**
Total reclassifications for the period, net of tax							**$ (168)**

NOTE 18. CAPITAL STOCK

The Company is authorized to issue up to 2,000,000,000 shares of common stock, with a par value of $1. Common shareowners are entitled to receive such dividends as may be declared by the Board of Directors, are entitled to one vote per share, and are entitled, in the event of liquidation, to share ratably in all the assets of the Company which are available for distribution to the common shareowners. Common shareowners do not have preemptive or conversion rights. Shares of common stock issued and outstanding or held in the treasury are not liable to further calls or assessments. There are no restrictions on the Company relative to dividends or the repurchase or redemption of common stock.

In April 2019, the Board of Directors authorized the repurchase of up to a total of $10 billion of Honeywell common stock. On February 12, 2021 the Board of Directors authorized another repurchase of up to a total of $10 billion of Honeywell common stock, which included $2.8 billion remaining under, and replaced, the previously approved share repurchase authorization. Approximately $7.1 billion and $3.3 billion remained available as of December 31, 2021 and 2020, respectively, for additional share repurchases.

Honeywell repurchased approximately 15.8 million and 20.7 million shares of its common stock during the years ended December 31, 2021 and 2020, for $3,380 million and $3,714 million.

The Company is authorized to issue up to 40,000,000 shares of preferred stock, without par value, and can determine the number of shares of each series, and the rights, preferences and limitations of each series. At December 31, 2021, there was no preferred stock outstanding.

HONEYWELL INTERNATIONAL INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)
(Dollars in tables in millions, except per share amounts)

NOTE 19. COMMITMENTS AND CONTINGENCIES

ENVIRONMENTAL MATTERS

The Company is subject to various federal, state, local and foreign government requirements relating to the protection of the environment. The Company believes that, as a general matter, the Company's policies, practices, and procedures are properly designed to prevent unreasonable risk of environmental damage and personal injury and that the handling, manufacture, use, and disposal of hazardous substances are in accordance with environmental and safety laws and regulations. However, mainly because of past operations and operations of predecessor companies, the Company, like other companies engaged in similar businesses, have incurred remedial response and voluntary cleanup costs for site contamination and are a party to lawsuits and claims associated with environmental and safety matters, including past production of products containing hazardous substances. Additional lawsuits, claims, and costs involving environmental matters are likely to continue to arise in the future.

With respect to environmental matters involving site contamination, the Company continually conducts studies, individually or jointly with other potentially responsible parties, to determine the feasibility of various remedial techniques. It is the Company's policy to record appropriate liabilities for environmental matters when remedial efforts or damage claim payments are probable and the costs can be reasonably estimated. Such liabilities are based on our best estimate of the undiscounted future costs required to complete the remedial work. The recorded liabilities are adjusted periodically as remediation efforts progress or as additional technical, regulatory, or legal information becomes available. Given the uncertainties regarding the status of laws, regulations, enforcement policies, the impact of other potentially responsible parties, technology, and information related to individual sites, the Company does not believe it is possible to develop an estimate of the range of reasonably possible environmental loss in excess of the Company's recorded liabilities. The Company expects to fund expenditures for these matters from operating cash flow. The timing of cash expenditures depends on a number of factors, including the timing of remedial investigations and feasibility studies, the timing of litigation and settlements of remediation liability, personal injury and property damage claims, regulatory approval of cleanup projects, remedial techniques to be utilized, and agreements with other parties.

The following table summarizes information concerning our recorded liabilities for environmental costs:

	Years Ended December 31,		
	2021	**2020**	**2019**
Beginning of year	**$ 660**	**$ 709**	**$ 755**
Accruals for environmental matters deemed probable and reasonably estimable	168	173	213
Environmental liability payments	(210)	(216)	(256)
Other	—	(6)	(3)
End of year	**$ 618**	**$ 660**	**$ 709**

Environmental liabilities are included in the following balance sheet accounts:

	December 31,	
	2021	2020
Accrued liabilities	$ 225	$ 225
Other liabilities	393	435
	$ 618	**$ 660**

The Company does not currently possess sufficient information to reasonably estimate the amounts of environmental liabilities to be recorded upon future completion of studies, litigation or settlements, and neither the timing nor the amount of the ultimate costs associated with environmental matters can be determined, although they could be material to the Company's consolidated results of operations and operating cash flows in the periods recognized or paid. However, considering the Company's past experience and existing reserves, the Company does not expect that environmental matters will have a material adverse effect on its consolidated financial position.

In conjunction with the Resideo spin-off, the Company entered into an indemnification and reimbursement agreement with a Resideo subsidiary, pursuant to which Resideo’s subsidiary has an ongoing obligation to make cash payments to Honeywell in amounts equal to 90% of Honeywell’s annual net spending for environmental matters at certain sites as defined in the agreement. The amount payable to Honeywell in any given year is subject to a cap of $140 million, and the obligation will continue until the earlier of December 31, 2043, or December 31 of the third consecutive year during which the annual payment obligation is less than $25 million.

HONEYWELL INTERNATIONAL INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)
(Dollars in tables in millions, except per share amounts)

Reimbursements associated with this agreement are collected from Resideo quarterly and were $140 million in both 2021 and 2020 and offset operating cash outflows incurred by the Company. As the Company incurs costs for environmental matters deemed probable and reasonably estimable related to the sites covered by the indemnification and reimbursement agreement, a corresponding receivable from Resideo for 90% of such costs is also recorded. This receivable amount recorded in 2021 and 2020 was $146 million and $146 million, respectively. As of December 31, 2021, Other current assets and Other assets included $140 million and $457 million, respectively, for the short-term and long-term portion of the receivable amount due from Resideo under the indemnification and reimbursement agreement. As of December 31, 2020, Other current assets and Other assets included $140 million and $451 million, respectively, for the short-term and long-term portion of the receivable amount due from Resideo under the indemnification and reimbursement agreement.

ASBESTOS RELATED LIABILITIES

Honeywell is named in asbestos-related personal injury claims related to North American Refractories Company (NARCO), which was sold in 1986, and the Bendix Friction Materials (Bendix) business, which was sold in 2014.

The following tables summarize information concerning NARCO and Bendix asbestos-related balances:

	Year Ended December 31, 2021			Year Ended December 31, 2020			Year Ended December 31, 2019		
	Bendix	**NARCO**	**Total**	**Bendix**	**NARCO**	**Total**	**Bendix**	**NARCO**	**Total**
Beginning of year	**$1,441**	**$779**	**$2,220**	**$1,499**	**$858**	**$2,357**	**$1,623**	**$891**	**$2,514**
Accrual for update to estimated liability	64	31	95	80	18	98	78	22	100
Change in estimated cost of future claims	29	—	29	42	—	42	(22)	—	(22)
Update of expected resolution values for pending claims	3	—	3	10	—	10	(4)	—	(4)
Asbestos related liability payments	(165)	(121)	(286)	(190)	(97)	(287)	(176)	(55)	(231)
End of year	**$1,372**	**$689**	**$2,061**	**$1,441**	**$779**	**$2,220**	**$1,499**	**$858**	**$2,357**

INSURANCE RECOVERIES FOR ASBESTOS RELATED LIABILITIES

	Year Ended December 31, 2021			Year Ended December 31, 2020			Year Ended December 31, 2019		
	Bendix	NARCO	Total	Bendix	NARCO	Total	Bendix	NARCO	Total
Beginning of year	**$148**	**$254**	**$ 402**	**$153**	**$281**	**$ 434**	**$170**	**$307**	**$ 477**
Probable insurance recoveries related to estimated liability	7	—	7	10	—	10	3	—	3
Insurance receipts for asbestos related liabilities	(13)	(33)	(46)	(33)	(25)	(58)	(39)	(29)	(68)
Insurance receivables settlements and write offs	—	—	—	18	(2)	16	19	3	22
End of year	**$142**	**$221**	**$ 363**	**$148**	**$254**	**$ 402**	**$153**	**$281**	**$ 434**

NARCO and Bendix asbestos related balances are included in the following balance sheet accounts:

	December 31,	
	2021	2020
Other current assets	$ 41	$ 36
Insurance recoveries for asbestos related liabilities	322	366
	$ 363	**$ 402**
Accrued liabilities	$ 261	$ 300
Asbestos related liabilities	1,800	1,920
	$2,061	**$2,220**

HONEYWELL INTERNATIONAL INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)
(Dollars in tables in millions, except per share amounts)

NARCO Products – NARCO manufactured high-grade, heat-resistant, refractory products for various industries. Honeywell’s predecessor, Allied Corporation, owned NARCO from 1979 to 1986. Allied Corporation sold the NARCO business in 1986 and entered into a cross-indemnity agreement which included an obligation to indemnify the purchaser for asbestos claims, arising primarily from alleged occupational exposure to asbestos-containing refractory brick and mortar for high-temperature applications. NARCO ceased manufacturing these products in 1980 and filed for bankruptcy in January 2002, at which point in time all then current and future NARCO asbestos claims were stayed against both NARCO and Honeywell pending the reorganization of NARCO. The Company established its initial liability for NARCO asbestos claims in 2002.

NARCO emerged from bankruptcy in April 2013, at which time a federally authorized 524(g) trust was established to evaluate and resolve all existing NARCO asbestos claims (the Trust). Both Honeywell and NARCO are protected by a permanent channeling injunction barring all present and future individual actions in state or federal courts and requiring all asbestos-related claims based on exposure to NARCO asbestos-containing products to be made against the Trust. The NARCO Trust Agreement (TA) and the NARCO Trust Distribution Procedures (TDP) set forth the structure and operating rules of the Trust, and established Honeywell’s evergreen funding obligations.

In accordance with the TA, the Trust is eligible to receive cash dividends from Harbison-Walker International Inc. (HWI), the reorganized and renamed entity that emerged from the NARCO bankruptcy. HWI cash dividends are required to be used to pay asbestos-related claims which qualify for payment under the TDP (Annual Contribution Claims) until those funds are exhausted, at which point Honeywell’s funding obligation, subject to an annual cap of $145 million, is triggered. The Trust received dividend payments from HWI in 2021. The Company is also required to fund amounts owed pursuant to settlement agreements reached during the pendency of the NARCO bankruptcy proceedings that provide for the right to submit claims to the Trust subject to qualification under the terms of the settlement agreements and TDP (Pre-Established Unliquidated Claims), as well as fund the annual operating costs of the Trust. There is no annual funding cap relative to Pre-Established Unliquidated Claims.

The operating rules per the TDP define criteria claimants must meet for a claim to be considered valid and paid, which include adequate medical evidence of the claimant’s asbestos-related condition and credible evidence of exposure to a specific NARCO asbestos-containing product. The TDP allows Honeywell to audit claim support documents against these criteria. Once operational in 2014, the Trust began to receive, process and pay claims. The Company identified several issues with the way the Trust was adhering to the TDP in audits subsequent to the Trust becoming operational. The Company consistently raised with the Trust concern that the Trust adopted an improper practice of paying claimants who have not demonstrated the requisite exposure. The Trust refused to alter its practices for payment of claims, and in September 2021, Honeywell filed suit against the Trust in the United States Bankruptcy Court for the Western District of Pennsylvania (Bankruptcy Court) alleging that the Trust has breached its duties in managing the Trust, including breaches of certain provisions of the TA and TDP. Honeywell's lawsuit seeks appropriate relief preventing the Trust from continuing these practices. The Trust also filed suit against Honeywell, alleging Honeywell has breached its obligations under the Trust's governing documents. Honeywell moved to dismiss the Trust’s suit, and on December 15, 2021, the Bankruptcy Court granted Honeywell’s motion to dismiss subject to granting the Trust leave to file an amended complaint. On December 28, 2021, the Trust filed an answer with counterclaims in response to Honeywell’s complaint and in lieu of filing an amended complaint. At this time, the Company cannot predict the outcome of these matters, or the potential impact on the asbestos-related liabilities.

Due to the bankruptcy filing in 2002, claimants were not permitted to file additional claims until the Trust became operative in 2014. As a consequence, there was a large backlog of claims filed with the Trust upon it becoming operative in 2014 through December 31, 2017, the date by which these claims had to be filed or else be barred by the expiration of the statute of limitations. Therefore, the claims filing rate did not start to normalize until 2018 and thereafter. As a result, between 2002 and 2018, the Company lacked a history of sufficiently reliable claims data to derive a reasonable estimate of its NARCO asbestos-related liability, and the Company continued to update its original estimate, as appropriate, using all available information.

Beginning in 2020, with three years of sufficiently reliable claims data, the Company updated its estimate of the NARCO asbestos-related liability. The estimate for the resolution of asserted Annual Contribution Claims and Pre-Established Unliquidated Claims uses average payment values for the relevant historical period. The estimate for unasserted claims is based on historic and anticipated claims filing experience and payment rates, disease classifications and type of claim, and average payment values by the Trust for the relevant historical period. The Company utilizes an asbestos liability valuation specialist to support the preparation of the NARCO asbestos-related liability estimates during the fourth quarter each year. The Company's estimates, which involve significant management judgment, and consider multiple scenarios, include all years of epidemiological disease projection through 2059.

The NARCO asbestos-related liability reflects an estimate for the resolution of Annual Contribution Claims and Pre-Established Unliquidated Claims filed with the Trust, as well as for unasserted Annual Contribution Claims and Pre-Established Unliquidated Claims. The NARCO asbestos-related liability excludes the annual operating expenses of the Trust which are expensed as they are incurred.

HONEYWELL INTERNATIONAL INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)
(Dollars in tables in millions, except per share amounts)

The Company's NARCO-related insurance receivable reflects coverage which reimburses Honeywell for portions of NARCO-related claims and defense costs. This coverage is provided by a large number of insurance policies written by dozens of insurance companies in both the domestic insurance market and the London excess market. Honeywell's NARCO-related insurance receivable is an estimate of the probable amount of insurance that is recoverable for asbestos claims. The Company's judgments related to the Company's insurance carriers and insurance coverages are reasonable and consistent with Honeywell's historical dealings and Honeywell's knowledge of any pertinent solvency issues surrounding insurers.

Bendix Products – Bendix manufactured automotive brake linings that contained chrysotile asbestos in an encapsulated form. Claimants consist largely of individuals who allege exposure to asbestos from brakes from either performing or being in the vicinity of individuals who performed brake replacements. The following tables present information regarding Bendix related asbestos claims activity:

	Years Ended December 31,	
Claims Activity	**2021**	**2020**
Claims Unresolved at the beginning of year	**6,242**	**6,480**
Claims Filed	2,611	2,233
Claims Resolved	(2,452)	(2,471)
Claims Unresolved at the end of year	**6,401**	**6,242**

	Years Ended December 31,	
Disease Distribution of Unresolved Claims	**2021**	**2020**
Mesothelioma and Other Cancer Claims	3,760	3,422
Nonmalignant Claims	2,641	2,820
Total Claims	**6,401**	**6,242**

Honeywell has experienced average resolution values per claim excluding legal costs as follows:

	Years Ended December 31,				
	2021	**2020**	**2019**	**2018**	**2017**
	(in whole dollars)				
Malignant claims	$56,000	$61,500	$50,200	$55,300	$56,000
Nonmalignant claims	$ 400	$ 550	$ 3,900	$ 4,700	$ 2,800

It is not possible to predict whether resolution values for Bendix-related asbestos claims will increase, decrease or stabilize in the future.

The Consolidated Financial Statements reflect an estimated liability for resolution of asserted (claims filed as of the financial statement date) and unasserted Bendix-related asbestos claims, which exclude the Company’s ongoing legal fees to defend such asbestos claims which will continue to be expensed as they are incurred.

The Company reflects the inclusion of all years of epidemiological disease projection through 2059 when estimating the liability for unasserted Bendix-related asbestos claims. Such liability for unasserted Bendix-related asbestos claims is based on historic and anticipated claims filing experience and dismissal rates, disease classifications, and resolution values in the tort system for the previous five years. The Company has valued Bendix asserted and unasserted claims using average resolution values for the previous five years. The Company updates the resolution values used to estimate the cost of Bendix asserted and unasserted claims during the fourth quarter each year.

The Company's insurance receivable corresponding to the liability for settlement of asserted and unasserted Bendix asbestos claims reflects coverage which is provided by a large number of insurance policies written by dozens of insurance companies in both the domestic insurance market and the London excess market. Based on the Company's ongoing analysis of the probable insurance recovery, insurance receivables are recorded in the financial statements simultaneous with the recording of the estimated liability for the underlying asbestos claims. This determination is based on the Company's analysis of the underlying insurance policies, historical experience with insurers, ongoing review of the solvency of insurers, judicial determinations relevant to insurance programs, and consideration of the impacts of any settlements reached with the Company's insurers.

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)
(Dollars in tables in millions, except per share amounts)

On October 31, 2018, David Kanefsky (Plaintiff), a Honeywell shareholder, filed a putative class action complaint in the U.S. District Court for the District of New Jersey (the Court) alleging violations of the Securities Exchange Act of 1934 and Rule 10b-5 related to the prior accounting for Bendix asbestos claims. An Amended Complaint was filed on December 30, 2019, and on February 7, 2020, the Company filed a Motion to Dismiss. On May 18, 2020, the Court denied the Motion to Dismiss. On December 7, 2021, the parties filed a Stipulation of Settlement (Settlement Agreement) and Plaintiff filed a motion for preliminary approval of the Settlement Agreement, which includes payment by Honeywell of $10 million to settle the claims in dispute. Honeywell continues to believe the claims lack merit and denies wrongdoing as well as any liability for the claims made against Honeywell in the action. The Settlement Agreement remains subject to final court approval and other conditions.

GARRETT LITIGATION AND BANKRUPTCY PROCEEDINGS

In conjunction with the Garrett spin-off, the Company entered into a binding indemnification and reimbursement agreement (Garrett Indemnity) and a binding tax matters agreement (Tax Matters Agreement) with Garrett and a Garrett subsidiary. On December 2, 2019, Garrett and Garrett ASASCO Inc. filed a Summons with Notice and commenced a lawsuit in the Commercial Division of the Supreme Court of the State of New York, County of New York (the State Court), seeking to invalidate the Garrett Indemnity. Garrett sought damages and a declaratory judgment based on various claims set forth in the Summons with Notice. On July 17, 2020, the Company received a notice from Garrett asserting that the Company had caused material breaches of the Tax Matters Agreement and that the Tax Matters Agreement was unenforceable.

On September 20, 2020, Garrett and 36 of its affiliates filed voluntary petitions for relief under Chapter 11 of the United States Bankruptcy Code in the United States Bankruptcy Court for the Southern District of New York (the Bankruptcy Court). On September 24, 2020, Garrett moved the existing State Court litigation against Honeywell to the Bankruptcy Court. For the year ended December 31, 2020, the Company reviewed the aggregate carrying value of the receivable amounts due in connection with the Garrett Indemnity and Tax Matters Agreement and reduced the aggregate carrying value of the receivable by $509 million to reflect the present value of the amounts owed to the Company over the full term of these agreements.

On April 26, 2021, the Bankruptcy Court confirmed Garrett’s amended Chapter 11 plan of reorganization (the Confirmed Plan), and on April 30, 2021 (the Effective Date), Garrett emerged from bankruptcy. On the Effective Date, and in accordance with the Confirmed Plan, (i) the Company received from Garrett an initial payment of $375 million and 834.8 million shares of Garrett's Series B Preferred Stock in full and final satisfaction of the Garrett Indemnity and Tax Matters Agreement, (ii) the Garrett Indemnity and Tax Matters Agreement were terminated, (iii) the Company and Garrett mutually released each other from the claims asserted in all pending legal actions related to the Garrett Indemnity and Tax Matters Agreement, and (iv) all pending litigation between the Company and Garrett in connection with those agreements was resolved.

The original Series B Preferred Stock Certificate of Designation provides for mandatory redemptions by Garrett of $35 million in 2022 and $100 million per year from 2023 to 2030 (inclusive) at the anniversary of the Effective Date, unless (i) Garrett’s consolidated EBITDA as of the end of the most recently completed fiscal year is less than $425 million, or (ii) Garrett does not have sufficient funds available to pay the redemption, at which point the redemption amounts past due will accrue interest. The Series B Preferred Stock Certificate of Designation also includes rights which allow (a) the

Company to put the Series B Preferred Stock to Garrett if certain EBITDA conditions are met, and (b) Garrett to call the Series B Preferred Stock in whole or in part if certain EBITDA conditions are met.

On September 30, 2021, Garrett filed an Amended and Restated Series B Preferred Stock Certificate of Designation (Amendment) with the Secretary of State of Delaware. The Amendment required Garrett to partially redeem a portion of the Series B Preferred Stock on or before March 31, 2022, such that the present value of remaining outstanding shares of the Series B Preferred Stock would be $400 million (First Partial Redemption), subject to applicable law, including that Garrett had funds legally available for the partial redemption. The First Partial Redemption would be applied to the latest scheduled redemption dates, beginning with the shares to be redeemed in 2030. The Amendment also provides that the Company cannot exercise its right to put the Series B Preferred Stock to Garrett until after December 31, 2022, subject to the EBITDA conditions described in the above section, unless the partial redemption does not occur on or before March 31, 2022. All other material terms and conditions in the Amendment were unchanged from the original Series B Preferred Stock Certificate of Designation.

On December 16, 2021, Garrett filed a Second Amended and Restated Series B Preferred Stock Certificate of Designation (Second Amendment) with the Secretary of State of Delaware. The Second Amendment accelerates the First Partial Redemption from March 31, 2022, to December 30, 2021, and allows Garrett to partially redeem an additional portion of the Series B Preferred Stock on or before March 31, 2022, such that the present value of remaining outstanding shares of the Series B Preferred Stock will be $207 million (Second Partial Redemption). The Second Partial Redemption is subject to similar terms as the First Partial Redemption, including that Garrett has funds legally available for the partial redemption. However, the Second Partial Redemption is also contingent upon Garrett completing the First Partial Redemption and either (i) increasing their revolving credit facility, or (ii) the Garrett Board of Directors determining that Garrett otherwise has sufficient liquidity to effect the Second Partial Redemption. The Second Partial Redemption would be applied to the earliest scheduled redemptions beginning with the shares to be redeemed on April 30, 2022.

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On December 17, 2021, Garrett announced their intention to effect the First Partial Redemption on December 28, 2021, in the amount of $211 million, and plan to effect the Second Partial Redemption during the first quarter of 2022 for a corresponding payment of $200 million. On December 28, 2021, Garrett paid $211 million for the amount due as the First Partial Redemption.

The Company recorded the Series B Preferred Stock at fair value at the Effective Date. The Company believes the present value of the mandatory redemptions is an appropriate basis for determining the fair value of the Series B Preferred Stock. The Company's present value reflects amortized cost determined by the present value of the mandatory redemptions discounted at 7.25%, which is the rate reflected in the Series B Preferred Stock Certificate of Designation. The discount amount will accrete into interest income over the mandatory redemption period. In addition to the Series B Preferred Stock, the Company subscribed for 4.2 million shares of Garrett's Series A Preferred Stock, which are convertible into Garrett’s Common Stock if certain conditions are met. Prior to and following Garrett’s emergence from bankruptcy, the Company also held 2.9 million shares of Garrett’s Common Stock. As of December 31, 2021, Short-term investments included $34 million and Investments and long-term receivables included $423 million for the Company's investments in Garrett's Series B Preferred Stock, Series A Preferred Stock and Common Stock.

OTHER MATTERS

The Company is subject to a number of other lawsuits, investigations and disputes (some of which involve substantial amounts claimed) arising out of the conduct of the Company's business, including matters relating to commercial transactions, government contracts, product liability, prior acquisitions and divestitures, employee benefit plans, intellectual property, and environmental, health and safety matters (including the matter described below). The Company recognizes liabilities for any contingency that is probable of occurrence and reasonably estimable. The Company continually assesses the likelihood of adverse judgments or outcomes in such matters, as well as potential ranges of possible losses (taking into consideration any insurance recoveries), based on a careful analysis of each matter with the assistance of outside legal counsel and, if applicable, other experts.

Such matters include:

- ***Petrobras and Unaoil*** – The Company continues to cooperate with investigations by the U.S. Department of Justice (DOJ), the Securities and Exchange Commission (SEC) and the Brazilian authorities relating to the Company's use of third parties who previously worked for the Company's UOP business in Brazil in relation to Petróleo Brasileiro S.A. (Petrobras) in connection with a project awarded in 2010. The investigations focus on compliance with the U.S. Foreign Corrupt Practices Act and similar Brazilian laws (the UOP Matters), and involve, among other things, document production and interviews with former and current management and employees. The DOJ and the SEC are also examining a matter involving a foreign subsidiary’s prior contract with Unaoil S.A.M. in Algeria executed in 2011. The Company continues to be engaged in discussions with the authorities with respect to a potential comprehensive resolution of these matters.

  As the discussions are both ongoing and at different stages with regards to each respective authority, there can be no assurance as to whether the Company will reach a resolution with such authorities or as to the potential timing, terms, or collateral consequences of any such resolution. As a result, the Company cannot predict the ultimate outcome of these UOP Matters or the potential impact on the Company. Based on available information to date, the Company estimates that a potential comprehensive resolution of these UOP Matters would result in a probable loss of at least $160 million, and the Company has recorded a charge in this amount in the Company's Consolidated Statement of Operations, and accrued a corresponding liability on the Consolidated Balance Sheet. Amounts payable to authorities pursuant to any potential final comprehensive resolution could differ from the amount recorded in the Company's consolidated financial statements. Based on available information to date, the Company does not expect that any such difference would be material with respect to the Company's consolidated financial position.

Given the uncertainty inherent in litigation and investigations, the Company does not believe it is possible to develop estimates of reasonably possible losses (or a range of possible losses) in excess of current accruals for such matters. Considering the Company's past experience and existing accruals, the Company does not expect the outcome of such matters, either individually or in the aggregate, to have a material adverse effect on the Company's consolidated financial position. Because most contingencies are resolved over long periods of time, potential liabilities are subject to change due to new developments, changes in settlement strategy or the impact of evidentiary requirements, which could cause us to pay damage awards or settlements (or become subject to equitable remedies) that could have a material adverse effect on the Company's consolidated results of operations or operating cash flows in the periods recognized or paid.

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WARRANTIES AND GUARANTEES

In the normal course of business, the Company issues product warranties and product performance guarantees. The Company accrues for the estimated cost of product warranties and performance guarantees based on contract terms and historical experience at the time of sale. Adjustments to initial obligations for warranties and guarantees are made as changes to the obligations become reasonably estimable. The following table summarizes information concerning the Company's recorded obligations for product warranties and product performance guarantees.

	Years Ended December 31,		
	2021	**2020**	**2019**
Beginning of year	**$ 243**	**$ 269**	**$ 310**
Accruals for warranties/guarantees issued during the year	146	164	173
Adjustment of pre-existing warranties/guarantees	(7)	(18)	(34)
Settlement of warranty/guarantee claims	(159)	(172)	(180)
End of year	**$ 223**	**$ 243**	**$ 269**

Product warranties and product performance guarantees are included in the following balance sheet accounts:

	December 31,	
	2021	**2020**
Accrued liabilities	$ 180	$ 183
Other liabilities	43	60
	$ 223	**$ 243**

NOTE 20. PENSION AND OTHER POSTRETIREMENT BENEFITS

The Company sponsors a number of both funded and unfunded U.S. and non-U.S. defined benefit pension plans. Pension benefits for many of the Company's U.S. employees are provided through non-contributory, qualified and non-qualified defined benefit plans. All non-union hourly and salaried employees joining Honeywell for the first time after December 31, 2012, are not eligible to participate in Honeywell’s U.S. defined benefit pension plans. The Company also sponsors defined benefit pension plans which cover non-U.S. employees who are not U.S. citizens, in certain jurisdictions, principally the UK, Netherlands, Germany, and Canada. Other pension plans outside of the U.S. are not material to the Company either individually or in the aggregate.

The Company also sponsors postretirement benefit plans that provide health care benefits and life insurance coverage mainly to U.S. eligible retirees. None of Honeywell’s U.S. employees are eligible for a retiree medical subsidy from the Company. In addition, the vast majority of Honeywell’s U.S. retirees either have no Company subsidy or have a fixed-dollar subsidy amount. This significantly limits the Company's exposure to the impact of future health care cost increases. The retiree medical and life insurance plans are not funded. Claims and expenses are paid from the Company's cash flows from operations.

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)
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The following tables summarize the balance sheet impact, including the benefit obligations, assets and funded status associated with the Company's significant pension and other postretirement benefit plans.

	Pension Benefits			
	U.S. Plans		Non-U.S. Plans	
	2021	2020	2021	2020
Change in benefit obligation:				
Benefit obligation at beginning of year	$18,054	$17,283	$ 7,670	$6,897
Service cost	105	99	26	23
Interest cost	306	461	77	106
Plan amendments	—	—	(3)	2
Actuarial (gains) losses[1]	141	1,331	(403)	509
Benefits paid	(1,221)	(1,100)	(249)	(246)
Settlements and curtailments	—	(21)	—	—
Foreign currency translation	—	—	(121)	291
Other	6	1	2	88
Benefit obligation at end of year	**17,391**	**18,054**	**6,999**	**7,670**
Change in plan assets:				
Fair value of plan assets at beginning of year	20,396	18,995	8,450	7,307
Actual return on plan assets	1,344	2,475	166	918
Company contributions	35	46	101	116
Benefits paid	(1,221)	(1,100)	(249)	(246)
Settlements and curtailments	—	(21)	—	—
Foreign currency translation	—	—	(74)	253
Other	6	1	2	102
Fair value of plan assets at end of year	20,560	20,396	8,396	8,450
Funded status of plans	**$ 3,169**	**$ 2,342**	**$1,397**	**$ 780**
Amounts recognized in Consolidated Balance Sheet consist of:				
Prepaid pension benefit cost[2]	$ 3,528	$ 2,695	$ 2,105	$1,688
Accrued pension liabilities—current[3]	(33)	(29)	(14)	(14)
Accrued pension liabilities—noncurrent[4]	(326)	(324)	(694)	(894)
Net amount recognized	**$ 3,169**	**$ 2,342**	**$1,397**	**$ 780**

(1) The actuarial losses incurred in 2021 related to the Company's U.S. plans are primarily the result of changes in demographic experience and demographic assumptions, partially offset by actuarial gains due to an increase in the discount rate assumptions used to estimate the benefit obligations as of December 31, 2021 compared to December 31, 2020. Actuarial gains incurred in 2021 related to the Company's non-U.S. plans are primarily the result of an increase in the discount rate assumption used to estimate the benefit obligations as of December 31, 2021 compared to December 31, 2020. Actuarial losses incurred in 2020 related to the Company's U.S. and non-U.S. plans are primarily the result of a decrease in the discount rate assumptions used to estimate the benefit obligations as of December 31, 2020 compared to December 31, 2019.

(2) Included in Other assets on the Consolidated Balance Sheet

(3) Included in Accrued liabilities on the Consolidated Balance Sheet

(4) Included in Other liabilities on the Consolidated Balance Sheet

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	Other Postretirement Benefits	
	2021	**2020**
Change in benefit obligation:		
Benefit obligation at beginning of year	$ 229	$ 325
Service cost	—	—
Interest cost	5	8
Plan amendments	—	(65)
Actuarial (gains) losses	(8)	(8)
Benefits paid	(30)	(31)
Benefit obligation at end of year	**196**	**229**
Change in plan assets:		
Fair value of plan assets at beginning of year	—	—
Actual return on plan assets	—	—
Company contributions	—	—
Benefits paid	—	—
Fair value of plan assets at end of year	—	—
Funded status of plans	**$(196)**	**$(229)**
Amounts recognized in Consolidated Balance Sheet consist of:		
Accrued liabilities	$ (25)	$ (27)
Postretirement benefit obligations other than pensions[1]	(171)	(202)
Net amount recognized	**$(196)**	**$(229)**

(1) Excludes non-U.S. plan of $37 million and $40 million as of December 31, 2021 and 2020.

Amounts recognized in Accumulated other comprehensive (income) loss associated with the Company's significant pension and other postretirement benefit plans at December 31, 2021 and 2020 are as follows:

	Pension Benefits			
	U.S. Plans		Non-U.S. Plans	
	2021	**2020**	**2021**	**2020**
Prior service (credit) cost	$ (92)	$ (134)	$ 20	$ 23
Net actuarial (gain) loss	492	505	397	629
Net amount recognized	**$ 400**	**$ 371**	**$ 417**	**$ 652**

	Other Postretirement Benefits	
	2021	**2020**
Prior service (credit) cost	$ (92)	$ (165)
Net actuarial (gain) loss	(34)	(28)
Net amount recognized	**$(126)**	**$(193)**

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)
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The components of net periodic benefit (income) cost and other amounts recognized in Other comprehensive (income) loss for the Company's significant pension and other postretirement benefit plans include the following components:

	Pension Benefits					
	U.S. Plans			Non-U.S. Plans		
Net Periodic Benefit Cost	**2021**	**2020**	**2019**	**2021**	**2020**	**2019**
Service cost	$ 105	$ 99	$ 82	$ 26	$ 23	$ 22
Interest cost	306	461	613	77	106	142
Expected return on plan assets	(1,220)	(1,135)	(1,117)	(348)	(336)	(331)
Amortization of prior service (credit) cost	(42)	(42)	(42)	—	—	—
Recognition of actuarial losses	31	26	35	9	18	88
Settlements and curtailments	—	4	4	—	—	—
Net periodic benefit (income) cost	**$(820)**	**$(587)**	**$(425)**	**$(236)**	**$(189)**	**$ (79)**

	U.S. Plans			Non-U.S. Plans		
Other Changes in Plan Assets and Benefits Obligations Recognized in Other Comprehensive (Income) Loss	**2021**	**2020**	**2019**	**2021**	**2020**	**2019**
Actuarial (gains) losses	$ (14)	$ (9)	$ (277)	$ (221)	$ (73)	$ 176
Prior service (credit) cost	—	—	—	(3)	2	—
Prior service credit recognized during year	43	42	42	(1)	—	—
Actuarial losses recognized during year	—	(30)	(39)	(9)	(18)	(88)
Foreign currency translation	—	—	—	(1)	19	14
Total recognized in other comprehensive (income) loss	**$ 29**	**$ 3**	**$(274)**	**$(235)**	**$ (70)**	**$ 102**
Total recognized in net periodic benefit (income) cost and other comprehensive (income) loss	**$(791)**	**$(584)**	**$(699)**	**$(471)**	**$(259)**	**$ 23**

	Other Postretirement Benefits		
	Years Ended December 31,		
Net Periodic Benefit Cost	**2021**	**2020**	**2019**
Service cost	$ —	$ —	$ —
Interest cost	5	8	14
Amortization of prior service (credit) cost	(74)	(66)	(62)
Recognition of actuarial (gains) losses	(2)	—	—
Net periodic benefit (income) cost	**$ (71)**	**$ (58)**	**$ (48)**

Other Changes in Plan Assets and Benefits Obligations Recognized in Other Comprehensive (Income) Loss	Years Ended December 31, 2021	2020	2019
Actuarial (gains) losses	$ (8)	$ (8)	$ (16)
Prior service (credit) cost	—	(65)	(2)
Prior service credit recognized during year	74	66	62
Actuarial (gains) losses recognized during year	2	—	—
Total recognized in other comprehensive (income) loss	**$ 68**	**$ (7)**	**$ 44**
Total recognized in net periodic benefit (income) cost and other comprehensive (income) loss	**$ (3)**	**$ (65)**	**$ (4)**

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Major actuarial assumptions used in determining the benefit obligations and net periodic benefit (income) cost for the Company's significant benefit plans are presented in the following table as weighted averages.

	Pension Benefits					
	U.S. Plans			Non-U.S. Plans		
	2021	2020	2019	2021	2020	2019
Actuarial assumptions used to determine benefit obligations as of December 31:						
Discount rate	2.87 %	2.50 %	3.22 %	1.79 %	1.23 %	1.81 %
Expected annual rate of compensation increase	3.25 %	3.25 %	3.25 %	2.56 %	2.43 %	2.47 %
Actuarial assumptions used to determine net periodic benefit (income) cost for years ended December 31:						
Discount rate—benefit obligation	2.50 %	3.22 %	4.35 %	1.24 %	1.81 %	2.63 %
Discount rate—service cost	2.68 %	3.33 %	4.47 %	1.00 %	1.48 %	2.26 %
Discount rate—interest cost	1.76 %	2.76 %	3.94 %	1.00 %	1.56 %	2.34 %
Expected rate of return on plan assets	6.15 %	6.15 %	6.75 %	4.03 %	4.66 %	5.14 %
Expected annual rate of compensation increase	3.25 %	3.25 %	3.25 %	2.43 %	2.47 %	2.46 %

	Other Postretirement Benefits		
	2021	2020	2019
Actuarial assumptions used to determine benefit obligations as of December 31:			
Discount rate	2.66 %	2.20 %	3.03 %
Actuarial assumptions used to determine net periodic benefit cost for years ended December 31:			
Discount rate(1)	2.20 %	2.36 %	4.07 %

(1) Discount rate was 3.03% for January 1, 2020 through September 30, 2020. The rate was changed to 2.36% for the remainder of 2020 due to a Plan remeasurement as of October 1, 2020.

The discount rate for the Company's U.S. pension and other postretirement benefits plans reflects the current rate at which the associated liabilities could be settled at the measurement date of December 31. To determine discount rates for the Company's U.S. pension and other postretirement benefit plans, the Company uses a modeling process that involves matching the expected cash outflows of the Company's benefit plans to a yield curve constructed from a portfolio of high quality, fixed-income debt instruments. The Company uses the single weighted-average yield of this hypothetical portfolio as a discount rate benchmark. The Company utilizes a full yield curve approach in the estimation of the service and interest cost components of net periodic pension benefit (income) for the Company's significant pension plans. This approach applies the specific spot rates along the yield curve used in the determination of the pension benefit obligation to their underlying projected cash flows and provides a more precise measurement of service and interest costs by improving the correlation between projected cash flows and their corresponding spot rates. For the Company's U.S. pension plans, the single weighted average spot rates used to determine service and interest costs for 2022 are 2.97%

and 2.26%. The discount rate used to determine the other postretirement benefit obligation is lower principally due to a shorter expected duration of other postretirement plan obligations as compared to pension plan obligations.

The Company plans to use an expected rate of return on U.S. plan assets of 6.40% for 2022, which represents an increase from the 6.15% assumption used for 2021. The Company's asset return assumption is based on historical plan asset returns over varying long-term periods combined with current market conditions and broad asset mix considerations with a focus on long-term trends rather than short-term market conditions. The Company reviews the expected rate of return on an annual basis and revise it as appropriate.

For non-U.S. benefit plans actuarial assumptions reflect economic and market factors relevant to each country.

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PENSION BENEFITS

The following amounts relate to the Company's significant pension plans with accumulated benefit obligations exceeding the fair value of plan assets:

	December 31,			
	U.S. Plans		Non-U.S. Plans	
	2021	2020	2021	2020
Projected benefit obligation	$ 359	$ 353	$ 964	$2,116
Accumulated benefit obligation	$ 346	$ 341	$ 932	$2,042
Fair value of plan assets	$ —	$ —	$ 256	$1,208

The accumulated benefit obligation for the Company's U.S. defined benefit pension plans was $17.3 billion and $17.9 billion and for the Company's Non-U.S. defined benefit pension plans was $6.9 billion and $7.6 billion at December 31, 2021 and 2020.

The Company's asset investment strategy for its U.S. pension plans focuses on maintaining a diversified portfolio using various asset classes in order to achieve the Company's long-term investment objectives on a risk adjusted basis. The Company's long-term target allocations are as follows: 55%-70% fixed income securities and cash, 25%-40% equity securities, 5%-10% real estate investments, and 10%-20% other types of investments. Equity securities include publicly-traded stock of companies located inside the United States. Fixed income securities include corporate bonds of companies from diversified industries, mortgage-backed securities, and U.S. Treasuries. Real estate investments include direct investments in commercial properties and investments in real estate funds. Other types of investments include investments in private equity that follow several different strategies. The Company reviews its assets on a regular basis to ensure that the Company is within the targeted asset allocation ranges and, if necessary, asset balances are adjusted back within target allocations.

The Company's non-U.S. pension assets are typically managed by decentralized fiduciary committees with the Honeywell Corporate Investments group providing funding and investment guidance. The Company's non-U.S. investment policies are different for each country as local regulations, funding requirements, and financial and tax considerations are part of the funding and investment allocation process in each country.

In accordance with ASU 2015-07, "Fair Value Measurement (Topic 820)", certain investments that are measured at fair value using the net asset value (NAV) per share (or its equivalent) practical expedient have not been classified in the fair value hierarchy. The fair value amounts presented in the following tables are intended to permit reconciliation of the fair value hierarchy to the amounts presented for the total pension benefits plan assets.

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The fair values of both the Company's U.S. and non-U.S. pension plans assets by asset category are as follows:

	U.S. Plans			
	December 31, 2021			
	Total	**Level 1**	**Level 2**	**Level 3**
Equities:				
Honeywell common stock	$ 3,251	$ 3,251	$ —	$ —
U.S. equities	—	—	—	—
Fixed income:				
Short term investments	1,767	1,767	—	—
Government securities	1,373	—	1,373	—
Corporate bonds	9,588	—	9,588	—
Mortgage/Asset-backed securities	1,072	—	1,072	—
Insurance contracts	8	—	8	—
Direct investments:				
Direct private investments	1,336	—	—	1,336
Real estate properties	843	—	—	843
Total	**$19,238**	**$5,018**	**$12,041**	**$2,179**
Investments measured at NAV:				
Private funds	1,244			
Real estate funds	14			
Commingled Funds	64			
Total assets at fair value	**$20,560**			

	U.S. Plans			
	December 31, 2020			
	Total	**Level 1**	**Level 2**	**Level 3**
Equities:				
Honeywell common stock	$ 3,319	$ 3,319	$ —	$ —
U.S. equities	—	—	—	—
Fixed income:				
Short term investments	1,314	1,314	—	—
Government securities	1,520	—	1,520	—
Corporate bonds	10,190	—	10,190	—
Mortgage/Asset-backed securities	982	—	982	—
Insurance contracts	7	—	7	—
Direct investments:				
Direct private investments	1,220	—	—	1,220
Real estate properties	651	—	—	651
Total	**$19,203**	**$4,633**	**$12,699**	**$1,871**
Investments measured at NAV:				
Private funds	1,105			
Real estate funds	26			
Commingled funds	62			
Total assets at fair value	**$20,396**			

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	Non-U.S. Plans			
	December 31, 2021			
	Total	Level 1	Level 2	Level 3
Equities:				
U.S. equities	$ 229	$ 1	$ 228	$ —
Non-U.S. equities	824	—	824	—
Fixed income:				
Short-term investments	571	571	—	—
Government securities	3,893	—	3,893	—
Corporate bonds	1,681	—	1,681	—
Mortgage/Asset-backed securities	79	—	79	—
Insurance contracts	123	—	123	—
Insurance buy-in contracts	691	—	—	691
Investments in private funds:				
Private funds	74	—	41	33
Real estate funds	163	—	—	163
Total	**$8,328**	**$ 572**	**$6,869**	**$ 887**
Investments measured at NAV:				
Private funds	17			
Real estate funds	51			
Total assets at fair value	**$8,396**			

	Non-U.S. Plans			
	December 31, 2020			
	Total	Level 1	Level 2	Level 3
Equities:				
U.S. equities	$ 207	$ —	$ 207	$ —
Non-U.S. equities	1,614	66	1,548	—
Fixed income:				
Short-term investments	596	596	—	—
Government securities	3,105	—	3,105	—
Corporate bonds	1,649	—	1,649	—
Mortgage/Asset-backed securities	93	—	93	—
Insurance contracts	142	—	142	—
Insurance buy-in contracts	767	—	—	767
Investments in private funds:				
Private funds	65	—	36	29
Real estate funds	147	—	—	147
Total	**$8,385**	**$ 662**	**$6,780**	**$ 943**
Investments measured at NAV:				
Private funds	18			
Real estate funds	47			
Total assets at fair value	**$8,450**			

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The following table summarizes changes in the fair value of Level 3 assets for both U.S. and Non-U.S. plans:

	U.S. Plans		Non-U.S. Plans		
	Direct Private Investments	Real Estate Properties	Private Funds	Real Estate Funds	Insurance Buy-in Contracts
Balance at December 31, 2019	**$ 950**	**$ 619**	**$ 34**	**$ 150**	**$ —**
Actual return on plan assets:					
Relating to assets still held at year-end	100	(4)	(5)	(3)	—
Relating to assets sold during the year	53	—	—	—	—
Purchases	221	59	—	—	767
Sales and settlements	(104)	(23)	—	—	—
Balance at December 31, 2020	**1,220**	**651**	**29**	**147**	**767**
Actual return on plan assets:					
Relating to assets still held at year-end	11	96	4	23	(76)
Relating to assets sold during the year	174	—	—	4	—
Purchases	194	99	—	—	—
Sales and settlements	(263)	(3)	—	(11)	—
Balance at December 31, 2021	**$1,336**	**$ 843**	**$ 33**	**$ 163**	**$ 691**

The Company enters into futures contracts to gain exposure to certain markets. Sufficient cash or cash equivalents are held by the Company's pension plans to cover the notional value of the futures contracts. At December 31, 2021 and 2020, the Company's U.S. plans had contracts with notional amounts of $4,415 million and $3,673 million. At December 31, 2021 and 2020, the Company's non-U.S. plans had contracts with notional amounts of $311 million and $564 million, respectively. In both the Company's U.S. and non-U.S. pension plans, the notional derivative exposure is related to outstanding equity and fixed income futures contracts.

Common stocks, preferred stocks, real estate investment trusts, and short-term investments are valued at the closing price reported in the active market in which the individual securities are traded. Corporate bonds, mortgages/asset-backed securities, and government securities are valued either by using pricing models, bids provided by brokers or dealers, quoted prices of securities with similar characteristics or discounted cash flows and as such include adjustments for certain risks that may not be observable such as credit and liquidity risks. Certain securities are held in collective trust funds which are valued using net asset values provided by the administrators of the funds. Investments in private equity, debt, real estate and hedge funds and direct private investments are valued at estimated fair value based on quarterly financial information received from the investment advisor and/or general partner. Investments in real estate properties are valued on a quarterly basis using the income approach. Valuation estimates are periodically supplemented by third party appraisals. The insurance buy-in contracts represent policies held by the Honeywell UK Pension Scheme, whereby the cost of providing pension benefits to plan participants is funded by the policies. The cash flows from the policies are intended to match the pension benefits. The fair value of these policies is based on an estimate of the policies' exit price.

The Company's funding policy for qualified defined benefit pension plans is to contribute amounts at least sufficient to satisfy regulatory funding standards. In 2021, 2020, and 2019, the Company was not required to make contributions to the U.S. pension plans and no contributions were made. The Company is not required to make any contributions to the U.S. pension plans in 2022. In 2021, contributions of $94 million were made to the non-U.S. pension plans to satisfy regulatory funding requirements. In 2022, the Company expects to make contributions of cash and/or marketable securities of approximately $11 million to the non-U.S. pension plans to satisfy regulatory funding standards. Contributions for both the U.S. and non-U.S. pension plans do not reflect benefits paid directly from Company assets.

HONEYWELL INTERNATIONAL INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)
(Dollars in tables in millions, except per share amounts)

Benefit payments, including amounts to be paid from Company assets, and reflecting expected future service, as appropriate, are expected to be paid as follows:

	U.S. Plans	Non-U.S. Plans
2022	$ 1,135	$ 261
2023	1,124	263
2024	1,115	268
2025	1,107	275
2026	1,097	284
2027-2031	5,152	1,455

OTHER POSTRETIREMENT BENEFITS

	December 31,	
	2021	2020
Assumed health care cost trend rate:		
Health care cost trend rate assumed for next year	6.50 %	7.00 %
Rate that the cost trend rate gradually declines to	5.00 %	5.00 %
Year that the rate reaches the rate it is assumed to remain at	2029	2029

Benefit payments reflecting expected future service, as appropriate, are expected to be paid as follows:

	Without Impact of Medicare Subsidy	Net of Medicare Subsidy
2022	$ 27	$ 25
2023	25	24
2024	14	14
2025	14	13
2026	13	12
2027-2031	57	53

NOTE 21. OTHER (INCOME) EXPENSE

	Years Ended December 31,		
	2021	**2020**	**2019**
Interest income	$ (102)	$ (107)	$ (255)
Pension ongoing income—non-service	(1,202)	(901)	(606)
Other postretirement income—non-service	(71)	(57)	(47)
Equity income of affiliated companies	(67)	(66)	(52)
Loss (gain) on sale of non-strategic business and assets	(102)	3	1
Foreign exchange	25	(68)	(120)
Expense related to UOP Matters	160	—	—
Reimbursement receivables charge	—	509	—
Other (net)	(19)	12	14
	$(1,378)	**$(675)**	**$(1,065)**

For more information on the UOP Matters and reimbursement receivables related to Garrett, see Note 19 Commitments and Contingencies.

HONEYWELL INTERNATIONAL INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)
(Dollars in tables in millions, except per share amounts)

NOTE 22. SEGMENT FINANCIAL DATA

Honeywell globally manages its business operations through four reportable operating segments. Segment information is consistent with how management reviews the businesses, makes investing and resource allocation decisions, and assesses operating performance.

Honeywell's senior management evaluates segment performance based on segment profit. Each segment's profit is measured as segment income (loss) before taxes excluding general corporate unallocated expense, interest and other financial charges, stock compensation expense, pension and other postretirement income (expense), repositioning and other charges, and other items within Other (income) expense.

	Years Ended December 31,		
	2021	**2020**	**2019**
Net Sales			
Aerospace			
Products	$ 6,158	$ 7,194	$ 8,766
Services	4,868	4,350	5,288
Total	**11,026**	**11,544**	**14,054**
Honeywell Building Technologies			
Products	4,098	3,868	4,395
Services	1,441	1,321	1,322
Total	**5,539**	**5,189**	**5,717**
Performance Materials and Technologies			
Products	8,008	7,548	8,732
Services	2,005	1,875	2,102
Total	**10,013**	**9,423**	**10,834**
Safety and Productivity Solutions			
Products	7,379	6,127	5,736
Services	435	354	368
Total	**7,814**	**6,481**	**6,104**
Corporate and All Other			
Services	—	—	—
Total	**—**	**—**	**—**
	$34,392	**$32,637**	**$36,709**
Depreciation and amortization			
Aerospace	$ 278	$ 241	$ 234
Honeywell Building Technologies	67	55	63
Performance Materials and Technologies	454	440	493
Safety and Productivity Solutions	237	223	222
Corporate and All Other	102	44	76
	$ 1,138	**$ 1,003**	**$ 1,088**
Segment Profit			
Aerospace	$ 3,051	$ 2,904	$ 3,607
Honeywell Building Technologies	1,238	1,099	1,165
Performance Materials and Technologies	2,120	1,851	2,433
Safety and Productivity Solutions	1,029	907	790
Corporate and All Other	(226)	(96)	(256)
	$ 7,212	**$ 6,665**	**$ 7,739**

HONEYWELL INTERNATIONAL INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)
(Dollars in tables in millions, except per share amounts)

	Years Ended December 31,		
	2021	**2020**	**2019**
Capital expenditures			
Aerospace	$ 284	$ 248	$ 272
Honeywell Building Technologies	62	66	43
Performance Materials and Technologies	265	252	314
Safety and Productivity Solutions	190	288	82
Corporate and All Other	94	52	128
	$ 895	**$ 906**	**$ 839**
Total Assets			
Aerospace	$ 11,490	$ 11,035	$ 11,378
Honeywell Building Technologies	6,543	6,351	5,968
Performance Materials and Technologies	18,021	16,772	16,888
Safety and Productivity Solutions	11,242	10,640	9,888
Corporate and All Other	17,174	19,788	14,557
	$64,470	**$64,586**	**$58,679**

A reconciliation of segment profit to consolidated income before taxes are as follows:

	Years Ended December 31,		
	2021	**2020**	**2019**
Segment Profit	$ 7,212	$ 6,665	$ 7,739
Interest and other financial charges	(343)	(359)	(357)
Stock compensation expense[(1)]	(217)	(168)	(153)
Pension ongoing income (expense)[(2)]	1,083	785	592
Pension mark-to-market expense	(40)	(44)	(123)
Other postretirement income[(2)]	71	57	47
Repositioning and other charges[(3)]	(569)	(575)	(546)
Other[(4)]	38	(349)	360
Income before taxes	**$7,235**	**$6,012**	**$7,559**

(1) Amounts included in Selling, general and administrative expenses.

(2) Amounts included in Cost of products and services sold and Selling, general and administrative expenses (service cost component) and Other (income) expense (non-service cost component).

(3) Amounts included in Cost of products and services sold, Selling, general and administrative expenses, and Other (income) expense.

(4) Amounts include the other components of Other (income) expense not included within other categories in this reconciliation. Equity income of affiliated companies is included in segment profit.

HONEYWELL INTERNATIONAL INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)
(Dollars in tables in millions, except per share amounts)

NOTE 23. GEOGRAPHIC AREAS—FINANCIAL DATA

	Net Sales[1]			Long-lived Assets[2]		
	Years Ended December 31,			Years Ended December 31,		
	2021	2020	2019	2021	2020	2019
United States	$ 20,662	$ 19,665	$ 21,910	$ 3,964	$ 3,823	$ 3,649
Europe	6,800	6,356	7,424	566	628	579
Other International	6,930	6,616	7,375	1,032	1,119	1,097
	$34,392	**$32,637**	**$36,709**	**$5,562**	**$5,570**	**$5,325**

(1) Sales between geographic areas approximate market value and are not significant. Net sales are classified according to their country of origin. Included in United States Net sales are export sales of $4,037 million, $4,000 million and $5,415 million for the years ended December 31, 2021, 2020 and 2019, respectively.

(2) Long-lived assets are comprised of Property, plant and equipment - net.

NOTE 24. SUPPLEMENTAL CASH FLOW INFORMATION

	Years Ended December 31,		
	2021	2020	2019
Net payments for repositioning and other charges:			
Severance and exit cost payments	$ (382)	$ (564)	$ (249)
Environmental payments	(210)	(216)	(256)
Reimbursement receipts	140	176	292
Insurance receipts for asbestos related liabilities	46	58	68
Asbestos related liability payments	(286)	(287)	(231)
	$(692)	**$(833)**	**$(376)**
Interest paid, net of amounts capitalized	$ 339	$ 329	$ 344
Income taxes paid, net of refunds	1,202	1,173	1,564
Non-cash investing and financing activities:			
Common stock contributed to savings plans	191	211	159
Marketable securities contributed to non-U.S. pension plans	81	93	—
Impact of Quantinuum contribution[1]	460	—	—
Noncontrolling interest non-cash contribution[1]	419	—	—
Loan in exchange for prepaid assets	25	—	—
Receipt of Garrett Series B Preferred Stock[2]	577	—	—

(1) See Note 2 Acquisitions and Divestitures for additional information for non-cash amounts recognized related to the combination of Honeywell Quantum Solutions and Cambridge Quantum Computing to form Quantinuum, a newly formed entity, Honeywell consolidates as the controlling majority-owner.

(2) See Note 19 Commitments and Contingencies for additional information for non-cash amounts recognized related to the receipt of 834.8 million shares of Garrett Series B Preferred Stock in exchange for the full and final satisfaction of the Garrett Indemnity, Tax Matters Agreement and pending litigation between the Company and Garrett. The non-cash amount reflects the fair value of the Garrett Series B Preferred Stock as of April 30, 2021, the date Garrett issued the Series B Preferred Stock to the Company. See Note 12 for additional information for the fair value determination of the Garrett Series B Preferred Stock.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the shareowners and the Board of Directors of Honeywell International Inc.

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated balance sheets of Honeywell International Inc. and subsidiaries (the "Company" or “Honeywell”) as of December 31, 2021 and 2020, and the related consolidated statements of operations, comprehensive income, shareowners’ equity, and cash flows, for each of the three years in the period ended December 31, 2021, and the related notes (collectively referred to as the "financial statements"). We also have audited the Company’s internal control over financial reporting as of December 31, 2021, based on criteria established in *Internal Control — Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2021 and 2020, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2021, in conformity with accounting principles generally accepted in the United States of America (“generally accepted accounting principles”). Also, in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2021, based on criteria established in *Internal Control — Integrated Framework (2013)* issued by COSO.

Basis for Opinions

The Company’s management is responsible for these financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management’s Report on Internal Control Over Financial Reporting. Our responsibility is to express an opinion on these financial statements and an opinion on the Company’s internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the financial statements included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures to respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

Definition and Limitations of Internal Control over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Critical Audit Matters

The critical audit matters communicated below are matters arising from the current-period audit of the financial statements that were communicated or required to be communicated to the audit committee and that (1) relate to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the financial statements, taken as a whole, and we are not, by communicating the critical audit matters below, providing separate opinions on the critical audit matters or on the accounts or disclosures to which they relate.

Asbestos Related Liabilities - North American Refractories Company (NARCO) Asbestos Liability – Refer to Note 19 to the financial statements

Critical Audit Matter Description

The Company records an estimated liability for asbestos related personal injury claims related to a predecessor company, NARCO. Such claims arise primarily from alleged occupational exposure to asbestos-containing refractory brick and mortar.

The Company's NARCO asbestos-related liability reflects an estimated liability for the resolution of asserted and unasserted NARCO-related asbestos claims that are probable of occurrence and reasonably estimable. The Company records an estimated liability for the resolution of asserted Annual Contribution Claims and Pre-Established Unliquidated Claims filed with the NARCO Trust using average payment values for the relevant historical period. The Company also records an estimated liability for unasserted Annual Contribution Claims and Pre-Established Unliquidated Claims based on historic and anticipated claims filing experience and payment rates, disease classifications and type of claim, and average payment values by the NARCO Trust for the relevant historical period. Beginning in 2020, with three years of sufficiently reliable claims data, the Company updated its estimate of the NARCO asbestos-related liability.

Accounting for the NARCO asbestos-related liability is an inherently subjective exercise as it requires management to make significant assumptions and judgments. Given the subjectivity related to estimating the NARCO asbestos-related liability and the assessment of the sufficiency and reliability of the claims data, auditing the NARCO asbestos-related liability involved especially subjective judgment.

How the Critical Audit Matter Was Addressed in the Audit

Our audit procedures related to the NARCO asbestos-related liability included the following, among others:

- We tested the effectiveness of internal controls over the estimate of the NARCO asbestos-related liability including management's controls over the estimate for asserted and unasserted Annual Contribution Claims and Pre-Established Unliquidated Claims.
- We evaluated the methods and assumptions used by management to estimate the NARCO asbestos-related liability by:
  - Reading the Company's analysis and third-party assessment to evaluate the Company's methodology used in the analysis.
  - Confirming the claims data with the NARCO Trust to evaluate the appropriateness of the underlying data used in the analysis.
  - Making inquiries of the Company's third-party specialist to identify the significant assumptions used to develop the analysis.
  - Making inquiries of internal and external legal counsel regarding the regulatory and litigation environments related to the NARCO asbestos-related liability.
- With the assistance of our internal actuarial specialists, we developed a range of independent estimates and compared those to the Company's recorded NARCO asbestos-related liability.

Revenue Recognition and Contracts with Customers – Long-Term Contracts – Refer to Note 1 and Note 3 to the financial statements

Critical Audit Matter Description

The Company has several businesses which enter into long-term contracts whereby revenue is recognized over the contract term ("over time") as the work progresses and control of the goods and services are continuously transferred to the customer. Revenue for these contracts is recognized based on the extent of progress towards completion, generally measured by using a cost-to-cost input method.

Accounting for long-term contracts requires management's judgment in estimating total contract costs. Contract costs, which can be incurred over several years, are largely determined based on negotiated or estimated purchase contract terms and consider factors such as historical performance trends, inflationary trends, technical and schedule risk, internal and subcontractor performance trends, business volume assumptions, asset utilization and anticipated labor agreements.

Given the significance of the judgments necessary to estimate costs associated with these long-term contracts (which varies upon the length of the contract), auditing long-term contracts requires a high degree of auditor judgment.

How the Critical Audit Matter Was Addressed in the Audit

Our audit procedures related to long-term contracts included the following, among others:

- We tested the effectiveness of internal controls over the recognition of revenue and the determination of estimated contract costs including controls over the review of management's assumptions and key inputs used to recognize revenue and costs on long-term contracts using the cost-to-cost input method.
- We evaluated the appropriateness and consistency of management's methods and assumptions used to recognize revenue and costs on long-term contracts using the cost-to-cost input method to recognize revenue over time.
- We tested recorded revenue using a combination of analytical procedures and detailed contract testing.
- We profiled the population of long-term contracts with longer duration and evaluated a selection of loss contracts or contracts with significant gross margin changes against historical performance to assess management's ability to achieve estimates and to identify potential bias in the recognition of revenue over time.

/S/ DELOITTE & TOUCHE LLP

Charlotte, North Carolina

February 11, 2022

We have served as the Company's auditor since 2014.

CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

Not Applicable.

CONTROLS AND PROCEDURES

Honeywell management maintains disclosure controls and procedures designed to provide reasonable assurance that information required to be disclosed in reports filed under the Exchange Act is recorded, processed, summarized and reported within the specified time periods and accumulated and communicated to our management, including our principal executive officer and principal financial officer, as appropriate to allow timely decisions regarding required disclosure. There have been no changes that have materially affected, or are reasonably likely to materially affect, Honeywell’s internal control over financial reporting that have occurred during the quarter ended December 31, 2021.

Our management, with the participation of our CEO and CFO, evaluated the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15(e) or 15d-15(e) promulgated under the Exchange Act) as of December 31, 2021. Based on these evaluations, our CEO and CFO concluded that our disclosure controls and procedures were effective as of December 31, 2021.

MANAGEMENT'S REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING

Honeywell management is responsible for establishing and maintaining adequate internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting as defined in Rules 13a-15(f) or 15d-15(f) under the Exchange Act. Honeywell’s internal control over financial reporting is a process designed to provide reasonable assurance to our management and board of directors regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements.

Management assessed the effectiveness of Honeywell’s internal control over financial reporting as of December 31, 2021. In making this assessment, management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in *Internal Control—Integrated Framework (2013)*.

Based on this assessment, management determined that Honeywell maintained effective internal control over financial reporting as of December 31, 2021.

We have not experienced any material impact to our internal control over financial reporting during the COVID-19 pandemic. Most of our employees worked remotely during the year in which we prepared these financial statements due to the impact of COVID-19. We are continually monitoring and assessing the need to modify or enhance our disclosure controls to ensure disclosure controls and procedures continue to be effective.

The effectiveness of Honeywell’s internal control over financial reporting as of December 31, 2021, has been audited by Deloitte & Touche LLP, an independent registered public accounting firm, as stated in their report which is included in the section titled Financial Statements and Supplementary Data.

OTHER INFORMATION

Not Applicable.

DISCLOSURE REGARDING FOREIGN JURISDICTIONS THAT PREVENT INSPECTIONS

Not Applicable.

DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

Information relating to the Directors of Honeywell, as well as information relating to compliance with Section 16(a) of the Securities Exchange Act of 1934, will be contained in the Proxy Statement, which will be filed with the SEC pursuant to Regulation 14A not later than 120 days after December 31, 2021, and such information is incorporated herein by reference. Certain information relating to the Executive Officers of Honeywell appears in this Form 10-K under the heading titled Information about our Executive Officers.

The members of the Audit Committee of our Board of Directors are: George Paz (Chair), Kevin Burke, D. Scott Davis, Judd A. Gregg and Robin L. Washington. The Board has determined that Mr. Paz, Mr. Burke, Mr. Davis and Ms. Washington are audit committee financial experts as defined by applicable SEC rules and that Mr. Paz, Mr. Davis, and Ms. Washington satisfy the financial sophistication criteria established by the Nasdaq. All members of the Audit Committee are independent as that term is defined in applicable SEC rules and Nasdaq listing standards.

Honeywell's corporate governance policies and procedures, including the Code of Business Conduct, Corporate Governance Guidelines and Charters of the Committees of the Board of Directors are available, free of charge, on our website (honeywell.com) under the heading Investors (see Corporate Governance), or by writing to Honeywell, 855 South Mint Street, Charlotte, North Carolina 28202, c/o Vice President and Corporate Secretary. Honeywell's Code of Business Conduct applies to all Honeywell directors, officers (including the Chief Executive Officer, Chief Financial Officer and Controller) and employees. Amendments to or waivers of the Code of Business Conduct granted to any of Honeywell's directors or executive officers will be published on our website within four business days of such amendment or waiver.

EXECUTIVE COMPENSATION

Information relating to executive compensation, including the Management Development and Compensation Committee Report and disclosures regarding compensation committee interlocks and insider participation will be contained in the Proxy Statement, and such information is incorporated herein by reference.

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

Information relating to security ownership of certain beneficial owners and management and related stockholder matters will be contained in the Proxy Statement, and such information is incorporated herein by reference.

EQUITY COMPENSATION PLANS

As of December 31, 2021, information about our equity compensation plans is as follows:

Plan category	Number of Securities to be Issued Upon Exercise of Outstanding Options, Warrants and Rights (a)	Weighted-Average Exercise Price of Outstanding Options, Warrants and Rights (b)	Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans (Excluding Securities Reflected in Column (a)) (c)
Equity compensation plans approved by security holders	19,340,042 (1)	$135.31 (2)	34,886,930 (3)
Equity compensation plans not approved by security holders	225,753 (4)	N/A (5)	N/A (6)
Total	**19,565,795**	**$135.31**	**34,886,930**

(1) Equity compensation plans approved by shareowners which are included in column (a) of the table are the 2016 Stock Incentive Plan and the 2011 Stock Incentive Plan (including 15,657,151 shares of Common Stock to be issued upon exercise of outstanding options; 2,886,193 RSUs subject to continued employment; 197,586 RSUs at target level and subject to company performance metrics and continued employment; and 415,773 deferred RSUs); and the 2016 Stock Plan for Non-Employee Directors and the 2006 Stock Plan for Non-Employee Directors (including 175,104 shares of Common Stock to be issued upon exercise of outstanding options; and 8,235 RSUs subject to continued services). RSUs included in column (a) of the table represent the full number of RSUs awarded and outstanding whereas the number of shares of Common Stock to be issued upon vesting will be lower than what is reflected on the table because the value of shares required to meet employee tax withholding requirements are not issued.

Because the number of future shares that may be distributed to employees participating in the Honeywell Global Stock Plan is unknown, no shares attributable to that plan are included in column (a) of the table above.

(2) Column (b) relates to stock options and does not include any exercise price for RSUs because an RSU's value is dependent upon attainment of certain performance goals and/or continued employment or service and they are settled for shares of Common Stock on a one-for-one basis.

(3) The number of shares that may be issued under the 2016 Stock Incentive Plan as of December 31, 2021 is 32,337,638, which includes the following additional shares that may again be available for issuance: shares that are settled for cash, expire, are canceled, or under similar prior plans, are tendered as option exercise price or tax withholding obligations, are reacquired with cash option exercise price or with monies attributable to any tax deduction to Honeywell upon the exercise of an option, or are under any outstanding awards assumed under any equity compensation plan of an entity acquired by Honeywell. No securities are available for future issuance under the 2011 Stock Incentive Plan.

The number of shares that may be issued under the Honeywell Global Stock Plan as of December 31, 2021 is 1,713,993. This plan is an umbrella plan for three plans described below maintained solely for eligible employees of participating non-U.S. countries.

- The UK Sharebuilder Plan allows an eligible UK employee to invest taxable earnings in Common Stock. The Company matches those shares and dividends paid are used to purchase additional shares of Common Stock. For the year ended December 31, 2021, 21,228 shares were credited to participants' accounts under the UK Sharebuilder Plan.
- The Honeywell Aerospace Ireland Share Participation Plan and the Honeywell Measurex (Ireland) Limited Group Employee Profit Sharing Plan allow eligible Irish employees to contribute a percentage of base pay and/or bonus that is invested in Common Stock. For the year ended December 31, 2021, 1,059 shares of Common Stock were credited to participants' accounts under these plans.

The remaining 815,299 shares included in column (c) are shares remaining under the 2016 Stock Plan for Non-Employee Directors.

(4) Equity compensation plans not approved by shareowners included in the table refer to the Honeywell Excess Benefit Plan and Supplemental Savings Plan.

The Honeywell Excess Benefit Plan and Supplemental Savings Plan for highly compensated employees is an unfunded, non-tax qualified plan that provides benefits equal to the employee deferrals and Company matching allocations that would have been provided under Honeywell's U.S. tax-qualified savings plan if the Internal Revenue Code limitations on compensation and contributions did not apply. The Company matching contribution is credited to participants' accounts in the form of notional shares of Common Stock. The notional shares are distributed in the form of actual shares of Common Stock. The number of shares to be issued under this plan based on the value of the notional shares as of December 31, 2021 is 225,753.

(5) Column (b) does not include any exercise price for notional shares allocated to employees under Honeywell's equity compensation plans not approved by shareowners because all of these shares are only settled for shares of Common Stock on a one-for-one basis.

(6) The amount of securities available for future issuance under the Honeywell Excess Benefit Plan and Supplemental Savings Plan is not determinable because the number of securities that may be issued under this plan depends upon the amount deferred to the plan by participants in future years.

CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

Information relating to certain relationships and related transactions and director independence will be contained in the Proxy Statement, and such information is incorporated herein by reference.

PRINCIPAL ACCOUNTING FEES AND SERVICES

Information relating to fees paid to and services performed by Deloitte & Touche LLP and our Audit Committee's pre-approval policies and procedures with respect to non-audit services will be contained in the Proxy Statement, and such information is incorporated herein by reference.

EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

		Page Number in Form 10-K
(a)(1.)	**Consolidated Financial Statements:**	
	Consolidated Statement of Operations for the years ended December 31, 2021, 2020 and 2019	53
	Consolidated Statement of Comprehensive Income for the years ended December 31, 2021, 2020 and 2019	54
	Consolidated Balance Sheet at December 31, 2021 and 2020	55
	Consolidated Statement of Cash Flows for the years ended December 31, 2021, 2020 and 2019	56
	Consolidated Statement of Shareowners' Equity for the years ended December 31, 2021, 2020 and 2019	57
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(a)(3.)	**Exhibits**	
	See the Exhibit Index of this Annual Report on Form 10-K	120

FORM 10-K SUMMARY

None.

EXHIBIT INDEX

Exhibit No.	Description
3(i)	Amended and Restated Certificate of Incorporation of Honeywell International Inc., as amended April 23, 2018 (incorporated by reference to Exhibit 3(i) to Honeywell's Form 10-Q for the quarter ended June 30, 2018)
3(ii)	By-laws of Honeywell International Inc., as amended April 23, 2018 (incorporated by reference to Exhibit 3(ii) to Honeywell's Form 10-Q for the quarter ended June 30, 2018)
4.1	Honeywell International Inc. is a party to several long-term debt instruments under which, in each case, the total amount of securities authorized does not exceed 10% of the total assets of Honeywell and its subsidiaries on a consolidated basis. Pursuant to paragraph 4(iii)(A) of Item 601(b) of Regulation S-K, Honeywell agrees to furnish a copy of such instruments to the Securities and Exchange Commission upon request.
4.2	Description of Honeywell International Inc. Securities Registered Pursuant to Section 12 of the Securities Exchange Act of 1934 (filed herewith)
10.1*	Deferred Compensation Plan for Non-Employee Directors of Honeywell International Inc., as amended and restated (incorporated by reference to Exhibit 10.2 to Honeywell's Form 10-Q for the quarter ended June 30, 2003)
10.2*	Amendment to Deferred Compensation Plan for Non-Employee Directors of Honeywell International Inc., as amended and restated (incorporated by reference to Exhibit 10.1 to Honeywell's Form 8-K filed December 21, 2004)
10.3*	Amendment to Deferred Compensation Plan for Non-Employee Directors of Honeywell International Inc., as amended and restated (incorporated by reference to Exhibit 10.2 to Honeywell's Form 10-K for the year ended December 31, 2005)
10.4*	Omnibus Amendment to Deferred Compensation Plan for Non-Employee Directors of Honeywell International Inc., as amended and restated (incorporated by reference to Exhibit 10.1 to Honeywell's Form 10-Q for the quarter ended June 30, 2021)
10.5*	Honeywell International Inc. Incentive Compensation Plan for Executive Employees, as amended and restated (incorporated by reference to Exhibit 10.4 to Honeywell's Form 10-K for the year ended December 31, 2018)
10.6*	Amendment to Honeywell International Inc. Incentive Compensation Plan for Executive Employees, as amended and restated (incorporated by reference to Exhibit 10.69 to Honeywell's Form 10-K for the year ended December 31, 2020)
10.7*	Omnibus Amendment to Honeywell International Inc. Incentive Compensation Plan for Executive Employees, as amended and restated (incorporated by reference to Exhibit 10.1 to Honeywell's Form 10-Q for the quarter ended June 30, 2021)
10.8*	Honeywell Excess Benefit Plan and Honeywell Supplemental Savings Plan, as amended and restated (incorporated by reference to Exhibit 10.5 to Honeywell's Form 10-K for the year ended December 31, 2020)
10.9*	Omnibus Amendment to Honeywell Excess Benefit Plan and Honeywell Supplemental Savings Plan, as amended and restated (incorporated by reference to Exhibit 10.1 to Honeywell's Form 10-Q for the quarter ended June 30, 2021)
10.10*	Honeywell International Inc. Severance Plan for Designated Officers, as amended and restated (incorporated by reference to Exhibit 10.6 to Honeywell's Form 10-K for the year ended December 31, 2013)
10.11*	Honeywell Deferred Incentive Compensation Plan, as amended and restated (incorporated by reference to Exhibit 10.7 to Honeywell's Form 10-K for the year ended December 31, 2020)
10.12*	Omnibus Amendment to Honeywell Deferred Incentive Compensation Plan, as amended and restated (incorporated by reference to Exhibit 10.1 to Honeywell's Form 10-Q for the quarter ended June 30, 2021)
10.13*	Honeywell International Inc. Supplemental Pension Plan, as amended and restated (incorporated by reference to Exhibit 10.10 to Honeywell's Form 10-K for the year ended December 31, 2008)
10.14*	Amendment to Honeywell International Inc. Supplemental Pension Plan, as amended and restated (incorporated by reference to Exhibit 10.10 to Honeywell's Form 10-K for the year ended December 31, 2009)

Exhibit No.	Description
10.22*	Amendment to Honeywell Supplemental Defined Benefit Retirement Plan, as amended and restated (incorporated by reference to Exhibit 10.9 to Honeywell's Form 10-K for the year ended December 31, 2015)
10.23*	Honeywell International Inc. Severance Plan for Corporate Staff Employees (Involuntary Termination Following a Change in Control), as amended and restated (incorporated by reference to Exhibit 10.12 to Honeywell's Form 10-K for the year ended December 31, 2013)
10.24*	Honeywell Supplemental Retirement Plan (incorporated by reference to Exhibit 10.24 to Honeywell's Form 10-K for the year ended December 31, 2006)
10.25*	UOP LLC Supplemental Pension Plan, as amended and restated (incorporated by reference to Exhibit 10.76 to Honeywell's 10-K for the year ended December 31, 2017)
10.26*	2006 Stock Plan for Non-Employee Directors of Honeywell International Inc., as amended and restated (incorporated by reference to Exhibit 10.31 to Honeywell's Form 10-K for the year ended December 31, 2008)
10.27*	Amendment to 2006 Stock Plan for Non-Employee Directors of Honeywell International Inc., as amended and restated (incorporated by reference to Exhibit 10.27 to Honeywell's Form 10-K for the year ended December 31, 2011)
10.28*	Amendment to 2006 Stock Plan for Non-Employee Directors of Honeywell International Inc., as amended and restated (incorporated by reference to Exhibit 10.24 to Honeywell's Form 10-K for the year ended December 31, 2014)
10.29*	Omnibus Amendment to 2006 Stock Plan for Non-Employee Directors of Honeywell International Inc., as amended and restated (incorporated by reference to Exhibit 10.1 to Honeywell's Form 10-Q for the quarter ended June 30, 2021)
10.30*	2006 Stock Plan for Non-Employee Directors of Honeywell International Inc.—Form of Option Agreement (incorporated by reference to Exhibit 10.3 to Honeywell's Form 10-Q for the quarter ended March 31, 2012)
10.31*	Omnibus Amendment to 2006 Stock Plan for Non-Employee Directors of Honeywell International Inc. – Form of Option Agreement (incorporated by reference to Exhibit 10.1 to Honeywell's Form 10-Q for the quarter ended June 30, 2021)
10.32*	2006 Stock Plan for Non-Employee Directors of Honeywell International Inc.—Form of Restricted Unit Agreement (incorporated by reference to Exhibit 10.4 to Honeywell's Form 10-Q for the quarter ended March 31, 2012)
10.33*	Omnibus Amendment to 2006 Stock Plan for Non-Employee Directors of Honeywell International Inc. – Form of Restricted Unit Agreement (incorporated by reference to Exhibit 10.1 to Honeywell's Form 10-Q for the quarter ended June 30, 2021)
10.34*	2007 Honeywell Global Employee Stock Plan (incorporated by reference to Exhibit A of Honeywell's Proxy Statement, dated March 12, 2007, filed pursuant to Rule 14a-6 of the Securities Exchange Act of 1934)
10.35*	Omnibus Amendment to 2007 Honeywell Global Employee Stock Plan (incorporated by reference to Exhibit 10.1 to Honeywell's Form 10-Q for the quarter ended June 30, 2021)
10.36*	2011 Stock Incentive Plan of Honeywell International Inc. and its Affiliates (incorporated by reference to Exhibit A of Honeywell's Proxy Statement, dated March 10, 2011, filed pursuant to Rule 14a-6 of the Securities Exchange Act of 1934)
10.37*	Amendment to 2011 Stock Incentive Plan of Honeywell International Inc. and its Affiliates (incorporated by reference to Exhibit 10.36 to Honeywell's Form 10-K for the year ended December 31, 2012)
10.38*	Amendment to 2011 Stock Incentive Plan of Honeywell International Inc. and its Affiliates (incorporated by reference to Exhibit 10.1 to Honeywell's Form 10-Q for the quarter ended March 31, 2014)
10.39*	Omnibus Amendment to 2011 Stock Incentive Plan of Honeywell International Inc. and its Affiliates (incorporated by reference to Exhibit 10.1 to Honeywell's Form 10-Q for the quarter ended June 30, 2021)
10.40*	2011 Stock Incentive Plan of Honeywell International Inc. and its Affiliates—Form of Restricted Unit

Exhibit No.	Description
10.51*	2016 Stock Incentive Plan of Honeywell International Inc. and its Affiliates—Form of Restricted Stock Unit Agreement, Form 1 (incorporated by reference to Exhibit 10.3 to Honeywell’s Form 10-Q for the quarter ended June 30, 2021)
10.52*	2016 Stock Incentive Plan of Honeywell International Inc. and its Affiliates—Form of Restricted Stock Unit Agreement, Form 2 (incorporated by reference to Exhibit 10.4 to Honeywell’s Form 10-Q for the quarter ended June 30, 2021)
10.53*	2016 Stock Incentive Plan of Honeywell International Inc. and its Affiliates—Form of Stock Option Award Agreement (incorporated by reference to Exhibit 10.2 to Honeywell’s Form 10-Q for the quarter ended June 30, 2021)
10.54*	2016 Stock Incentive Plan of Honeywell International Inc. and its Affiliates–Form of Performance Plan Grant Agreement (incorporated by reference to Exhibit 10.5 to Honeywell’s Form 10-Q for the quarter ended June 30, 2021)
10.55*	2016 Stock Plan for Non-Employee Directors (incorporated by reference to Exhibit B of Honeywell’s Proxy Statement, dated March 10, 2016, filed pursuant to Rule 14a-6 of the Securities Exchange Act of 1934)
10.56*	Amendment to the 2016 Stock Plan for Non-Employee Directors of Honeywell International Inc. (incorporated by reference to Exhibit 99.2 to Honeywell's Form 8-K filed October 8, 2019)
10.57*	Amendment to the 2016 Stock Plan for Non-Employee Directors of Honeywell International Inc. (incorporated by reference to Exhibit 10.1 to Honeywell’s Form 10-Q for the quarter ended June 30, 2020)
10.58*	Omnibus Amendment to 2016 Stock Plan for Non-Employee Directors of Honeywell International Inc. (incorporated by reference to Exhibit 10.1 to Honeywell’s Form 10-Q for the quarter ended June 30, 2021)
10.59*	2016 Stock Plan for Non-Employee Directors of Honeywell International Inc. – Form of Stock Option Award Agreement (incorporated by reference to Exhibit 10.6 to Honeywell’s Form 10-Q for the quarter ended June 30, 2021)
10.60*	2016 Stock Plan for Non-Employee Directors of Honeywell International Inc. – Form of Restricted Stock Unit Agreement (incorporated by reference to Exhibit 10.7 to Honeywell’s Form 10-Q for the quarter ended June 30, 2021)
10.61*	Form of Honeywell International Inc. Noncompete Agreement for Senior Executives (filed herewith)
10.62*	Letter Agreement dated February 24, 2012 between Honeywell and Darius Adamczyk (incorporated by reference to Exhibit 10.1 to Honeywell’s Form 10-Q for the quarter ended March 31, 2016)
10.63*	Offer Letter dated March 31, 2016 from Honeywell to Darius Adamczyk (incorporated by reference to Exhibit 99.1 to Honeywell’s Form 8-K filed April 6, 2016)
10.64*	Employment Offer Letter dated March 1, 2017 between Honeywell International Inc. and Darius Adamczyk (incorporated by reference to Exhibit 99.1 to Honeywell’s Form 8-K filed March 6, 2017)
10.65*	Letter Agreement dated July 27, 2018 between Honeywell International Inc. and Greg Lewis (incorporated by reference to Exhibit 99.1 to Honeywell’s Form 8-K filed August 2, 2018)
10.66*	Letter Agreement dated October 2, 2017, between Honeywell and Anne Madden (incorporated by reference to Exhibit 10.70 to Honeywell’s Form 10-K for the year ended December 31, 2020)
10.67*	Letter Agreement dated September 13, 2019, between Honeywell and Michael Madsen (filed herewith)
10.68*	Letter Agreement dated February 21, 2019, between Honeywell and Que Thanh Dallara (filed herewith)
10.69*	Letter Agreement dated April 1, 2016 between Honeywell and Rajeev Gautam (incorporated by reference to Exhibit 10.1 to Honeywell’s Form 10-Q for the quarter ended March 31, 2018)
10.70*	Retirement Agreement dated July 20, 2021 between Honeywell and Rajeev Gautam and Exhibit A (Consulting Agreement) thereto (incorporated by reference to Exhibit 10.8 to Honeywell’s Form 10-Q for the quarter ended June 30, 2021)
10.71*	Letter Agreement dated July 20, 2016 between Honeywell and John Waldron (incorporated by reference to Exhibit 10.1 to Honeywell’s Form 10-Q for the quarter ended March 31, 2021)

Exhibit No.	Description
10.77	Indemnification and Reimbursement Agreement, dated October 14, 2018, by and among New HAPI Inc. and Honeywell International Inc. (incorporated by reference to Exhibit 2.1 to Honeywell's Form 8-K filed October 15, 2018)
10.78	Delayed Draw Term Loan Agreement, dated as of March 26, 2020, among Honeywell International Inc., the initial lenders named therein, Citibank, N.A., as administrative agent, and Citibank, N.A., Bank of America, N.A., JPMorgan Chase Bank, N.A. and Wells Fargo Bank, National Association, as syndication agents (incorporated by reference to Exhibit 10.1 to Honeywell's Form 8-K filed on March 31, 2020)
10.79	Second Amendment, dated July 28, 2020, to Indemnification and Reimbursement Agreement dated October 14, 2018 among Honeywell and Resideo Intermediate Holding Inc. (incorporated by reference to Exhibit 10.1 to Honeywell's Form 10-Q for the quarter ended September 30, 2020)
10.80	First Amendment, dated April 21, 2020, to Indemnification and Reimbursement Agreement, dated October 14, 2018 among Honeywell and Resideo Intermediate Holding Inc. (incorporated by reference to Exhibit 10.6 to Honeywell's Form 10-Q for the quarter ended June 30, 2020)
10.81	First Amendment, dated June 12, 2020, to Indemnification and Reimbursement Agreement, dated September 12, 2018 among Honeywell, Honeywell Holdings International Inc. and Garrett ASASCO Inc. (incorporated by reference to Exhibit 10.7 to Honeywell's Form 10-Q for the quarter ended June 30, 2020)
10.82	Third Amendment, dated November 16, 2020, to Indemnification and Reimbursement Agreement dated October 14, 2018 among Honeywell and Resideo Intermediate Holding Inc. (incorporated by reference to Exhibit 10.2 to Honeywell's Form 10-Q for the quarter ended March 31, 2021)
10.83	Fourth Amendment, dated February 12, 2021, to Indemnification and Reimbursement Agreement dated October 14, 2018 among Honeywell and Resideo Intermediate Holding Inc. (incorporated by reference to Exhibit 10.3 to Honeywell's Form 10-Q for the quarter ended March 31, 2021)
21	Subsidiaries of the Registrant (filed herewith)
23.1	Consent of Deloitte & Touche LLP (filed herewith)
24	Powers of Attorney (filed herewith)
31.1	Certification of Principal Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 (filed herewith)
31.2	Certification of Principal Financial Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 (filed herewith)
32.1	Certification of Principal Executive Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (furnished herewith)
32.2	Certification of Principal Financial Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (furnished herewith)
95	Mine Safety Disclosures (filed herewith)
101.INS	The following financial statements from the Company's Annual Report on Form 10-K for the year ended December 31, 2021, formatted in Inline XBRL: (i) Consolidated Statements of Cash Flows, (ii) Consolidated Statements of Operations, (iii) Consolidated Statements of Comprehensive Income, (iv) Consolidated Balance Sheets, (v) Consolidated Statements of Shareowners' Equity and (vi) Notes to Consolidated Financial Statements, tagged as blocks of text and including detailed tags.
101.SCH	iXBRL Taxonomy Extension Schema (filed herewith)
101.CAL	iXBRL Taxonomy Extension Calculation Linkbase (filed herewith)
101.DEF	iXBRL Taxonomy Extension Definition Linkbase (filed herewith)
101.LAB	iXBRL Taxonomy Extension Label Linkbase (filed herewith)
101.PRE	iXBRL Taxonomy Extension Presentation Linkbase (filed herewith)
104	Cover page from the Company's Annual Report on Form 10-K for the year ended December 31, 2021, formatted in Inline XBRL (and contained in Exhibit 101)

The Exhibits identified above with an asterisk (*) are management contracts or compensatory plans or arrangements.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

HONEYWELL INTERNATIONAL INC.

Date: February 11, 2022	By:	/s/ Robert D. Mailloux
		Robert D. Mailloux Vice President and Controller (on behalf of the Registrant and as the Registrant's Principal Accounting Officer)

Pursuant to the requirements of the Securities Exchange Act of 1934, this annual report has been signed below by the following persons on behalf of the Registrant and in the capacities and on the date indicated:

Name	Name
/s/ Darius E. Adamczyk Darius E. Adamczyk Chairman and Chief Executive Officer (Principal Executive Officer)	* Judd A. Gregg Director
* Duncan B. Angove Director	* Rose Lee Director
* William S. Ayer Director	* Grace D. Lieblein Director
* Kevin Burke Director	* George Paz Director
* D. Scott Davis Director	* Robin L. Washington Director
* Deborah Flint Director	
/s/ Gregory P. Lewis Gregory P. Lewis Senior Vice President and Chief Financial Officer (Principal Financial Officer)	/s/ Robert D. Mailloux Robert D. Mailloux Vice President and Controller (Principal Accounting Officer)

*By: /s/ Gregory P. Lewis

Gregory P. Lewis
Attorney-in-fact

February 11, 2022

FORM 10-K CROSS-REFERENCE INDEX

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

Form 10-K

☒ ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d)
OF THE SECURITIES EXCHANGE ACT OF 1934
For the fiscal year ended December 31, 2020
OR
☐ TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d)
OF THE SECURITIES EXCHANGE ACT OF 1934
For the transition period from to
Commission file number 1-8974

hon-20201231_g1.jpg

Honeywell International Inc.

(Exact name of registrant as specified in its charter)

Delaware	22-2640650
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
300 South Tryon Street Charlotte, North Carolina	28202
(Address of principal executive offices)	(Zip Code)

Registrant's telephone number, including area code (704) 627-6200

Securities registered pursuant to Section 12(b) of the Act:

Title of Each Class	Trading Symbols	Name of each exchange on which registered
Common Stock, par value $1 per share*	HON	The New York Stock Exchange
1.300% Senior Notes due 2023	HON 23A	The New York Stock Exchange
0.000% Senior Notes due 2024	HON 24A	The New York Stock Exchange
2.250% Senior Notes due 2028	HON 28A	The New York Stock Exchange
0.750% Senior Notes due 2032	HON 32	The New York Stock Exchange

* The common stock is also listed on the London Stock Exchange.

Securities registered pursuant to Section 12(g) of the Act: None

Indicate by check mark if the Registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☒ No ☐

Indicate by check mark if the Registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Exchange Act. Yes ☐ No ☒

Indicate by check mark whether the Registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the Registrant

was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the Registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☒ No ☐

Indicate by check mark whether the Registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See definitions of “large accelerated filer,” “accelerated filer,” “smaller reporting company” and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer ☒ Accelerated filer ☐ Non-accelerated filer ☐ Smaller reporting company ☐

Emerging growth company ☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report. Yes ☒ No ☐

Indicate by check mark whether the Registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes ☐ No ☒

The aggregate market value of the voting stock held by nonaffiliates of the Registrant was approximately $97.0 billion at June 30, 2020.

There were 695,501,159 shares of Common Stock outstanding at January 29, 2021.

Documents Incorporated by Reference

Part III: Proxy Statement for Annual Meeting of Shareowners to be held May 21, 2021.

TABLE OF CONTENTS

ORGANIZATION OF OUR ANNUAL REPORT ON FORM 10-K

The order and presentation of content in our Annual Report on Form 10-K (Form 10-K) differs from the traditional U.S. Securities and Exchange Commission (SEC) Form 10-K format. We believe that our format improves readability and better presents how we organize and manage our business. See Form 10-K Cross-Reference Index for a cross-reference to the traditional SEC Form 10-K format.

CAUTIONARY STATEMENT ABOUT FORWARD-LOOKING STATEMENTS

We describe many of the trends and other factors that drive our business and future results in the section titled Management's Discussion and Analysis of Financial Condition and Results of Operations and in other parts of this report (including under the section titled Risk Factors). Such discussions contain forward-looking statements within the meaning of Section 21E of the Securities Exchange Act of 1934, as amended (the Exchange Act). Forward-looking statements are those that address activities, events or developments that management intends, expects, projects, believes or anticipates will or may occur in the future. They are based on management's assumptions and assessments in light of past experience and trends, current economic and industry conditions, expected future developments and other relevant factors. They are not guarantees of future performance, and actual results, developments and business decisions may differ significantly from those envisaged by our forward-looking statements. We do not undertake to update or revise any of our forward-looking statements. Our forward-looking statements are also subject to risks and uncertainties, including the impact of the coronavirus pandemic (COVID-19), that can affect our performance in both the near- and long-term. These forward-looking statements should be considered in light of the information included in this Form 10-K, including, in particular, the factors discussed within the section titled Risk Factors. Such factors may be revised or supplemented in subsequent reports on Forms 10-Q and 8-K.

BUSINESS

Honeywell International Inc. (Honeywell or the Company) invents and commercializes technologies that address some of the world's most critical challenges around energy, safety, security, air travel, productivity and global urbanization. As a diversified technology and manufacturing company, we are uniquely positioned to blend physical products with software to serve customers worldwide with aerospace products and services, energy efficient products and solutions for businesses, specialty chemicals, electronic and advanced materials, process technology for refining and petrochemicals, and productivity, sensing, safety and security technologies for buildings and industries. Our products and solutions enable a safer, more comfortable and more productive world, enhancing the quality of life of people around the globe. The Honeywell brand dates back to 1906, and the Company was incorporated in Delaware in 1985.

Our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and any amendments to those reports, are available free of charge on our website (honeywell.com) under the heading Investors (see SEC Filings) immediately after they are filed with, or furnished to, the SEC. In addition, in this Form 10-K, the Company incorporates by reference certain information from its definitive Proxy Statement for the 2021 Annual Meeting of Stockholders, which we expect to file with the SEC on or about April 9, 2021 (the Proxy Statement), and which will also be available free of charge on our website.

MAJOR BUSINESSES

We globally manage our business operations through four segments: Aerospace, Honeywell Building Technologies, Performance Materials and Technologies, and Safety and Productivity Solutions. Financial information related to our segments is included in Note 23 Segment Financial Data of Notes to Consolidated Financial Statements. The major products and services, including Honeywell Forge solutions supported by Honeywell Connected Enterprise, customers, uses and key competitors of each of our segments are:

AEROSPACE

Aerospace is a leading global supplier of products, software and services for aircrafts that it sells to original equipment manufacturers (OEM) and other customers in a variety of end markets including: air transport, regional, business and general aviation aircraft, airlines, aircraft operators and defense and space contractors. Aerospace products and services include auxiliary power units, propulsion engines, environmental control systems, integrated avionics, wireless connectivity services, electric power systems, engine controls, flight safety, communications, navigation hardware, data and software applications, radar and surveillance systems, aircraft lighting, management and technical services, advanced systems and instruments, satellite and space components, aircraft wheels and brakes, repair and overhaul services and thermal systems. Aerospace also provides spare parts, repair, overhaul and maintenance services (principally to aircraft operators) for the aftermarket. Honeywell Forge solutions are leveraged by our customers as tools to turn data into predictive maintenance and predictive analytics to enable better fleet management and make flight operations more efficient.

HONEYWELL BUILDING TECHNOLOGIES

Honeywell Building Technologies is a leading global provider of products, software, solutions and technologies that enable building owners and occupants to ensure their facilities are safe, energy efficient, sustainable and productive. Honeywell Building Technologies products and services include advanced software applications for building control and optimization; sensors, switches, control systems and instruments for energy management; access control; video surveillance; fire products; remote patient monitoring systems; and installation, maintenance and upgrades of systems. Honeywell Forge solutions enable our customers to digitally manage buildings, connecting data from different assets to enable smart maintenance, improve building performance and even protect from incoming security threats.

PERFORMANCE MATERIALS AND TECHNOLOGIES

Performance Materials and Technologies is a global leader in developing and manufacturing high-quality performance chemicals and materials, process technologies and automation solutions. The segment is comprised of Process Solutions, UOP and Advanced Materials. Process Solutions provides automation control, instrumentation, advanced software and related services for the oil and gas, refining, pulp and paper, industrial power generation, chemicals and petrochemicals, biofuels, life sciences, and metals, minerals and mining industries. Through its smart energy products, Process Solutions enables utilities and distribution companies to deploy advanced capabilities to improve operations, reliability and environmental sustainability. UOP provides process technology, products, including catalysts and adsorbents, equipment, and consulting services that enable customers to efficiently produce gasoline, diesel, jet fuel, petrochemicals and renewable fuels for the petroleum refining, gas processing, petrochemical, and other industries. Advanced Materials manufactures a wide variety of high-performance products, including materials used to manufacture end products such as bullet-resistant armor, nylon, computer chips and pharmaceutical packaging, and provides reduced and low global-warming-potential materials based on hydrofluoro-olefin technology. In the industrial environment, Honeywell Forge solutions enable integration and connectivity to provide a holistic view of operations and turn data into clear actions to maximize productivity and efficiency. Honeywell Forge's cybersecurity capabilities help identify risks and act on cyber-related incidents, together enabling improved operations and protecting processes, people and assets.

SAFETY AND PRODUCTIVITY SOLUTIONS

Safety and Productivity Solutions is a leading global provider of products and software that improve productivity, workplace safety and asset performance to customers around the globe. Safety products include personal protection equipment (PPE), apparel, gear, and footwear designed for work, play and outdoor activities; gas detection technology; and cloud-based notification and emergency messaging. Productivity Solutions products and services include mobile devices and software for computing, data collection and thermal printing; supply chain and warehouse automation equipment, software and solutions; custom-engineered sensors, switches and controls for sensing and productivity solutions; and software-based data and asset management productivity solutions. Honeywell Forge solutions digitally automate processes to improve efficiency while reducing downtime and safety costs.

COMPETITION

We are subject to competition in substantially all product and service areas. Some of our key competitors include but are not limited to:

- Aerospace: Garmin, Raytheon Technologies, Safran and Thales
- Honeywell Building Technologies: Carrier Global, Johnson Controls, Schneider Electric and Siemens
- Performance Materials and Technologies: ABB, Albemarle, Arkema, BASF, Dupont, Emerson Electric, Exterran, Grace and Yokogawa
- Safety and Productivity Solutions: 3M, Kion Group, MSA Safety Incorporated, TE Connectivity and Zebra Technologies

Our businesses compete on a variety of factors such as performance, applied technology, product innovation, product recognition, quality, reliability, customer service, delivery, and price. Brand identity, service to customers and quality are important competitive factors for our products and services. Our products face considerable price competition. While our competitive position varies among our products and services, we are a significant competitor in each of our major product and service classes.

EXECUTIVE SUMMARY

Despite a challenging 2020, we continued to deliver on our financial commitments and create long-term shareowner value. Although sales declined 11% to $32.6 billion, our differentiated solutions delivered double-digit sales growth in the defense and space, warehouse automation, PPE and recurring connected software businesses. We adapted to apply Honeywell's capabilities toward addressing the COVID-19 challenges of our customers around the world. Our execution through the downturn demonstrated our ability to move quickly and decisively to reduce fixed costs, ensure liquidity, invest in growth, and position ourselves for recovery, while at the same time, remaining focused on our three transformation initiatives – Honeywell Connected Enterprise, Honeywell Digital, and Integrated Supply Chain.

We maintained our commitment to create long-term shareowner value and, despite the downturn, we deployed $7.5 billion to capital expenditures, dividends, share repurchases and mergers and acquisitions, which was approximately $1.3 billion in excess of our operating cash flow for the year. Further, we improved our cash and short-term investments by $4.8 billion, which provided stability as well as opportunity for investment during challenging times.

As we look forward, we intend to continue deploying capital to high-return opportunities, including software and services with recurring revenue streams, positioning our business for future growth. Orders for our warehouse automation, PPE, and healthy building solutions remain strong, and we carry a robust backlog of $26.4 billion as of December 31, 2020. We are a leading software-industrial company committed to introducing state of the art technology solutions to improve efficiency, productivity and safety in high growth businesses in broad-based, attractive industrial end markets.

BUSINESS OBJECTIVES

Our businesses are focused on the following objectives:

- Driving profitable growth by delivering innovative products through research and development and technological excellence, and through continued enhancement of our footprint in high growth regions;
- Continuing to execute on our strategy to be a premier software-industrial company, including the ongoing expansion of Honeywell Forge connected solutions for aircraft, buildings, cybersecurity, plants, and workers and driving a recurring revenue model across the Company. Honeywell Forge provides Enterprise Performance Management Software-as-a-Service solutions to help drive operational excellence for our customers, collecting operational data from various assets and organizing data into an ecosystem where it can be useful;
- Expanding margins by optimizing the Company’s performance through the Integrated Supply Chain and Honeywell Digital transformation initiatives, commercial excellence, repositioning, and other manufacturing and operational process improvements;
- Executing disciplined portfolio management through rigorous merger and acquisition, divestiture, and integration processes to deliver growth and shareholder value;
- Controlling corporate costs, including costs incurred for asbestos and environmental matters, and pension and other post-retirement benefits; and
- Increasing availability of capital through strong cash flow generation and conversion from effective working capital management and proactive management of debt to enable the Company to strategically deploy capital for acquisitions, dividends, share repurchases and capital expenditures.

BACKLOG

Our backlog represents the estimated remaining value of work to be performed under firm contracts. Backlog is equal to our remaining performance obligations under the contracts that meet the guidance on revenue from contracts with customers as discussed in Note 3 Revenue Recognition and Contracts with Customers of Notes to Consolidated Financial Statements. Backlog was $26,376 million and $25,612 million at December 31, 2020 and 2019. We expect to recognize approximately 55% of our remaining performance obligations as revenue in 2021, and the remaining balance thereafter.

U.S. GOVERNMENT SALES

The Company, principally through our Aerospace segment, sells to the U.S. Government acting through its various departments and agencies and through prime contractors, including the U.S. Department of Defense (as both a prime contractor and subcontractor). We do not expect our overall operating results to be significantly affected by any proposed changes in 2021 federal defense spending due to the varied mix of the government programs which impact us (OEM production, engineering development programs, aftermarket spares and repairs and overhaul programs), as well as our diversified customer base.

U.S. Government Sales	Years Ended December 31, 2020	2019	2018
Sales to the U.S. Department of Defense	$ 3,661	$ 3,491	$ 2,832
Sales to other U.S. Government departments and agencies	557	566	571
Total Sales to the U.S. Government	$ 4,218	$ 4,057	$ 3,403

INTERNATIONAL OPERATIONS

We engage in manufacturing, sales, service and research and development globally. U.S. exports and non-U.S. manufactured products are significant to our operations. U.S. exports represented 12% of our total sales in 2020, 15% in 2019 and 13% in 2018. Non-U.S. manufactured products and services, mainly in Europe and Asia, were 40% of our total sales in 2020, 40% in 2019 and 43% in 2018.

Manufactured Products and Systems and Performance of Services	Year Ended December 31, 2020			
	Aerospace	Honeywell Building Technologies	Performance Materials and Technologies	Safety and Productivity Solutions
	(% of Segment Sales)			
U.S. exports	22 %	2 %	13 %	2 %
Non-U.S. manufactured products/ services	15 %	65 %	58 %	37 %

Information related to risks related to our foreign operations is included in the section titled Risk Factors under the caption “Macroeconomic and Industry Risks.”

RAW MATERIALS

The principal raw materials used in our operations are readily available. Although we occasionally experience disruption in raw materials supply, we experienced no significant problems in the purchase of key raw materials or commodities in 2020. We are not dependent on any one supplier for a material amount of our raw materials.

Prices of certain key raw materials, including copper, fluorspar, tungsten salts, ethylene, aluminum, and molybdenum in Performance Materials and Technologies and nickel, steel, titanium and other metals in Aerospace, are expected to fluctuate. We offset raw material cost increases with formula-driven or long-term supply agreements, price increases and hedging activities where feasible. We do not presently anticipate that a shortage of raw materials will cause any material adverse impacts during 2021.

PATENTS, TRADEMARKS, LICENSES AND DISTRIBUTION RIGHTS

Our segments are not dependent upon any single patent or related group of patents, trademarks, or any licenses or distribution rights. In our judgment, our intellectual property rights are adequate for the conduct of our business. We believe that, in the aggregate, the rights under our patents, trademarks, licenses and distribution rights are generally important to our operations, but we do not consider any individual patent, trademark or any licensing or distribution rights related to a specific process or product to be of material importance in relation to our total business.

REGULATIONS

The Company’s operations are subject to various federal, state, local and foreign government regulations, including requirements regarding the protection of human health and the environment. Our policies, practices and procedures are designed to prevent unreasonable risk of environmental damage, and of resulting financial liability, in connection with our business. Some risk of environmental damage is, however, inherent in some of our operations and products, as it is with other companies engaged in similar businesses.

We engage in the handling, manufacturing, use and disposal of many substances classified as hazardous by one or more regulatory agencies. Our policies, practices and procedures are designed to prevent unreasonable risk of environmental damage and personal injury, and to ensure that our handling, manufacture, use and disposal of these substances meet or exceed environmental and safety laws and regulations. It is possible that future knowledge or other developments, such as improved capability to detect substances in the environment or increasingly strict environmental laws and standards and enforcement policies, could bring into question our current or past handling, manufacture, use or disposal of these substances.

Among other environmental requirements, we are subject to the Federal Superfund and similar state and foreign laws and regulations, under which we have been designated as a potentially responsible party that may be liable for cleanup costs associated with current and former operating sites and various hazardous waste sites, some of which are on the U.S. Environmental Protection Agency’s National Priority List. While there is a possibility that a responsible party might be unable to obtain appropriate contribution from other responsible parties, we do not anticipate having to bear significantly more than our proportional share in multi-party situations taken as a whole.

We do not believe that Federal, State and local provisions regulating the discharge of materials into the environment, or otherwise relating to the protection of the environment, or any existing or pending climate change legislation, regulation, or international treaties or accords are reasonably likely to have a material effect in the foreseeable future on the Company’s business and we will continue to monitor emerging developments in this area.

Beyond our compliance requirements with environmental regulations, compliance with other government regulations has not had, and based on laws and regulations currently in effect, is not expected to have a material effect on the Company's capital expenditures, earnings or competitive position. See section titled Risk Factors for additional information on government regulation that could impact our business.

HUMAN CAPITAL MANAGEMENT

We believe a commitment to and investment in human capital management enables better decision making, helps us build competitive advantage, and furthers our long-term success. As of December 31, 2020, we employed approximately 103,000 employees across 70 countries, 41,000 of whom are in the United States. Human capital management is the key driver of our performance culture, which enables our workforce to respond to the fast-changing needs of our customers. Our performance culture is defined by a set of Honeywell Behaviors (Have a Passion for Winning, Be a Zealot for Growth, Think Big … Then Make It Happen, Act with Urgency, Be Courageous, Become Your Best, Be Committed, and Build Exceptional Talent), which reflect the bold, entrepreneurial spirit of our employees while emphasizing our goal to operate with speed and precision. At their foundation is a commitment to Integrity and Ethics, Inclusion and Diversity, and Workplace Respect, fundamental values that underlie everything we do.

Our commitment to these fundamental values and the Honeywell Behaviors starts at the top with a diverse Board of Directors and executive management team, who represent a broad spectrum of backgrounds and perspectives. We believe that the diversity of our current Board of Directors (four women, two Hispanics, and two African Americans) and the diversity of Honeywell’s executive leadership (more than half of the Company’s nine executive officers is diverse by ethnic background or gender) supports our evolving business strategy and is a testament to Honeywell’s ongoing commitment to hiring, developing, and retaining diverse talent. The Company’s commitment to Inclusion and Diversity enables better decision-making, helps build competitive advantages, and furthers long-term success.

In 2020, the Company established a Global Inclusion and Diversity Steering Committee co-sponsored by our Chairman and CEO, Senior Vice President and General Counsel, and Senior Vice President and Human Resources and fortified our inclusion and diversity governance structure by embedding Inclusion and Diversity Councils in each of our business groups. The re-designed governance structure provides a scalable model that supports our six affinity group employee networks for women, Black, Hispanic, veteran, LGBTQ, and disabled employees and facilitates the introduction of new networks to reflect the diverse characteristics of our workforce. These networks are designed to provide training and development opportunities and expand internal networks for promotional opportunities.

In addition, our people managers are expected to model behaviors that promote a culture that is open and inclusive for all employees. We help managers develop this skill as they do any other leadership skill, though training programs, interactive learning and real time events, including the hiring and talent review processes. Our Leadership Edge program provides training in core management skills to more than 13,000 leaders across the organization.

Training programs are available to all employees through our internal learning and development platform, which assigns curriculum tailored to an employee’s job responsibilities. Employees can also access additional trainings on-demand to continue to enhance their skills. This year, we also deployed a mandatory unconscious bias training program to our global workforce as a supplement to their other learning opportunities.

Our internal talent acquisition and management platform is a key component to recruiting, hiring, and developing top-performing talent. Our hiring practices consider a diverse slate of candidates and our hiring managers are provided training and toolkits to reinforce their role in bringing diverse talent into the Company. Further, we partner with top academic institutions and external professional organizations to enhance the diversity of our workforce to attract and retain top talent. Our talent review process requires our people managers to have quarterly career discussions with each member of their teams to discuss the best opportunity for growth and development, which enhances our identification of candidates for internal promotion and succession planning.

Finally, our Code of Business Conduct establishes the baseline requirements of our integrity and compliance program and promotes an environment where everyone is treated ethically and with respect. It outlines our pledge to recognize the dignity of each individual, respect each employee, provide compensation and benefits that are competitive, promote self-development through training, and value diversity of perspectives and ideas. All employees must complete Code of Business Conduct training and, where permitted by law, must also certify each year that they will comply with the Code. In 2020, we received certifications from 100% of officers and employees where permitted by law.

Overall, we believe our culture, along with our internal tools and initiatives, enable us to effectively execute our human capital strategy. For discussion on the risks relating to our inability to attract and retain top-performing talent, please see section titled Risk Factors.

SELECTED FINANCIAL DATA

This selected financial data should be read in conjunction with the Company's Consolidated Financial Statements and related Notes included elsewhere in this Annual Report as well as the section Management's Discussion and Analysis of Financial Condition and Results of Operations.

	Years Ended December 31,				
	2020	2019	2018(1)(2)	2017(1)	2016
	(Dollars in millions, except per share amounts)				
Results of Operations					
Net sales	$ 32,637	$ 36,709	$ 41,802	$ 40,534	$ 39,302
Net income attributable to Honeywell	4,779	6,143	6,765	1,545	4,812
Earnings Per Common Share					
Earnings from operations:					
Basic	6.79	8.52	9.10	2.03	6.30
Assuming dilution	6.72	8.41	8.98	2.00	6.21
Dividends per share	3.63	3.36	3.06	2.74	2.45
Balance Sheet Data					
Property, plant and equipment—net	5,570	5,325	5,296	5,926	5,793
Total assets	64,586	58,679	57,773	59,470	54,566
Short-term debt	6,042	4,892	6,458	5,309	3,593
Long-term debt	16,342	11,110	9,756	12,573	12,182
Total debt	22,384	16,002	16,214	17,882	15,775
Redeemable noncontrolling interest	7	7	7	5	3
Shareowners' equity	17,790	18,706	18,358	16,665	18,883

(1) 2018 and 2017 Net Income attributable to Honeywell and Earnings Per Common Share were impacted by the U.S. Tax Cuts and Jobs Act.

(2) The results of operations for the Transportation Systems and Homes and Global Distribution businesses are included in the Consolidated Statement of Operations through the effective dates of the respective spin-offs, which occurred in 2018.

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

(Dollars in tables and graphs in millions)

The following Management's Discussion and Analysis of Financial Condition and Results of Operations is intended to help the reader understand the results of operations and financial condition of Honeywell International Inc. and its consolidated subsidiaries (Honeywell or the Company) for the three years ended December 31, 2020. All references to Notes relate to Notes to Consolidated Financial Statements in the section titled Financial Statements and Supplementary Data.

On October 1, 2018, we completed the tax-free spin-off to Honeywell shareowners of our Transportation Systems business, previously part of Aerospace, into a standalone publicly-traded company, Garrett Motion Inc. (Garrett).

On October 29, 2018, we completed the tax-free spin-off to Honeywell shareowners of our Homes and Global Distribution business, previously part of Home and Building Technologies (renamed Honeywell Building Technologies following the spin-off), into a standalone publicly-traded company, Resideo Technologies, Inc. (Resideo).

We removed the assets and liabilities associated with Garrett and Resideo from our Consolidated Balance Sheet as of the effective dates of the respective spin-offs. We included the results of operations for Garrett and Resideo in our Consolidated Statement of Operations through the effective dates of the respective spin-offs. Total sales attributable to these spin-offs were $6.6 billion for the year ended December 31, 2018.

A detailed discussion of the prior year 2019 to 2018 year-over-year changes are not included herein and can be found in the Management's Discussion and Analysis of Financial Condition and Results of Operations section in the 2019 Annual Report on Form 10-K filed February 14, 2020.

COVID-19 UPDATE

In December 2019, a novel strain of coronavirus (COVID-19) was identified in Asia. Over the next several months, COVID-19 quickly spread across the world. In March 2020, the World Health Organization declared COVID-19 a worldwide pandemic. As of December 31, 2020, the virus continues to spread and many countries are experiencing a resurgence in infection rates. Although vaccines have recently been made available, the availability and distribution of the vaccines continue to provide challenges.

Governments took unprecedented actions to contain the spread of COVID-19, temporarily shutting down non-essential businesses, issuing stay at home or “shelter in place” orders and asking citizens to avoid all non-essential travel. In certain situations, governments closed borders and issued mandatory quarantines. Companies were asked, and in many cases were required, to allow non-essential employees to work remotely. Consumer spending declined, global travel demand declined significantly, and the world entered a global recession.

These events impacted our business operations in multiple ways. In the first quarter of 2020, we quickly responded to the changing environment. In January 2020, we implemented policies in select countries within Asia to restrict travel and require employees to work from home for all roles that allow for remote work. In March 2020, we expanded this work from home policy to include our employees worldwide. We introduced appropriate safety and hygiene protocols to enable our manufacturing employees to operate safely through the pandemic. We actively monitored the changing government rules and regulations for each of our locations worldwide.

We remain cautious as many factors remain unpredictable, including the increasing rate of COVID-19 infections. We continue to monitor COVID-19 infection rates globally and acknowledge the risk of new surges in COVID-19 infections.

We prepared procedures for the phased return of our employees to office sites and trained our local site leaders in the appropriate safety and hygiene protocols. As of December 31, 2020, all of our manufacturing sites continue to operate and, outside of India, most of our employees in Asia have returned to the workplace in some capacity. We also returned small numbers of workers to select office sites within Europe and North America. In many countries, including the U.S., most of our non-manufacturing employees continue to work from home (for all roles that allow for remote work).

The global recession resulted in a slow-down in demand for many of the products and services that we offer. The impact on each of our businesses is outlined below:

- ***Aerospace*** – The decline in global travel negatively impacted many of our customers, resulting in lower demand for our products from OEMs and negatively impacted demand for our commercial aftermarket businesses. As a result, this segment's sales and profits declined for the year ended December 31, 2020, compared to the year ended December 31, 2019.
- ***Performance Materials and Technologies*** – Many of our customers operate in the oil and gas industry. The decline in global travel, coupled with excessive oil and gas supply, negatively impacted many of our customers and resulted in lower demand for our products. As a result, this segment's sales and profits declined for the year ended December 31, 2020, compared to the year ended December 31, 2019.
- ***Honeywell Building Technologies*** – Our customers own or manage buildings in a variety of industries including commercial real estate, hospitality, government, healthcare, banking and education. The global recession impacted many of these industries, resulting in a reduction of discretionary spending. As a result, this segment's sales and profits declined for the year ended December 31, 2020, compared to the year ended December 31, 2019.
- ***Safety and Productivity Solutions*** – The global pandemic created significant demand for our respiratory PPE and warehouse automation driving increases in this segment's sales and profits for the year ended December 31, 2020, compared to the year ended December 31, 2019.

As a result of the slowdown in demand for our products, we implemented several cost reduction programs across our enterprise. We canceled our 2020 merit increases and reduced executive and Board of Director compensation. We initiated reduced work schedules across the company and implemented permanent census reductions.

We also took several steps to secure additional liquidity. In March 2020, we entered into a $6.0 billion Delayed Draw Term Loan Agreement. In May 2020, we completed a public Senior Notes offering, which provided $3.0 billion of available liquidity and permanently reduced the undrawn commitments under the Delayed Draw Term Loan Agreement by $3.0 billion. In June 2020, we drew on the remaining $3.0 billion of commitments under the Delayed Draw Term Loan Agreement. In August 2020, we completed a public Senior Notes offering, which provided $3.0 billion of available liquidity and was used to repay the outstanding principal amount of $3.0 billion under the Delayed Draw Term Loan Agreement. As of December 31, 2020, there are no outstanding borrowings or commitments remaining under the Delayed Draw Term Loan Agreement. Further, we held $15.2 billion of available cash and cash equivalents, including short-term investments.

We continue to monitor and respond to the changing conditions created by the pandemic.

Employee Health, Safety, and Economic Wellness

We continue to monitor the COVID-19 situation and its impacts globally. We are prioritizing the health and safety of our employees. Out of an abundance of caution for the health of our employees and to support local government initiatives to stem the spread of the virus, we implemented several precautions at various sites around the world at all times in compliance with local government requirements and Centers for Disease Control and Prevention (CDC) guidelines. These include, but are not limited to:

- Limiting visitor site access to business-essential purposes;
- Introducing screening checks at certain sites where permissible or mandated;
- Enabling employees to work from home wherever and whenever required or appropriate;
- Continuously updating travel guidance, according to latest developments; and

- Complying with all local health authority guidance or regulations and our own protocols, including requesting employees to comply with self-quarantine requirements whenever advisable.

We have taken a number of measures to support our employees during these difficult times. We extended medical benefits globally to cover out-of-pocket costs associated with testing for coronavirus, and for those on our U.S. company medical plans, we are also covering treatment costs. In Mexico, we introduced a medical benefit for employees at lower compensation levels to ensure access to private medical treatment. In the U.S., we changed our sick leave plan for non-exempt employees to make more sick time available earlier in the year if it is needed. We established a $10 million company-funded relief fund targeting employees worldwide at lower compensation levels, especially those on reduced work hours who did not receive high levels of income replacement from unemployment or other government assistance.

In addition to the measures to assist our employees, Honeywell contributed $2 million to establish a Small Business Innovation Fund in Charlotte to help our local economy. The fund helps storefront businesses with 50 or fewer employees make investments in new technologies and business models to adjust to the realities of operating in the COVID-19 environment. The fund prioritizes businesses owned by women, minorities and veterans.

Our Commitment to Public Health

In a partnership with the State of North Carolina and other local businesses, we announced a goal to deliver 1 million COVID-19 vaccines in North Carolina by July 4, 2021. In Phoenix, where our Aerospace business is headquartered, we will sponsor a week-long vaccination program in February 2021. In addition, Honeywell funded the provision of approximately 10 million meals and a month's supply of hygiene kits to families in India suffering hardships due to the crisis.

As we produce critical worker safety gear such as face masks, gloves, goggles, safety suits, and protective footwear, we play an essential role in the health and well-being of people and economies. To date, Honeywell has donated more than 2 million masks to frontline workers across multiple regions. Our customers and communities are depending on us more than ever to deliver for them and we are committed to supporting the safety of our employees, customers and fellow citizens around the world.

We are investing in new production facilities and continue to expand existing facilities to increase production of essential PPE products. We will bring these products to market as quickly as possible. We are committed to healthcare professionals, first responders, distributors and other stakeholders in an effort to ensure our PPE products are being placed quickly and cost-effectively in the hands of those most in need.

We announced our new capacity in the U.S. to make N95 masks, with production lines added in Rhode Island and Arizona that will collectively produce 40 million masks each month to support health, safety, and response workers globally. In addition, we are expanding our non-U.S. capacity with a new mask manufacturing line in the UK that is expected to produce 4.5 million masks each month, and a new line in India that is expected to produce 2 million masks each month. Separately, we are collaborating with Mubadala Investment Company's subsidiary, Strata Manufacturing, in the UAE to produce 30 million masks annually.

We have communicated the following principles to our authorized distributor network:

- Our expectation that, at a minimum, all of our partners will comply with all applicable laws prohibiting price gouging and apply appropriate diligence to the greatest extent possible to understand how our products are being purchased so that they are placed quickly and cost-effectively in the hands of those most in need - including first responders and medical professionals.
- While we do not control the prices that third parties set, we expect our partners to fairly price PPE used in the COVID-19 response effort.
- If we find that one of our partners is not upholding the letter or spirit of these principles, we reserve the right not to fulfill that partner's orders and terminate our relationship with that party.

We are also investing in developing and bringing to market a wide array of new COVID-related products, including but not limited to Healthy Buildings solutions, remote operations offerings, automation technologies to help speed vaccine development, vaccine packaging solutions, an ultraviolet cleaning system for aircraft, innovative dual-layer face covers and safety packs.

Plant Productivity and Safety

In situations where our businesses were deemed essential, we worked with local officials to determine how to safely operate our manufacturing facilities. We successfully operated these manufacturing facilities with minimal disruption in our productivity. In the second quarter of 2020, we repurposed certain manufacturing facilities to produce PPE that was in short supply around the world. As of December 31, 2020, more than 95% of our manufacturing sites were operating at normal production levels.

We continue to provide essential services and produce essential goods around the world. We employ standards such as screening checks, use of masks, face coverings and other safety equipment and social distancing practices along production lines in our production facilities at all times in compliance with local government requirements and CDC guidelines. We take appropriate actions including disinfecting and quarantine procedures when a suspected COVID-19 case is identified.

Customers and Suppliers

Current global economic conditions due to COVID-19 have adversely affected and may continue to adversely affect our customers' and suppliers' ability to operate or obtain financing, particularly in our airline, oil and gas, and automotive end markets. Customer or supplier bankruptcies, delays in their ability to obtain financing, or the unavailability of financing could adversely affect our cash flow or results of operations. We continue to actively monitor both supplier and customer financial health and take measures to manage our supply chain disruptions and limit our exposure.

See section titled Risk Factors for discussion of risks associated to the COVID-19 pandemic.

RESULTS OF OPERATIONS

Consolidated Financial Results

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Net Sales by Segment

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Net Sales Attributable to Spun-Off Entities

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Segment Profit by Segment

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CONSOLIDATED OPERATING RESULTS

Net Sales

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The change in net sales was attributable to the following:

	2020 Versus 2019	2019 Versus 2018
Volume	(12)%	3 %
Price	1 %	2 %
Foreign Currency Translation	— %	(1)%
Acquisitions/Divestitures	— %	(16)%
	(11)%	(12)%

2020 compared with 2019

A discussion of net sales by segment can be found in the Review of Business Segments section of this Management Discussion and Analysis.

The unfavorable volume in 2020 was driven by:

- Lower sales across our businesses due to the impact of the global recession attributable to COVID-19 and volatility in the oil and gas industry,
- Partially offset by strength in respiratory PPE products, warehouse automation projects, and defense and space.

Cost of Products and Services Sold

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2020 compared with 2019

Cost of products and services sold decreased in 2020 primarily due to the following:

- Lower direct and indirect material costs by approximately $1,130 million and $310 million,
- Lower labor costs by approximately $800 million, driven by lower sales volumes and other cost actions to improve productivity.

Gross Margin

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2020 compared with 2019

Gross margin percentage decreased in 2020 primarily due to the following:

- Lower gross margin in the Performance Materials and Technologies, Aerospace, and Safety and Productivity Solutions segments,
- Partially offset by higher Honeywell Building Technologies gross margin.

Selling, General and Administrative Expenses

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2020 compared with 2019

Selling, general and administrative expenses decreased due to higher productivity, including lower costs resulting from repositioning actions.

Other (Income) Expense

	2020	2019	2018
Other (income) expense	$ (675)	$ (1,065)	$ (1,149)

2020 compared with 2019

Other (income) expense changed due to the following:

- Non-cash charges associated with the reduction in value of reimbursement receivables due from Garrett,
- Lower interest income, and
- Lower foreign exchange income,
- Partially offset by higher pension income, higher equity income of affiliated companies and higher other postretirement income.

Tax Expense

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2020 compared with 2019

The effective tax rate for 2020 was lower than the U.S. federal statutory rate of 21% primarily due to the favorable resolution of a foreign tax matter related to the previously completed spin-off transactions, tax impact of restructuring, tax law changes in India, and the resolution of certain U.S. tax matters offset by accrued withholding taxes related to unremitted foreign earnings and non-cash charges related to the reduction of the aggregate carrying value of certain receivables with no corresponding tax benefit.

The effective tax rate for 2019 was lower than the U.S. federal statutory rate of 21% primarily resulting from the impacts of revised guidance related to U.S. Tax Cuts and Jobs Act and internal restructuring initiatives that resulted in a $281 million reduction of accrued withholding taxes related to unremitted foreign earnings.

For further discussion of changes in the effective tax rate, see Note 5 Income Taxes of Notes to Consolidated Financial Statements.

Net Income Attributable to Honeywell

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2020 compared with 2019

Earnings per share of common stock–assuming dilution decreased due to the following:

- Lower segment profit due to the impact of the global recession attributable to COVID-19 and volatility in the oil and gas industry,
- Non-cash charges associated with the reduction in value of reimbursement receivables due from Garrett, and
- Lower interest income, lower foreign exchange income, and higher repositioning costs,
- Partially offset by lower income taxes, higher pension income, and the favorable impact of lower outstanding share count resulting from the Company's stock repurchases.

REVIEW OF BUSINESS SEGMENTS

We globally manage our business operations through four segments: Aerospace, Honeywell Building Technologies, Performance Materials and Technologies, and Safety and Productivity Solutions.

AEROSPACE

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	2020	2019	Change 2020 vs 2019	2018	Change 2019 vs 2018
Net sales	$ 11,544	$ 14,054	(18)%	$ 15,493	(9)%
Cost of products and services sold	7,813	9,398		10,837	
Selling, general and administrative and other expenses	827	1,049		1,153	
Segment profit	$ 2,904	$ 3,607	(19)%	$ 3,503	3 %

	2020 vs. 2019		2019 vs. 2018	
Factors Contributing to Year-Over-Year Change	**Net Sales**	**Segment Profit**	**Net Sales**	**Segment Profit**
Organic	(18)%	(20)%	9 %	21 %
Foreign currency translation	— %	— %	— %	— %
Acquisitions, divestitures and other, net	— %	1 %	(18)%	(18)%
Total % Change	(18)%	(19)%	(9)%	3 %

2020 compared with 2019

Aerospace Net sales decreased due to lower sales volumes as the decline in global travel resulting form COVID-19 negatively impacted many of our customers, resulting in lower demand for our products from OEMs and reduced demand for our aftermarket products and services.

- Commercial Aviation Original Equipment sales decreased 36% (decreased 35% organic) due to lower demand from air transport and regional and business aviation OEMs.
- Commercial Aviation Aftermarket sales decreased 34% (decreased 34% organic) due to lower demand in air transport and regional and business aviation.
- Defense and Space sales increased 9% (increased 10% organic) driven by growth in U.S. and international defense.

Aerospace segment profit decreased due to lower sales volume and lower sales of higher margin products and services, partially offset by favorable pricing. Cost of products and services sold decreased due to lower sales volumes.

HONEYWELL BUILDING TECHNOLOGIES

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	2020	2019	Change 2020 vs. 2019	2018	Change 2019 vs. 2018
Net sales	$ 5,189	$ 5,717	(9)%	$ 9,298	(39)%
Cost of products and services sold	3,067	3,444		6,066	
Selling, general and administrative and other expenses	1,023	1,108		1,624	
Segment profit	$ 1,099	$ 1,165	(6)%	$ 1,608	(28)%

Factors Contributing to Year-Over-Year Change	2020 vs. 2019 Net Sales	2020 vs. 2019 Segment Profit	2019 vs. 2018 Net Sales	2019 vs. 2018 Segment Profit
Organic	(9)%	(5)%	5 %	8 %
Foreign currency translation	— %	(1)%	(2)%	(2)%
Acquisitions, divestitures and other, net	— %	— %	(42)%	(34)%
Total % Change	(9)%	(6)%	(39)%	(28)%

2020 compared with 2019

Honeywell Building Technologies Net sales decreased due to lower organic sales. Our customers own or manage buildings in a variety of industries including commercial real estate, hospitality, airports and other government buildings, healthcare and education. The global recession resulting from the COVID-19 pandemic impacted many of these industries, resulting in a reduction of discretionary spending and demand for our products and services.

- Sales in Products decreased 10% (decreased 10% organic) primarily due to lower sales volumes.
- Sales in Building Solutions decreased 9% (decreased 8% organic) primarily due to lower sales volumes and the unfavorable impact of foreign currency translation.

Honeywell Building Technologies segment profit decreased primarily due to lower sales volumes and the unfavorable impact of foreign currency translation, partially offset by favorable pricing. Cost of products and services sold decreased due to lower sales volumes.

PERFORMANCE MATERIALS AND TECHNOLOGIES

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	2020	2019	Change 2020 vs. 2019	2018	Change 2019 vs. 2018
Net sales	$ 9,423	$ 10,834	(13)%	$ 10,674	1 %
Cost of products and services sold	6,331	6,989		6,948	
Selling, general and administrative and other expenses	1,241	1,412		1,398	
Segment profit	$ 1,851	$ 2,433	(24)%	$ 2,328	5 %

Factors Contributing to Year-Over-Year Change	2020 vs. 2019 Net Sales	2020 vs. 2019 Segment Profit	2019 vs. 2018 Net Sales	2019 vs. 2018 Segment Profit
Organic	(13)%	(24)%	4 %	6 %
Foreign currency translation	— %	— %	(3)%	(1)%
Acquisitions, divestitures and other, net	—	—	— %	— %
Total % Change	(13)%	(24)%	1 %	5 %

2020 compared with 2019

Performance Materials and Technologies Net sales decreased primarily due to lower sales volumes. Many of our customers operate in the oil and gas industry. The decline in global travel, coupled with excessive oil and gas supply, negatively impacted many of our customers, resulting in lower demand for our products and services.

- UOP sales decreased 25% (decreased 25% organic) driven primarily by decreases in catalyst volumes, licensing, and engineering sales volumes.
- Process Solutions sales decreased 11% (decreased 10% organic) primarily due to lower sales volumes in products businesses, automation projects and migration services.
- Advanced Materials sales decreased 5% (decreased 6% organic) driven primarily by decreased sales volumes in fluorine products due to lower demand in automotive refrigerants, partially offset by increased sales volumes in specialty products.

Performance Materials and Technologies segment profit decreased primarily due to operating leverage on lower sales volumes and lower sales of higher margin products and services, partially offset by other productivity actions. Cost of products and services sold decreased primarily due to lower sales volumes.

SAFETY AND PRODUCTIVITY SOLUTIONS

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	2020	2019	Change 2020 vs. 2019	2018	Change 2019 vs. 2018
Net sales	$ 6,481	$ 6,104	6 %	$ 6,337	(4)%
Cost of products and services sold	4,532	4,158		4,205	
Selling, general and administrative and other expenses	1,042	1,156		1,100	
Segment profit	$ 907	$ 790	15 %	$ 1,032	(23)%

Factors Contributing to Year-Over-Year Change	2020 vs. 2019 Net Sales	2020 vs. 2019 Segment Profit	2019 vs. 2018 Net Sales	2019 vs. 2018 Segment Profit
Organic	6 %	16 %	(4)%	(23)%
Foreign currency translation	— %	(1)%	(2)%	(2)%
Acquisitions, divestitures and other, net	— %	— %	2 %	2 %
Total % Change	6 %	15 %	(4)%	(23)%

2020 compared with 2019

Safety and Productivity Solutions Net sales increased primarily due to higher organic sales. The global pandemic has created significant increased demand for our respiratory PPE and additional demand for online shopping services, bolstering demand for our warehouse automation services.

- Sales in Safety and Retail increased 9% (increased 9% organic) primarily due to a significant increase in order volume for respiratory PPE due to the global pandemic, partially offset by lower demand for gas sensing and detection equipment.
- Sales in Productivity Solutions and Services decreased 1% (flat organic) due to the unfavorable impact of foreign currency translation.
- Sales in Warehouse and Workflow Solutions increased 14% (increased 14% organic) primarily due to strong demand for our warehouse automation services.
- Sales in Sensing & IoT decreased 6% (decreased 6% organic) due to lower organic sales volumes.

Safety and Productivity Solutions segment profit increased as a result of higher productivity, higher sales volumes, and favorable pricing, partially offset by higher sales of lower margin products and the unfavorable impact of foreign currency translation. Cost of products and services sold increased primarily due to higher organic sales volumes, partially offset by higher productivity.

REPOSITIONING CHARGES

See Note 4 Repositioning and Other Charges of Notes to Consolidated Financial Statements for a discussion of our repositioning actions and related charges incurred in 2020, 2019 and 2018. Cash spending related to our repositioning actions was $564 million, $249 million and $285 million in 2020, 2019 and 2018, and was funded through operating cash flows.

RISK FACTORS

Our business, operating results, cash flows and financial condition are subject to the material risks and uncertainties set forth below, any one of which could cause our actual results to vary materially from recent results or from our anticipated future results.

MACROECONOMIC AND INDUSTRY RISKS

Each of our businesses is subject to unique industry and economic conditions that may adversely affect the markets and operating conditions of our customers, which in turn can affect demand for our products and services and our results of operations.

- ***Aerospace***—Our Aerospace business is impacted by customer buying patterns of aftermarket parts, supplier stability, factory transitions and global supply chain capacity constraints that may lead to shortages of crucial components. Operating results may be adversely affected by downturns in the global demand for air travel, which may impact new aircraft production or result in the delay or cancellation of new aircraft orders, delays in launch schedules for new aircraft, the retirement of aircraft and reductions in global flying hours, which impacts air transport and regional, business and general aviation aircraft utilization rates. Operating results may also be adversely affected by any decrease in air travel demand due to regional restrictions or suspension of service for public health, safety, or environmental events, such as the effects of the COVID-19 pandemic, which negatively impacted our operating results during 2020. Operating results could also be impacted by changes in overall trends related to end market demand for the product portfolio, as well as new entrants and non-traditional players entering the market. Operating results in our Defense and Space business unit may be affected by the mix of U.S. and foreign government appropriations for defense and space programs and by compliance risks. Results may also be impacted by the potential introduction of counterfeit parts into our global supply chain.

- ***Honeywell Building Technologies***—Operating results may be adversely impacted by downturns in the level of global commercial construction activity (including retrofits and upgrades), lower capital spending and operating expenditures on building projects, decreased industrial plant expansion, changes in the competitive landscape including new market entrants and new technologies, and fluctuations in inventory levels in distribution channels.

- ***Performance Materials and Technologies***—Operating results may be adversely impacted by downturns in capacity utilization for chemical, industrial, refining, petrochemical and semiconductor plants, our customers' availability of capital for refinery construction and expansion, raw material demand and supply, product commoditization, continued illegal imports of hydrofluorocarbons into Europe and our ability to maximize our facilities' production capacity and minimize downtime. Periods of increased volatility in oil and natural gas prices may result in less investment by our customers and therefore, lower demand for our products and services.
- ***Safety and Productivity Solutions***—Operating results may be adversely impacted by reduced investments in process automation, safety monitoring, and plant capacity utilization initiatives, fluctuations in retail markets, a slowdown in demand for safety products, changes in the competitive landscape, including new market entrants and technology that may lead to product commoditization, and adverse industry economic conditions, all of which could result in lower market share, reduced selling prices and lower margins.

The global COVID-19 coronavirus pandemic and related impacts adversely affect and may continue to adversely affect our business, financial condition, results of operations, liquidity, and cash flow.

The global spread of coronavirus (COVID-19) creates significant volatility, uncertainty and economic disruption that impacts our business, operations and financial results and may continue to do so. The extent to which the COVID-19 pandemic will continue to impact our business, operations and financial results will depend on numerous evolving factors that we may not be able to accurately predict, including: the duration, scope and severity of the pandemic, including the extent of the continued increase in cases across the United States in particular, as well as the timing and availability of effective medical treatments and vaccines; governmental, business and individual decisions and actions; the pace of vaccine deployment; the impact of the pandemic on economic activity; and the extent to which we or our employees, customers, suppliers, service providers or other business partners may be prevented from conducting normal business activities, including due to shutdowns or other restrictive measures that may be requested or mandated by governmental authorities. These factors could, among other things, continue to disrupt (i) the purchasing, contracting and payment behaviors of our customers and their end-users; (ii) our operations, including our manufacturing activities, the shipment of our products, and the performance of our suppliers and service providers; and (iii) our liquidity and cash flow.

Risks arising from the COVID-19 pandemic impacting our business and that may continue to impact our business, financial condition, results of operations and prospects include, among other things:

- ***Customer Risk***—Existing and potential customers and their end-users may continue to take actions to reduce or suspend operations, reduce or delay spending, cancel contracts, or cut costs in a manner that reduces demand for our products and services. In particular, lower demand for air travel may continue to cause our customers to delay or suspend spending in connection with the manufacturing, repair, overhaul or servicing of aircraft, and there may be long-term deterioration in demand for air travel that could impact our business beyond the current COVID-19 health crisis. Customers may also continue to attempt to renegotiate contracts and obtain concessions, face financial constraints on their ability to make payments to us on a timely basis or at all, or enter into bankruptcy or discontinue their business operations, and we may continue to be required to discount the pricing of our products. In addition, unfavorable customer site conditions, such as closure of or access restrictions to customer facilities, and disruptions to our customers' third-party logistics, warehousing, inventory management and distribution services may continue to limit our ability to sell products, meet billing milestones or provide services.

- ***Operations Risk***—The closure of our facilities, restrictions inhibiting our employees' ability to access those facilities, and disruptions to the ability of our suppliers or service providers to deliver goods or services to us (including as a result of supplier facility closures or access restrictions, disruptions to their supply chains, and supplier liquidity or bankruptcy risk) could further disrupt our ability to provide our services and solutions and result in, among other things, terminations of customer contracts and losses of revenue. Because the COVID-19 pandemic could adversely affect our near-term and long-term revenues, earnings, liquidity and cash flows, we have taken and may be required to redeploy significant cost actions, including but not limited to reducing discretionary expenses (such as non-essential travel, contractors, and consultants), reducing hiring, canceling annual merit increases, reducing executive and board of director pay, reducing work schedules across the enterprise, shortening or staggering work schedules to match production with demand, and reducing staffing levels, as well as increasing supplier-based productivity and enhancing spending-limit controls. However, the extent to which our mitigation efforts are successful, if at all, is not currently ascertainable; also, our costs may not decrease at the same pace as revenue declines as many of our costs are less variable in nature, and we may not be able to or may not choose to significantly reduce them in an effort to remain focused on long-term outlook and growth opportunities. Further, our management of the impact of COVID-19 will continue to require significant investment of time from our management and employees, as well as resources across our global enterprise. The focus on managing and mitigating the impacts of COVID-19 on our business may cause us to divert or delay the application of our resources toward new initiatives or investments, which may adversely impact our future results of operations. Issues relating to the COVID-19 pandemic may also result in legal claims or litigation against us. In addition, remote work has increased the frequency of cybersecurity attacks, including phishing and malware attempts that utilize COVID-19-related strategies, increasing the risk of a material cybersecurity incident that could result in the loss of proprietary or personal data, render us more vulnerable to future cybersecurity attacks, disrupt our operations, or otherwise cause us reputational or financial harm.

- ***Liquidity and Cash Flow Risk***—Because of the customer and operations risks described above, our business may not continue to generate sufficient cash flow from operations in the future to service our debt and make necessary capital expenditures. If we are unable to generate such cash flow, we may need to use existing cash balances to service our debt, and if such balances are insufficient, then we may be required to engage in one or more alternatives, such as selling assets, restructuring of existing debt, issuing new debt or obtaining additional equity capital on terms that may be onerous or highly dilutive. Our ability to refinance our indebtedness will depend on the capital markets and our financial condition at such time.

Due to the daily evolution of the COVID-19 pandemic and the responses to curb its spread, we cannot predict the ultimate impact the COVID-19 pandemic will have on our business, financial condition, results of operations, liquidity, and cash flow. Any recovery from the COVID-19 pandemic and related economic impact may be slowed or reversed by a variety of factors, such as, in the United States, the current widespread increase in COVID-19 infections. In addition, even after the COVID-19 pandemic has subsided, we may continue to experience adverse impacts to our business as a result of its global economic impact, including the current recession and any recession that may occur in the future. Further, many of the factors disclosed under Risk Factors in this Form 10-K are, and we anticipate will continue to be further, heightened or exacerbated by the impact of the COVID-19 pandemic.

A significant percentage of our sales and operations is in non-U.S. jurisdictions and is subject to the economic, political, regulatory, foreign exchange and other risks of international operations.

Our international operations, including U.S. exports, represent more than half of the Company’s sales. Risks related to international operations include exchange control regulations, wage and price controls, antitrust regulations, employment regulations, foreign investment laws, import, export and other trade restrictions (such as sanctions and embargoes), differing levels of protection of intellectual property, acts of industrial espionage, violations by our employees of anti-corruption laws (despite our efforts to mitigate such risk), changes in regulations regarding transactions with state-owned enterprises, nationalization of private enterprises, acts of terrorism, and our ability to hire and maintain qualified staff and maintain the safety of our employees in these regions. Instability and uncertainties arising from the global geopolitical environment and the evolving international and domestic political, regulatory and economic landscape, including the potential for changes in global trade policies, including sanctions and trade barriers, and trends such as populism, economic nationalism and negative sentiment toward multinational companies, as well as the cost of compliance with increasingly complex and often conflicting regulations worldwide, can impair our flexibility in modifying product, marketing, pricing or other strategies for growing our businesses, as well as our ability to improve productivity and maintain acceptable operating margins.

In December 2020, the United Kingdom and the European Union announced they had entered into a post-Brexit deal on certain aspects of trade and other strategic and political issues. Depending on the application of the terms of the trade and cooperation agreement between the United Kingdom and the European Union, we could face increased regulatory costs and challenges. The Company has developed plans to mitigate the potential impact of these costs and challenges, but the implications of these uncertainties could affect the Company's business, financial position and results of operations.

Existing free trade laws and regulations provide certain beneficial duties and tariffs for qualifying imports and exports. Changes in laws or policies governing the terms of foreign trade, and in particular increased trade restrictions, tariffs or taxes on imports from countries where we manufacture products or from where we import products or raw materials, either directly or through our suppliers, could have an impact on our competitive position and financial results.

The United States has commenced certain trade actions, including imposing tariffs on certain goods imported from China and other countries, which has resulted in retaliatory tariffs by China and other countries. Additional tariffs imposed by the United States on a broader range of imports, or further retaliatory trade measures taken by China or other countries in response, could increase the cost of our products. Given the change in the U.S. presidential administration, we face uncertainty with regard to U.S. government trade policy.

Operating outside of the United States also exposes us to foreign exchange risk, which we monitor and seek to reduce through hedging activities. However, foreign exchange hedging activities bear a financial cost and may not always be available to us or be successful in eliminating such volatility. Finally, we generate significant amounts of cash outside of the United States that is invested with financial and non-financial counterparties. While we employ comprehensive controls regarding global cash management to guard against cash or investment loss and to ensure our ability to fund our operations and commitments, a material disruption to the counterparties with whom we transact business could expose Honeywell to financial loss.

Operating outside the United States also exposes us to additional intellectual property risk. The laws and enforcement practices of certain jurisdictions in which we operate may not protect our intellectual property rights to the same extent as in the U.S. and may impose joint venture, technology transfer, local service or other foreign investment requirements and restrictions that potentially compromise control over our technology and proprietary information. Failure of foreign jurisdictions to protect our intellectual property rights, an inability to effectively enforce such rights in foreign jurisdictions, or the imposition of foreign jurisdiction investment or sourcing restrictions or requirements could result in loss of valuable proprietary information and could impact our competitive position and financial results.

Risks related to our defined benefit pension plans may adversely impact our results of operations and cash flow.

Significant changes in actual investment return on pension assets, discount rates, and other factors could adversely affect our results of operations and require cash pension contributions in future periods. Changes in discount rates and actual asset returns different than our anticipated asset returns can result in significant non-cash actuarial gains or losses, which we record in the fourth quarter of each fiscal year, and, if applicable, in any quarter in which an interim re-measurement is triggered. With regard to cash pension contributions, funding requirements for our pension plans are largely dependent upon interest rates, actual investment returns on pension assets and the impact of legislative or regulatory changes related to pension funding obligations.

OPERATIONAL RISKS

Raw material price fluctuations, the ability of key suppliers to meet quality and delivery requirements, or catastrophic events can increase the cost of our products and services, impact our ability to meet commitments to customers and cause us to incur significant liabilities.

The cost of raw materials is a key element in the cost of our products, particularly in Performance Materials and Technologies (copper, fluorspar, tungsten salts, ethylene, aluminum, and molybdenum) and in Aerospace (nickel, steel, titanium and other metals). Our inability to offset material price inflation through increased prices to customers, formula-driven or long-term fixed price contracts with suppliers, productivity actions or commodity hedges could adversely affect our results of operations.

Many major components, product equipment items and raw materials, particularly in Aerospace, are procured or subcontracted on a single or sole-source basis. Although we maintain a qualification and performance surveillance process and we believe that sources of supply for raw materials and components are generally adequate, it is difficult to predict what effects shortages or price increases may have in the future. Our ability to manage inventory and meet delivery requirements may be constrained by our suppliers' inability to scale production and adjust delivery of long-lead time products during times of volatile demand. In addition, current or future global economic uncertainty, including the ongoing COVID-19 pandemic, may affect the financial stability of our key suppliers or their access to financing, which may in turn affect their ability to perform their obligations to us. If one or more of our suppliers experiences financial difficulties, delivery delays or other performance problems, our resulting inability to fill our supply needs would jeopardize our ability to fulfill obligations under commercial and government contracts, which could, in turn, result in reduced sales and profits, contract penalties or terminations, and damage to customer relationships.

We may be unable to successfully execute or effectively integrate acquisitions, and divestitures may not occur as planned.

We regularly review our portfolio of businesses and pursue growth through acquisitions and seek to divest non-core businesses. We may not be able to complete transactions on favorable terms, on a timely basis, or at all. In addition, our results of operations and cash flows may be adversely impacted by (i) the failure of acquired businesses to meet or exceed expected returns, including risk of impairment; (ii) the failure to integrate multiple acquired businesses into Honeywell simultaneously and on schedule and/or to achieve expected synergies; (iii) the inability to dispose of non-core assets and businesses on satisfactory terms and conditions; and (iv) the discovery of unanticipated liabilities, labor relations difficulties, cybersecurity concerns, compliance issues or other problems in acquired businesses for which we lack contractual protections, insurance or indemnities, or, with regard to divested businesses, claims by purchasers to whom we have provided contractual indemnification.

Our future growth is largely dependent upon our ability to develop new technologies and introduce new products that achieve market acceptance in increasingly competitive markets with acceptable margins.

Our future growth rate depends upon a number of factors, including our ability to (i) identify and evolve with emerging technological and broader industry trends in our target end-markets; (ii) develop and maintain competitive products; (iii) defend our market share against an ever-expanding number of competitors, including many new and non-traditional competitors; (iv) enhance our products by adding innovative features that differentiate our products from those of our competitors and prevent commoditization of our products; (v) develop, manufacture and bring compelling new products to market quickly and cost-effectively; (vi) monitor disruptive technologies and business models; (vii) achieve sufficient return on investment for new products introduced based on capital expenditures and research and development spending; (viii) respond to changes in overall trends related to end-market demand; and (ix) attract, develop and retain individuals with the requisite technical expertise and understanding of customers' needs to develop new technologies and introduce new products. Competitors may also develop after-market services and parts for our products which attract customers and adversely affect our return on investment for new products. The failure of our technologies or products to gain market acceptance due to more attractive offerings by our competitors or the failure to address any of the above factors could significantly reduce our revenues and adversely affect our competitive standing and prospects.

Failure to increase productivity through sustainable operational improvements, as well as an inability to successfully execute repositioning projects or to effectively manage our workforce, may reduce our profitability or adversely impact our businesses.

Our profitability and margin growth are dependent upon our ability to drive sustainable improvements. We seek productivity and cost savings benefits through repositioning actions and projects, such as consolidation of manufacturing facilities, transitions to cost-competitive regions and product line rationalizations. Risks associated with these actions include delays in execution, additional unexpected costs, realization of fewer than estimated productivity improvements and adverse effects on employee morale. We may not realize the full operational or financial benefits we expect, the recognition of these benefits may be delayed, and these actions may potentially disrupt our operations. In addition, organizational changes, increased attrition, failure to create and implement a succession plan for key Company positions, not retaining key talent, inability to attract new employees with unique skills, labor relations difficulties, or workforce stoppage could have a material adverse effect on our business, reputation, financial position and results of operations.

As a supplier to the U.S. Government, we are subject to unique risks, such as the right of the U.S. Government to terminate contracts for convenience and to conduct audits and investigations of our operations and performance.

U.S. Government contracts are subject to termination by the government, either for the convenience of the government or for our failure to perform consistent with the terms of the applicable contract. Our contracts with the U.S. Government are also subject to government audits that may recommend downward price adjustments and other changes. When appropriate and prudent, we made adjustments and paid voluntary refunds in the past and may do so in the future.

We are also subject to government investigations of business practices and compliance with government procurement and security regulations. If, as a result of any such investigation or other government investigations (including investigation of violations of certain environmental, employment or export laws), Honeywell or one of its businesses were found to have violated applicable law, then it could be suspended from bidding on or receiving awards of new government contracts, suspended from contract performance pending the completion of legal proceedings and/or have its export privileges suspended.

Our operations and the prior operations of predecessor companies expose us to the risk of material environmental liabilities.

Mainly because of past operations and operations of predecessor companies, we are subject to potentially material liabilities related to the remediation of environmental hazards and to claims of personal injuries or property damages that may be caused by hazardous substance releases and exposures. We continue to incur remedial response and voluntary clean-up costs for site contamination and are a party to lawsuits and claims associated with environmental and safety matters, including past production of products containing hazardous substances. Additional lawsuits, claims and costs involving environmental matters are likely to continue to arise in the future. Various federal, state, local and foreign governments regulate the use of certain materials, the discharge of materials into the environment, and/or communications respecting certain materials in our products, and can impose substantial fines and criminal sanctions for violations, and require injunctive relief measures, including installation of costly equipment, implementation of operational changes to limit emissions and/or decrease the likelihood of accidental hazardous substance releases, or limiting access of our products to markets, among others. In addition, changes in laws, regulations and enforcement of policies, the discovery of previously unknown contamination or new technology or information related to individual sites, the establishment of stricter toxicity standards with respect to certain contaminants, or the imposition of new clean-up requirements or remedial techniques could require us to incur additional costs in the future that would have a negative effect on our financial condition or results of operations.

Cybersecurity incidents could disrupt business operations, result in the loss of critical and confidential information, and adversely impact our reputation and results of operations.

Global cybersecurity threats and incidents can range from uncoordinated individual attempts to gain unauthorized access to information technology (IT) systems to sophisticated and targeted measures known as advanced persistent threats, directed at the Company, its products, its customers and/or its third party service providers, including cloud providers. Our customers, including the U.S. Government, are increasingly requiring cybersecurity protections and mandating cybersecurity standards in our products, and we may incur additional costs to comply with such demands. While we have experienced, and expect to continue to experience, these types of threats and incidents, none of them to date have been material to the Company. We seek to deploy comprehensive measures to deter, prevent, detect, respond to and mitigate these threats, including identity and access controls, data protection, vulnerability assessments, continuous monitoring of our IT networks and systems and maintenance of backup and protective systems. Despite these efforts, cybersecurity incidents, depending on their nature and scope, could potentially result in the misappropriation, destruction, corruption or unavailability of critical data and confidential or proprietary information (our own or that of third parties) and the disruption of business operations. The potential consequences of a material cybersecurity incident include financial loss, reputational damage, litigation with third parties, theft of intellectual property, fines levied by the Federal Trade Commission, diminution in the value of our investment in research, development and engineering, and increased cybersecurity protection and remediation costs due to the increasing sophistication and proliferation of threats, which in turn could adversely affect our competitiveness and results of operations.

The development of technology products and services presents security and safety risks.

An increasing number of our products, services and technologies are delivered with Internet of Things (IoT) capabilities and the accompanying interconnected device networks, which include sensors, data and advanced computing capabilities. We have developed product software designs that we believe are less susceptible to cyber-attacks, but despite these efforts, if our products and services that include IoT solutions do not work as intended or are compromised, the possible consequences include financial loss, reputational damage, exposure to legal claims or enforcement actions, theft of intellectual property, and diminution in the value of our investment in research, development and engineering, which in turn could adversely affect our competitiveness and results of operations.

Data privacy, data protection, and information security may require significant resources and present certain risks.

We collect, store, have access to and otherwise process certain confidential or sensitive data, including proprietary business information, personal data or other information that is subject to privacy and security laws, regulations and/or customer-imposed controls. Despite our efforts to protect such data, we may be vulnerable to material security breaches, theft, misplaced or lost data, programming errors, or employee errors that could potentially lead to the compromising of such data, improper use of our systems, software solutions or networks, unauthorized access, use, disclosure, modification or destruction of information, defective products, production downtimes and operational disruptions. In addition, we operate in an environment in which there are different and potentially conflicting data privacy laws in effect in the various U.S. states and foreign jurisdictions in which we operate and we must understand and comply with each law and standard in each of these jurisdictions while ensuring the data is secure. For example, the State of California recently passed legislation granting residents certain new data privacy rights and regulating the security of IoT devices, effective in January 2020, and California voters recently approved additional privacy legislation, which provides for the establishment of a California privacy regulator, modifies the current data privacy regulations and imposes additional data protection obligations and is effective in January 2023; European laws require us to have an approved legal mechanism to transfer personal data out of Europe; the European Union General Data Protection Regulation, which became enforceable in May 2018, superseded prior European Union data protection legislation and imposes more stringent requirements in how we collect and process personal data and provides for significantly greater penalties for noncompliance; and several other states and countries have passed or are considering laws that require personal data relating to their residents or citizens to be maintained on local servers and impose additional data transfer restrictions. Government enforcement actions can be costly and interrupt the regular operation of our business, and violations of data privacy laws can result in fines, reputational damage and civil lawsuits, any of which may adversely affect our business, reputation and financial statements.

A material disruption of our operations, particularly at our manufacturing facilities or within our information technology infrastructure, could adversely affect our business.

Our facilities, supply chains, distribution systems and information technology systems are subject to catastrophic loss due to natural disasters, including hurricanes and floods, power outages, fires, explosions, terrorism, equipment failures, sabotage, cyber incidents, any potential effects of climate change and adverse weather conditions, labor disputes, critical supply failure, inaccurate downtime forecast, political disruption, and other reasons, which can result in undesirable consequences, including financial losses and damaged relationships with customers. Another public health crises, like a regional or global pandemic, including the COVID-19 pandemic, could again disrupt our supply chain, distribution channels, production facilities, operations and customer demand, which could negatively impact our operations and adversely affect our business. We employ information technology systems and networks to support the business and rely on them to process, transmit and store electronic information, and to manage or support a variety of business processes and activities. Disruptions to our information technology infrastructure from system failures, shutdowns, power outages, telecommunication or utility failures, cybersecurity incidents, and other events, including disruptions at our cloud computing, server, systems and other third party IT service providers, could interfere with our operations, interrupt production and shipments, damage customer and business partner relationships, and negatively impact our reputation.

Concentrations of credit, counterparty and market risk may adversely affect our results of operations and financial condition.

We maintain long-term contractual relationships with many of our customers, suppliers, and other counterparties. While we monitor the financial health of these counterparties, we are exposed to credit and market risks of such counterparties, including those concentrated in the same or similar industries and geographic regions. Changes in economic conditions, including the impact of the COVID-19 pandemic and resulting recession, could also lead to concerns about the creditworthiness of counterparties in the same or similar industry or geography, impacting our ability to renew our long-term contractual arrangements or collect amounts due under these arrangements. Among other factors, changes in economic conditions could also result in the credit deterioration or insolvency of a significant counterparty.

Garrett is currently subject to bankruptcy proceedings in the United States Bankruptcy Court for the Southern District of New York. We have recorded an adjustment against the receivable amounts owed to us under agreements with Garrett, and depending on developments, we may be required to record an additional adjustment in whole or in part (together with a related statement of operations charge) in a future period or periods.

We regularly review the aggregate carrying value of the reimbursement receivable amounts due from Garrett in connection with our indemnification and reimbursement agreement and our tax matters agreement with Garrett. On September 20, 2020, Garrett and certain of its affiliates filed voluntary petitions for relief under Chapter 11 of the United States Bankruptcy Code in the United States Bankruptcy Court for the Southern District of New York (the Bankruptcy Court). On January 11, 2021, Garrett accepted, in the bankruptcy proceedings, a revised agreement, originally proposed by Oaktree Capital Management, L.P. (Oaktree) and Centerbridge Partners, L.P. (Centerbridge), in coordination with Honeywell, and subsequently signed by additional equity holders that, collectively with the Company, Oaketree, and Centerbridge, represent approximately 58% of Garrett's outstanding common stock and noteholders representing approximately 88% of the principal amount outstanding on Garrett's senior notes (the Final COH Plan). Based on the Final COH Plan, we believe the present value of payments to us under the Final COH Plan are an appropriate estimate of receivable amounts due in connection with the indemnification and reimbursement agreement and the tax matters agreement. There can be no assurance that the Final COH Plan will be confirmed by the Bankruptcy Court or that Garrett will be able to substantially consummate the restructuring transactions contemplated in the Final COH Plan. The ultimate outcome of the bankruptcy process is uncertain. Should any of these assumptions change and depending on the transaction and/or plan of reorganization ultimately approved by the Bankruptcy Court, the amount collected could differ from the receivable amounts currently recorded in our financial statements. There can be no assurance that recording an additional adjustment (positive or negative) against the remaining receivable amounts in whole or in part (together with a related statement of operations charge) will not be necessary in a future period or periods. See Note 20 Commitments and Contingencies of Notes to Consolidated Financial Statements for further details.

LEGAL AND REGULATORY RISKS

Our U.S. and non-U.S. tax liabilities are dependent, in part, upon the distribution of income among various jurisdictions in which we operate.

Our future results of operations could be adversely affected by changes in the effective tax rate as a result of a change in the mix of earnings in countries with differing statutory tax rates, changes in tax laws, regulations and judicial rulings (or changes in the interpretation thereof), potential taxation of digital services, changes in generally accepted accounting principles, changes in the valuation of deferred tax assets and liabilities, changes in the amount of earnings permanently reinvested offshore, the results of audits and examinations of previously filed tax returns and continuing assessments of our tax exposures and various other governmental enforcement initiatives. Our tax expense includes estimates of tax reserves and reflects other estimates and assumptions, including assessments of future earnings of the Company, which could impact the valuation of our deferred tax assets.

Changes in legislation or government regulations or policies can have a significant impact on our results of operations.

The sales and margins of each of our segments are directly impacted by government regulations, including environmental, safety, performance and product certification regulations. Within Aerospace, the operating results of Commercial Original Equipment and Commercial Aftermarket may be impacted by, among other things, mandates of the Federal Aviation Administration and other similar international regulatory bodies requiring the installation of equipment on aircraft. Our Defense and Space business unit may be affected by changes in government procurement regulations. Within Honeywell Building Technologies and Safety and Productivity Solutions, the demand for and cost of providing products, services and solutions can be impacted by fire, security, safety, health care, environmental and energy efficiency standards and regulations. Performance Materials and Technologies' results of operations can be impacted by environmental standards, regulations, and judicial determinations. Growth in all our businesses within emerging markets may be adversely impacted by the inability to acquire and retain qualified employees where local employment law mandates may be restrictive. Changes in such regulations and government policies could negatively impact us; for instance, noncompliance with legislation and regulations can result in fines and penalties, and compliance with any new regulations or policies may be burdensome and/or require significant expenditures.

Increased public awareness and concern regarding global climate change may result in more international, regional and/or federal or other stakeholder requirements or expectations that could mandate more restrictive or expansive standards, such as stricter limits on greenhouse gas emissions or more prescriptive reporting of environmental, social, and governance metrics, than the voluntary commitments that the Company has adopted or require such changes on a more accelerated time frame. There continues to be a lack of consistent climate legislation, which creates economic and regulatory uncertainty; however, under the new U.S. presidential administration, there likely will be renewed interest in such legislation. If environmental laws or regulations are either changed or adopted and impose significant operational restrictions and compliance requirements upon the Company or its products, they could negatively impact the Company's business, capital expenditures, results of operations, financial condition and competitive position.

We cannot predict with certainty the outcome of litigation matters, government proceedings and other contingencies and uncertainties.

We are subject to a number of lawsuits, investigations and disputes (some of which involve substantial amounts claimed) arising out of the conduct of our business, including matters relating to commercial transactions, government contracts, product liability (including asbestos), prior acquisitions and divestitures, employment, employee benefits plans, intellectual property, antitrust, anti-corruption, accounting, import and export, and environmental, health and safety matters. Our potential liabilities are subject to change over time due to new developments, changes in settlement strategy or the impact of evidentiary requirements, and we may become subject to or be required to pay damage awards or settlements that could have a material adverse effect on our results of operations, cash flows and financial condition. While we maintain insurance for certain risks, the amount of our insurance coverage may not be adequate to cover the total amount of all insured claims and liabilities. The incurrence of significant liabilities for which there is no or insufficient insurance coverage could adversely affect our results of operations, cash flows, liquidity and financial condition.

QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISKS

Information relating to market risks is included within Liquidity and Capital Resources of our Form 10-K under the caption “Financial Instruments”.

LIQUIDITY AND CAPITAL RESOURCES

(Dollars in tables in millions)

We continue to manage our businesses to maximize operating cash flows as the primary source of liquidity. Each of our businesses is focused on increasing operating cash flows through revenue growth, margin expansion and improved working capital turnover. Additional sources of liquidity include committed credit lines, short-term debt from the commercial paper market, long-term borrowings, access to the public debt and equity markets, U.S. cash balances and the ability to access non-U.S. cash as a result of the U.S. Tax Cuts and Jobs Act.

CASH

We monitor the third-party depository institutions that hold our cash and cash equivalents on a daily basis. Our emphasis is primarily safety of principal and secondarily maximizing yield of those funds. We diversify our cash and cash equivalents among counterparties to minimize exposure to any one of these entities. As of December 31, 2020 and 2019, we held $15.2 billion and $10.4 billion, respectively, of cash and cash equivalents, including our short-term investments.

BORROWINGS

Consolidated total borrowings were $22.4 billion and $16.0 billion as of December 31, 2020 and 2019. In response to COVID-19, the Company took several actions during 2020 to secure liquidity in light of the uncertainty in economic conditions and the credit markets, including a $6.0 billion Delayed Draw Term Loan and a total of $7.1 billion raised through Senior Note offerings. See Note 10 Long-term Debt and Credit Agreements of Notes to Consolidated Financial Statements for a summary of the actions taken by the Company to improve our short-term and long-term liquidity position in response to COVID-19.

	December 31,	
	2020	2019
Commercial paper and other short-term borrowings	$ 3,597	$ 3,516
Variable rate notes	1,122	622
Fixed rate notes	17,399	11,586
Other	266	278
Total borrowings	$ 22,384	$ 16,002

A source of liquidity is our ability to access the commercial paper market. Commercial paper notes are sold at a discount or premium and have a maturity of not more than 365 days from date of issuance. Borrowings under the commercial paper program are available for general corporate purposes as well as for financing acquisitions. The weighted average interest rate on commercial paper and other short-term borrowings outstanding was 0.27% and (0.37%) as of December 31, 2020 and 2019.

We also have the following revolving credit agreements:

- A $1.5 billion 364-Day Credit Agreement (the 364-Day Credit Agreement) with a syndicate of banks, dated April 10, 2020. This 364-Day Credit Agreement is maintained for general corporate purposes. The 364-Day Credit Agreement replaced the 364-day credit agreement dated as of April

26, 2019, which was terminated on April 10, 2020. As of December 31, 2020, there were no outstanding borrowings under our 364-Day Credit Agreement.

- A $4.0 billion Five Year Credit Agreement (the 5-Year Credit Agreement) with a syndicate of banks, dated April 26, 2019. This 5-Year Credit Agreement is maintained for general corporate purposes. Commitments under the 5-Year Credit Agreement can be increased pursuant to the terms of the 5-Year Credit Agreement to an aggregate amount not to exceed $4.5 billion. As of December 31, 2020, there were no outstanding borrowings under our 5-Year Credit Agreement.

We also have a current shelf registration statement filed with the SEC under which we may issue additional debt securities, common stock and preferred stock that may be offered in one or more offerings on terms to be determined at the time of the offering. We anticipate that net proceeds of any offering would be used for general corporate purposes, including repayment of existing indebtedness, share repurchases, capital expenditures and acquisitions.

CREDIT RATINGS

Our ability to access the global debt capital markets and the related cost of these borrowings, is affected by the strength of our credit rating and market conditions. Our credit ratings are periodically reviewed by the major independent debt-rating agencies. As of December 31, 2020, S&P, Fitch, and Moody's have ratings on our debt set forth in the table below:

	S&P	Fitch	Moody's
Outlook	Stable	Stable	Stable
Short-term	A-1	F1	P1
Long-term	A	A	A2

CASH FLOW SUMMARY

Our cash flows from operating, investing and financing activities, as reflected in the Consolidated Statement of Cash Flows, are summarized as follows:

	Years Ended December 31,		
	2020	2019	2018
Cash provided by (used for):			
Operating activities	$ 6,208	$ 6,897	$ 6,434
Investing activities	(987)	(533)	1,027
Financing activities	(81)	(6,600)	(5,032)
Effect of exchange rate changes on cash	68	16	(201)
Net increase (decrease) in cash and cash equivalents	$ 5,208	$ (220)	$ 2,228

2020 compared with 2019

Cash provided by operating activities decreased by $689 million primarily due to lower net income of $1,364 million, partially offset by a favorable impact from working capital of $588 million (favorable accounts receivable and inventory, partially offset by accounts payable).

Cash used for investing activities increased by $454 million primarily due to a $251 million increase in payments related to settlements of derivative contracts, $211 million increase in cash paid for acquisitions, net of cash acquired, and $67 million increase in capital expenditures, partially offset by a net decrease in investments of $61 million.

Cash used for financing activities decreased by $6,519 million primarily due to a $7,399 million increase in proceeds from the issuance of long-term debt and a $686 million decrease in repurchases of common stock, partially offset by an increase in payments of long-term debt of $1,405 million.

CASH REQUIREMENTS AND ASSESSMENT OF CURRENT LIQUIDITY

In addition to our normal operating cash requirements, our principal future cash requirements will be to fund capital expenditures, share repurchases, dividends, strategic acquisitions and debt repayments. Specifically, we expect our primary cash requirements in 2021 to be as follows:

- Capital expenditures—we expect to spend approximately $1 billion for capital expenditures in 2021 primarily for growth, production and capacity expansion, implementation of cost reduction measures, maintenance, and replacement.

- Share repurchases—under our share repurchase program, $3.3 billion was available as of December 31, 2020 for additional share repurchases. We expect to repurchase outstanding shares from time to time to offset the dilutive impact of employee stock-based compensation plans, including option exercises, restricted unit vesting and matching contributions under our savings plans. Additionally, we will seek to reduce share count via share repurchases as and when attractive opportunities arise. The amount and timing of future repurchases may vary depending on market conditions and our level of operating, financing and other investing activities.
- Dividends—we increased our quarterly dividend rate by 3% to $0.93 per share of common stock effective with the fourth quarter 2020 dividend. We intend to continue to pay quarterly dividends in 2021.

We continue to identify opportunities to improve our liquidity and working capital efficiency, which includes the extension of payment terms with our suppliers. In addition, multiple third-party financial institutions offer a voluntary supply chain financing (SCF) program which enables our suppliers, at their sole discretion, to sell their receivables from the Company to these financial institutions on terms that are negotiated between the supplier and the respective financial institution. We agree on commercial terms for the goods and services we procure from our suppliers, including prices, quantities and payment terms, regardless of whether the supplier elects to participate in the SCF program. Our suppliers' voluntary participation in the SCF program has no bearing on our payment terms and we have no economic interest in a supplier's decision to participate in the SCF program.

Amounts due to our suppliers that elected to participate in the SCF programs are included in Accounts payable on the Consolidated Balance Sheet. At December 31, 2020, Accounts payable included $0.6 billion payable to suppliers who have elected to participate in the SCF program. Amounts settled with third-party financial institutions through the SCF program increased $0.5 billion for the year ended December 31, 2020. The increase for the year ended December 31, 2020 reflects a combination of an extension of payment terms with suppliers and increased utilization of our SCF program. All activity related to amounts due to suppliers that elected to participate in the SCF program is reflected in cash flows from operating activities in our Consolidated Statement of Cash Flows. While access to SCF could decrease if our credit ratings are downgraded, we do not believe that changes in the availability of SCF will have a significant impact on our liquidity. The impact of this program is not material to our overall liquidity.

We sell trade receivables to unaffiliated financial institutions without recourse. Transfers of the receivables are accounted for as sales and, accordingly, receivables sold are excluded from Accounts receivable—net on the Consolidated Balance Sheet and are reflected in cash flows from operating activities on the Consolidated Statement of Cash Flows. The difference between the carrying amount of the trade receivables sold and the cash received is recorded in Cost of products and services sold on the Consolidated Statement of Operations. Amounts settled with third-party financial institutions related to accounts receivable factoring were not material for the year ended December 31, 2020, and the impact of this program is not material to our overall liquidity.

Finally, we continue to assess the relative strength of each business in our portfolio as to strategic fit, market position, profit and cash flow contribution in order to identify target investment and acquisition opportunities in order to upgrade our combined portfolio. We identify acquisition candidates that will further our strategic plan and strengthen our existing core businesses. We also identify businesses that do not fit into our long-term strategic plan based on their market position, relative profitability or growth potential. These businesses are considered for potential divestiture, restructuring or other repositioning actions, subject to regulatory constraints.

Based on past performance and current expectations, we believe that our operating cash flows will be sufficient to meet our future operating cash needs. Our available cash, committed credit lines and access to the public debt and equity markets provide additional sources of short-term and long-term liquidity to fund current operations, debt maturities, and future investment opportunities.

See Note 10 Long-term Debt and Credit Agreements of Notes to Consolidated Financial Statements for additional discussion of items impacting our liquidity.

CONTRACTUAL OBLIGATIONS

Following is a summary of our significant contractual obligations and probable liability payments at December 31, 2020:

		Payments by Period			
	Total[(6)(7)]	2021	2022 - 2023	2024 - 2025	Thereafter
Long-term debt, including finance leases[(1)]	$ 18,787	$ 2,445	$ 6,102	$ 2,647	$ 7,593
Interest payments on long-term debt, including finance leases	3,674	372	624	507	2,171
Operating lease liabilities	913	204	306	172	231
Purchase obligations[(2)]	3,595	1,374	1,204	559	458
Estimated environmental liability payments[(3)]	660	225	213	181	41
Asbestos related liability payments[(4)]	2,220	300	495	397	1,028
Asbestos insurance recoveries[(5)]	(402)	(36)	(89)	(70)	(207)
	$ 29,447	$ 4,884	$ 8,855	$ 4,393	$ 11,315

(1) Assumes all long-term debt is outstanding until scheduled maturity.

(2) Purchase obligations are entered into with various vendors in the normal course of business and are consistent with our expected requirements. This includes leases that were entered into and had not yet commenced as of December 31, 2020.

(3) The payment amounts in the table only reflect the environmental liabilities which are probable and reasonably estimable as of December 31, 2020.

(4) These amounts are estimates of asbestos related cash payments for NARCO and Bendix based on our asbestos related liabilities which are probable and reasonably estimable as of December 31, 2020. See Asbestos Matters in Note 20 Commitments and Contingencies of Notes to Consolidated Financial Statements for additional information.

(5) These amounts represent our insurance recoveries that are deemed probable for asbestos related liabilities as of December 31, 2020. See Asbestos Matters in Note 20 Commitments and Contingencies of Notes to Consolidated Financial Statements for additional information.

(6) The table excludes tax liability payments, including those for unrecognized tax benefits. See Note 5 Income Taxes of Notes to Consolidated Financial Statements for additional information.

(7) The table excludes expected proceeds from the indemnification and reimbursement agreements entered into with Garrett and Resideo. See Note 20 Commitments and Contingencies of Notes to Consolidated Financial Statements for additional information.

ASBESTOS MATTERS

Payments, net of insurance recoveries, related to known asbestos matters were $229 million, $163 million and $216 million for the years ended December 31, 2020, 2019 and 2018 and are estimated to be approximately $264 million in 2021. We expect to pay these asbestos matters from operating cash flows.

The timing of these payments depends on several factors, including the timing of litigation and settlements of liability claims.

Reimbursements from Garrett primarily for asbestos-related liability payments related to the Bendix business in the U.S., as defined in our indemnification and reimbursement agreement with Garrett, were $36 million in 2020. See Note 20 Commitments and Contingencies of Notes to Consolidated Financial Statements for further discussion of our asbestos matters and Garrett.

ENVIRONMENTAL MATTERS

Accruals during the year for environmental matters deemed probable and reasonably estimable were $173 million, $213 million and $395 million for the years ended December 31, 2020, 2019 and 2018. In addition, for the years ended December 31, 2020, 2019 and 2018, we incurred operating costs for ongoing businesses of approximately $88 million, $99 million and $95 million relating to compliance with environmental regulations.

Payments related to known environmental matters were $216 million, $256 million and $218 million for the years ended December 31, 2020, 2019 and 2018 and are estimated to be approximately $225 million in 2021. We expect to pay these environmental matters from operating cash flows. The timing of these payments depends on several factors, including the timing of litigation and settlements of remediation liability, personal injury and property damage claims, regulatory approval of cleanup projects, execution timeframe of projects, remedial techniques to be utilized and agreement with other parties.

Reimbursements from Resideo for payments related to environmental matters at certain sites, as defined in the indemnification and reimbursement agreement, were $140 million in 2020 and are expected to be $140 million in 2021. We received $35 million in reimbursement payments from Resideo in January 2021.

See Note 20 Commitments and Contingencies of Notes to Consolidated Financial Statements for further discussion of our environmental matters and the indemnification and reimbursement agreement entered into with Resideo.

FINANCIAL INSTRUMENTS

The Company uses derivative financial instruments to reduce our risks from interest and foreign currency exchange rate fluctuations. Derivative financial instruments are not used for trading or other speculative purposes and we do not use leveraged derivative financial instruments.

The following table illustrates the potential change in fair value for interest rate sensitive instruments based on a hypothetical immediate one percentage point increase in interest rates across all maturities and the potential change in fair value for foreign exchange rate sensitive instruments based on a 10% weakening of the U.S. Dollar versus local currency exchange rates across all maturities at December 31, 2020 and 2019.

	Face or Notional Amount	Carrying Value[1]	Fair Value[1]	Estimated Increase (Decrease) in Fair Value[2]
December 31, 2020				
Interest Rate Sensitive Instruments				
Long-term debt (including current maturities)	$ 18,787	$ (18,787)	$ (20,176)	$ (1,063)
Interest rate swap agreements	3,950	194	194	(148)
Foreign Exchange Rate Sensitive Instruments				
Foreign currency exchange contracts[3]	16,123	52	52	(334)
Cross currency swap agreements	1,200	(50)	(50)	(125)
December 31, 2019				
Interest Rate Sensitive Instruments				
Long-term debt (including current maturities)	$ 12,486	$ (12,486)	$ (13,578)	$ (677)
Interest rate swap agreements	3,950	25	25	(72)
Foreign Exchange Rate Sensitive Instruments				
Foreign currency exchange contracts[3]	12,746	270	270	(676)
Cross currency swap agreements	1,200	51	51	(115)

(1) Asset or (liability).

(2) A hypothetical immediate one percentage point decrease in interest rates across all maturities and a potential change in fair value of foreign exchange rate sensitive instruments based on a 10% strengthening of the U.S. dollar versus local currency exchange rates across all maturities will result in a change in fair value approximately equal to the inverse of the amount disclosed in the table.

(3) Changes in the fair value of foreign currency exchange contracts are offset by changes in the fair value, cash flows, or net investments of underlying hedged foreign currency transactions or foreign operations.

See Note 12 Derivative Instruments and Hedging Transactions to Consolidated Financial Statements for further discussion.

CRITICAL ACCOUNTING ESTIMATES

The preparation of our consolidated financial statements in accordance with generally accepted accounting principles is based on the selection and application of accounting policies that require us to make significant estimates and assumptions about the effects of matters that are inherently uncertain. Many estimates and assumptions involved in the application of accounting principles have a material impact on reported financial condition and operating performance and on the comparability of such reported information over different reporting periods. Critical accounting estimates or assumptions are those where the nature of the estimates or assumptions is material due to the levels of subjectivity and judgment necessary to account for highly uncertain matters or the susceptibility of such matters to change, and the impact of the estimates and assumptions on financial condition or operating performance is material. We consider the estimates and assumptions discussed below to be critical to the understanding of our financial statements. Actual results could differ from our estimates and assumptions, and any such differences could be material to our consolidated financial statements.

Sales Recognition on Long-Term Contracts—We recognize sales for long-term contracts with performance obligations satisfied over time using either an input or output method. We recognize revenue over time as we perform on these contracts based on the continuous transfer of control to the customer. With control transferring over time, revenue is recognized based on the extent of progress towards completion of the performance obligation. We generally use the cost-to-cost input method of progress for our contracts because it best depicts the transfer of control to the customer that occurs as we incur costs. Under the cost-to-cost method, the extent of progress towards completion is measured based on the proportion of costs incurred to date to the total estimated costs at completion of the performance obligation. Due to the nature of the work required to be performed on many of our performance obligations, the estimation of total revenue and cost at completion requires judgment. Contract revenues are largely determined by negotiated contract prices and quantities, modified by our assumptions regarding contract options, change orders, incentive and award provisions associated with technical performance and price adjustment clauses (such as inflation or index-based clauses). Cost estimates are largely based on negotiated or estimated purchase contract terms, historical performance trends and other economic projections. Significant factors that influence these estimates include inflationary trends, technical and schedule risk, internal and subcontractor performance trends, business volume assumptions, asset utilization, and anticipated labor agreements. Revenue and cost estimates are regularly monitored and revised based on changes in circumstances. Impacts from changes in estimates of net sales and cost of sales are recognized on a cumulative catch-up basis, which recognizes in the current period the cumulative effect of the changes on current and prior periods based on a performance obligation’s percentage of completion. Anticipated losses on long-term contracts are recognized when such losses become evident. We maintain financial controls over the customer qualification, contract pricing and estimation processes to reduce the risk of contract losses.

Income Taxes—On a recurring basis, we assess the need for a valuation allowance against our deferred tax assets by considering all available positive and negative evidence, such as past operating results, projections of future taxable income, enacted tax law changes and the feasibility and impact of tax planning initiatives. Our projections of future taxable income include a number of estimates and assumptions regarding our volume, pricing and costs, as well as the timing and amount of reversals of taxable temporary differences.

We recognize tax benefits from uncertain tax positions only if it is more likely than not that the tax position will be sustained on examination by the taxing authorities, including resolution of any related appeals and litigation. We assess our income tax positions based upon our evaluation of the facts, circumstances and information available at the reporting date. The tax benefits recognized in the financial statements from such positions are then measured based on the largest benefit that has a greater than 50% likelihood of being realized upon ultimate settlement with a taxing authority that has full knowledge of all relevant information. For those income tax positions where it is not more likely than not that a tax benefit will be sustained, no tax benefit has been recognized in the financial statements.

For further discussion of additional income tax policies, see Note 1 Summary of Significant Accounting Policies of Notes to Consolidated Financial Statements.

Reimbursement Receivables—In conjunction with the Garrett and Resideo spin-offs, the Company entered into reimbursement agreements under which Honeywell receives cash payments as reimbursement primarily for asbestos related liability payments related to the Bendix business in the U.S. (Garrett) and for net spending for environmental matters at certain sites as defined in the agreement (Resideo). Accordingly, the Company recorded receivables based on estimates of the underlying reimbursable Honeywell asbestos and environmental spend, and we monitor the recoverability of such receivables, which are subject to the terms of applicable credit agreements and general ability to pay. For Garrett, the Company established an allowance based on the developments associated with Garrett's Chapter 11 bankruptcy filing. See Note 20 Commitments and Contingencies of Notes to Consolidated Financial Statements for a discussion of the recognition and measurement of our reimbursement receivables, including the allowance established for Garrett.

Goodwill and Indefinite-Lived Intangible Assets Impairment Testing—Goodwill and intangible assets deemed to have indefinite lives are not amortized, but are subject to annual, or more frequent if necessary, impairment testing. In testing goodwill and indefinite-lived intangible assets, the fair value is estimated utilizing a discounted cash flow approach utilizing cash flow forecasts, including strategic and annual operating plans, adjusted for terminal value assumptions. These impairment tests involve the use of accounting estimates and assumptions, changes in which could materially impact our financial condition or operating performance if actual results differ from such estimates and assumptions. To address this uncertainty, we perform sensitivity analyses on key estimates and assumptions. Once the fair value is determined, if the carrying amount exceeds the fair value, it is impaired. Any impairment is measured as the difference between the carrying amount and its fair value.

Finite-Lived Intangible Assets—The determination of useful lives (for depreciation/amortization purposes) and whether or not intangible assets are impaired involves the use of accounting estimates and assumptions, changes in which could materially impact our financial condition or operating performance if actual results differ from such estimates and assumptions. We evaluate the recoverability of the carrying amount of our finite-lived intangible assets whenever events or changes in circumstances indicate that the carrying amount of a finite-lived intangible asset group may not be fully recoverable. The principal factors in considering when to perform an impairment review are as follows:

- Significant under-performance (i.e., declines in sales, earnings or cash flows) of a business or product line in relation to expectations;
- Annual operating plans or strategic plan outlook that indicate an unfavorable trend in operating performance of a business or product line;
- Significant negative industry or economic trends; or
- Significant changes or planned changes in our use of the assets.

Once it is determined that an impairment review is necessary, recoverability of assets is measured by comparing the carrying amount of the asset grouping to the estimated future undiscounted cash flows. If the carrying amount exceeds the estimated future undiscounted cash flows, the asset grouping is considered to be impaired. The impairment is then measured as the difference between the carrying amount of the asset grouping and its fair value. We endeavor to utilize the best information available to measure fair value, which is usually either market prices (if available), level 1 or level 2 of the fair value hierarchy, or an estimate of the future discounted cash flow, level 3 of the fair value hierarchy. The key estimates in our discounted cash flow analysis include assumptions as to expected industry and business growth rates, sales volume, selling prices and costs, cash flows, and the discount rate selected. These estimates are subject to changes in the economic environment, including market interest rates and expected volatility. Management believes the estimates of future cash flows and fair values are reasonable; however, changes in estimates due to variance from assumptions could materially affect the valuations.

Defined Benefit Pension Plans—We sponsor both funded and unfunded U.S. and non-U.S. defined benefit pension plans. For financial reporting purposes, net periodic pension (income) expense is calculated annually based upon various actuarial assumptions, including a discount rate for plan obligations and an expected long-term rate of return on plan assets. Changes in the discount rate and expected long-term rate of return on plan assets could materially affect the annual pension (income) expense amount. Annual pension (income) expense is comprised of service and interest cost, assumed return on plan assets, prior service amortization (Pension Ongoing (Income) Expense) and a potential mark-to-market adjustment (MTM Adjustment).

The key assumptions used in developing our net periodic pension (income) expense for our U.S. plans included the following:

	2020	2019	2018
Discount Rate:			
Projected benefit obligation	3.22 %	4.35 %	3.68 %
Service cost	3.33 %	4.47 %	3.77 %
Interest cost	2.76 %	3.94 %	3.27 %
Assets:			
Expected rate of return	6.15 %	6.75 %	7.75 %
Actual rate of return	13.8 %	21.2 %	(1.8)%
Actual 10 year average annual compounded rate of return	10.6 %	11.1 %	11.0 %

The MTM Adjustment represents the recognition of net actuarial gains or losses in excess of 10% of the greater of the fair value of plan assets or the plans' projected benefit obligation (the corridor). Net actuarial gains and losses occur when the actual experience differs from any of the various assumptions used to value our pension plans or when assumptions change. The primary factors contributing to actuarial gains and losses are changes in the discount rate used to value pension obligations as of the measurement date each year and the difference between expected and actual returns on plan assets. The mark-to-market accounting method results in the potential for volatile and difficult to forecast MTM Adjustments. MTM Adjustments were $44 million, $123 million and $37 million for the years ended December 31, 2020, 2019 and 2018.

We determine the expected long-term rate of return on plan assets utilizing historical plan asset returns over varying long-term periods combined with our expectations of future market conditions and asset mix considerations (see Note 21 Pension and Other Postretirement Benefits of Notes to Consolidated Financial Statements for details on the actual various asset classes and targeted asset allocation percentages for our pension plans). We plan to use an expected rate of return on plan assets of 6.15% for 2021, matching the assumption used for 2020.

The discount rate reflects the market rate on December 31 (measurement date) for high-quality fixed-income investments with maturities corresponding to our benefit obligations and is subject to change each year. The discount rate can be volatile from year to year as it is determined based upon prevailing interest rates as of the measurement date. We used a 2.50% discount rate to determine benefit obligations as of December 31, 2020, reflecting a decrease in the market interest rate environment since the prior year-end.

In addition to the potential for MTM Adjustments, changes in our expected rate of return on plan assets and discount rate resulting from economic events also affects future pension ongoing (income) expense. The following table highlights the sensitivity of our U.S. pension obligations and ongoing (income) expense to changes in these assumptions, assuming all other assumptions remain constant. These estimates exclude any potential MTM Adjustment:

Change in Assumption	Impact on 2021 Pension Ongoing Expense	Impact on PBO
0.25 percentage point decrease in discount rate	Decrease $32 million	Increase $520 million
0.25 percentage point increase in discount rate	Increase $30 million	Decrease $500 million
0.25 percentage point decrease in expected rate of return on assets	Increase $50 million	—
0.25 percentage point increase in expected rate of return on assets	Decrease $50 million	—

Pension ongoing income for our world-wide pension plans is expected to be approximately $1,046 million in 2021 compared with pension ongoing income of $785 million in 2020. The expected increase in pension income is primarily due to higher expected return on plan assets due to strong asset returns in our U.S. and UK plans in 2020, and lower interest cost from a decrease in discount rates in our U.S. and UK plans. Also, if required, a MTM Adjustment will be recorded in the fourth quarter of 2021 in accordance with our pension accounting method as previously described. It is difficult to reliably forecast or predict whether there will be a MTM Adjustment in 2021, and if one is required, what the magnitude of such adjustment will be. MTM Adjustments are primarily driven by events and circumstances beyond the control of the Company such as changes in interest rates and the performance of the financial markets.

Asbestos Related Liabilities and Insurance Recoveries—In connection with the recognition of liabilities for asbestos related matters, we record asbestos related insurance recoveries that are deemed probable. In assessing the probability of insurance recovery, we make judgments concerning insurance coverage that we believe are reasonable and consistent with our historical dealings and our knowledge of any pertinent solvency issues surrounding insurers. While the substantial majority of our insurance carriers are solvent, some of our individual carriers are insolvent, which has been considered in our analysis of probable recoveries. Projecting future events is subject to various uncertainties that could cause the insurance recovery on asbestos related liabilities to be higher or lower than that projected and recorded. Given the inherent uncertainty in making future projections, we reevaluate our projections concerning our probable insurance recoveries considering any changes to the projected liability, our recovery experience or other relevant factors that may impact future insurance recoveries.

Our involvement in asbestos related personal injury actions relates to two predecessor companies. Regarding North American Refractories Company (NARCO) asbestos related claims, we estimate our NARCO asbestos liability for the resolution of asserted Narco-related asbestos claims which qualify for payment under the NARCO Trust Distribution Procedures (Annual Contribution Claims) and for amounts owed pursuant to settlement agreements reached during the pendency of the NARCO bankruptcy proceedings that provide for the right to submit claims to the NARCO Trust subject to qualification under the terms of the settlement agreements and Trust Distribution Procedures (Pre-Established Unliquidated Claims) using average payment values for the relevant historical period. We estimate our NARCO asbestos liability for unasserted claims based on historic and anticipated claims filing experience and payment rates, disease classifications and type of claim, and average payment values by the NARCO Trust for the relevant historical period. Our estimate also includes all years of epidemiological disease projection through 2059. Regarding Bendix Friction Materials (Bendix) asbestos related claims, we accrued for the estimated value of pending claims using average resolution values for the previous five years. We also accrued for the estimated value of future claims related to Bendix over the full term of epidemiological disease projection through 2059 based on historic and anticipated claims filing experience and dismissal rates, disease classifications, and average resolution values in the tort system for the previous five years. We update our assumptions on average payment values and average resolution values in the fourth quarter of each year.

See Note 20 Commitments and Contingencies of Notes to Consolidated Financial Statements for a discussion of management’s judgments applied in the recognition and measurement of our asbestos related liabilities and related insurance recoveries.

Contingent Liabilities—We are subject to a number of lawsuits, investigations and claims (some of which involve substantial dollar amounts) that arise out of the conduct of our global business operations or those of previously owned entities, including matters relating to commercial transactions, government contracts, product liability (including asbestos), prior acquisitions and divestitures, employee benefit plans, intellectual property, legal and environmental, health and safety matters. We continually assess the likelihood of any adverse judgments or outcomes to our contingencies, as well as potential amounts or ranges of probable losses, and recognize a liability, if any, for these contingencies based on a thorough analysis of each matter with the assistance of outside legal counsel and, if applicable, other experts. Such analysis includes making judgments concerning matters such as the costs associated with environmental matters, the outcome of negotiations, the number and cost of pending and future asbestos claims, and the impact of evidentiary requirements. Because most contingencies are resolved over long periods of time, liabilities may change in the future due to new developments (including new discovery of facts, changes in legislation and outcomes of similar cases through the judicial system), changes in assumptions or changes in our settlement strategy. See Note 20 Commitments and Contingencies of Notes to Consolidated Financial Statements for a discussion of management’s judgment applied in the recognition and measurement of our environmental and asbestos liabilities which represent our most significant contingencies.

OTHER MATTERS

LITIGATION

See Note 20 Commitments and Contingencies of Notes to Consolidated Financial Statements for a discussion of environmental, asbestos and other litigation matters.

RECENT ACCOUNTING PRONOUNCEMENTS

See Note 1 Summary of Significant Accounting Policies of Notes to Consolidated Financial Statements for a discussion of recent accounting pronouncements.

INFORMATION ABOUT OUR EXECUTIVE OFFICERS

The executive officers of Honeywell, listed as follows, are elected annually by the Board of Directors. There are no family relationships among them.

Name, Age, Year First Elected an Executive Officer	Business Experience
Darius Adamczyk, 55 2017[(a)]	Chairman of the Board and Chief Executive Officer since April 2018. President and Chief Executive Officer from April 2017 to April 2018. Chief Operating Officer from April 2016 to March 2017. President and Chief Executive Officer Performance Materials and Technologies from April 2014 to April 2016. President of Honeywell Process Solutions from April 2012 to April 2014.
Que Thanh Dallara, 47 2018	President and Chief Executive Officer, Connected Enterprise since October 2018. Vice President and Chief Commercial Officer from January 2017 to October 2018. From 2007 to 2016, Ms. Dallara served in multiple leadership positions at TE Connectivity Ltd., most recently as Senior Vice President, Corporate Strategy and Analytics.
Rajeev Gautam, 68 2016	President and Chief Executive Officer, Performance Materials and Technologies since April 2016. President of Honeywell UOP from January 2009 to April 2016.
Vimal Kapur, 55 2018	President and Chief Executive Officer, Honeywell Building Technologies since May 2018. President of Honeywell Process Solutions from 2014 to May 2018.
Gregory P. Lewis, 53 2018	Senior Vice President and Chief Financial Officer since August 2018. Vice President of Enterprise Information Management from October 2016 to April 2018, prior to being named Vice President, Corporate Finance in May 2018. Chief Financial Officer of Automation and Control Solutions from April 2013 to September 2016.
Anne T. Madden, 56 2017	Senior Vice President and General Counsel since October 2017. Corporate Secretary from February 2018 to September 2019. Vice President of Corporate Development and Global Head of M&A from January 2002 to October 2017.
Michael R. Madsen, 57	President and Chief Executive

(a) Also a Director.

UNRESOLVED STAFF COMMENTS

None.

PROPERTIES

We have approximately 834 locations, of which 226 are manufacturing sites. Our properties and equipment are in good operating condition and are adequate for our present needs. We do not anticipate difficulty in renewing existing leases as they expire or in finding alternative facilities.

LEGAL PROCEEDINGS

We are subject to a number of lawsuits, investigations and claims (some of which involve substantial amounts) arising out of the conduct of our business. See a discussion of environmental, asbestos and other litigation matters in Note 20 Commitments and Contingencies of Notes to Consolidated Financial Statements.

There were no matters requiring disclosure pursuant to the requirement to disclose certain environmental matters involving potential monetary sanctions in excess of $300,000.

MINE SAFETY DISCLOSURES

One of our wholly-owned subsidiaries has a placer claim for and operates a chabazite ore surface mine in Arizona. Information concerning mine safety and other regulatory matters associated with this mine is required by Section 1503(a) of the Dodd-Frank Wall Street Reform and Consumer Protection Act and Item 104 of Regulation S-K and is included in Exhibit 95 to this Form 10-K.

MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

Our common stock is listed on the New York Stock Exchange under the ticker symbol “HON”. Dividend information for Honeywell’s common stock is included in Note 26 Unaudited Quarterly Financial Information of Notes to Consolidated Financial Statements. We increased our quarterly dividend rate by 3% to $0.93 per share of common stock effective with the fourth quarter 2020 dividend. We intend to continue to pay quarterly dividends in 2021.

The number of record holders of our common stock at December 31, 2020 was 42,205.

Information regarding securities authorized for issuance under equity compensation plans is included the section titled Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters under the caption “Equity Compensation Plans.”

We purchased 7,619,919 shares of our common stock, par value $1 per share, in the quarter ending December 31, 2020. On April 29, 2019, the Board of Directors authorized the repurchase of up to a total of $10 billion of Honeywell common stock, which included amounts remaining under, and replaced, the previously approved share repurchase program. As of December 31, 2020, $3.3 billion remained available for additional share repurchases. We expect to repurchase outstanding shares from time to time to generally offset the dilutive impact of employee stock-based compensation plans, including option exercises, restricted unit vesting and matching contributions under our savings plans. Additionally, we seek to reduce share count via share repurchases as and when attractive opportunities arise. The amount and timing of future repurchases may vary depending on market conditions and the level of our operating, financing and other investing activities.

The following table summarizes our purchases of Honeywell's common stock for the three months ended December 31, 2020:

Issuer Purchases of Equity Securities

Period	Total Number of Shares Purchased	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Approximate Dollar Value of Shares that May Yet be Purchased Under Plans or Programs (Dollars in millions)
October 1 - 31, 2020	—	$ —	—	$ 4,841
November 1 - 30, 2020	2,430,000	$ 198.09	2,430,000	$ 4,360
December 1 - 31, 2020	5,189,919	$ 208.96	5,189,919	$ 3,275

PERFORMANCE GRAPH

The following graph compares the five-year cumulative total return on our common stock to the total returns on the Standard & Poor's (S&P) 500 Stock Index and a composite of S&P's Industrial Conglomerates and Aerospace and Defense indices, on a 55%/45% weighted basis (the Composite Index). The weighting of the components of the Composite Index are based on our segments' relative contribution to total segment profit. The selection of the Industrial Conglomerates component of the Composite Index reflects the diverse and distinct range of non-aerospace businesses conducted by Honeywell. The annual changes for the five-year period shown in the graph are based on the assumption that $100 was invested in Honeywell stock and each index on December 31, 2015 and that all dividends were reinvested.

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	Dec. 2015	Dec. 2016	Dec. 2017	Dec. 2018	Dec. 2019	Dec. 2020
Honeywell	100	114.98	155.34	142.57	194.89	239.66
S&P 500 Index	100	111.96	136.40	130.42	171.49	203.04
Composite Index	100	113.33	129.15	105.37	134.31	132.19

FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

HONEYWELL INTERNATIONAL INC.
CONSOLIDATED STATEMENT OF OPERATIONS

	Years Ended December 31,		
	2020	2019	2018
	(Dollars in millions, except per share amounts)		
Product sales	$ 24,737	$ 27,629	$ 32,848
Service sales	7,900	9,080	8,954
Net sales	32,637	36,709	41,802
Costs, expenses and other			
Cost of products sold	17,638	19,269	23,634
Cost of services sold	4,531	5,070	5,412
	22,169	24,339	29,046
Selling, general and administrative expenses	4,772	5,519	6,051
Other (income) expense	(675)	(1,065)	(1,149)
Interest and other financial charges	359	357	367
	26,625	29,150	34,315
Income before taxes	6,012	7,559	7,487
Tax expense	1,147	1,329	659
Net income	4,865	6,230	6,828
Less: Net income attributable to the noncontrolling interest	86	87	63
Net income attributable to Honeywell	$ 4,779	$ 6,143	$ 6,765
Earnings per share of common stock—basic	$ 6.79	$ 8.52	$ 9.10
Earnings per share of common stock—assuming dilution	$ 6.72	$ 8.41	$ 8.98

The Notes to Consolidated Financial Statements are an integral part of this statement.

HONEYWELL INTERNATIONAL INC.
CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

	Years Ended December 31,		
	2020	2019	2018
	(Dollars in millions)		
Net income	$ 4,865	$ 6,230	$ 6,828
Other comprehensive income (loss), net of tax			
Foreign exchange translation adjustment	(211)	143	(685)
Actuarial gains (losses) recognized	91	162	(602)
Prior service credit (cost) recognized	47	1	2
Prior service credit recognized during year	(82)	(79)	(74)
Actuarial (gains) losses recognized during year	41	16	35
Settlements and curtailments	—	—	2
Foreign exchange translation and other	(23)	(14)	31
Pensions and other postretirement benefit adjustments	74	86	(606)
Changes in fair value of available for sale investments	4	—	—
Cash flow hedges recognized in other comprehensive income	10	103	89
Less: Reclassification adjustment for gains (losses) included in net income	54	92	4
Changes in fair value of cash flow hedges	(44)	11	85
Other comprehensive income (loss), net of tax	(177)	240	(1,206)
Comprehensive income	4,688	6,470	5,622
Less: Comprehensive income attributable to the noncontrolling interest	89	82	53
Comprehensive income attributable to Honeywell	$ 4,599	$ 6,388	$ 5,569

The Notes to Consolidated Financial Statements are an integral part of this statement.

HONEYWELL INTERNATIONAL INC.
CONSOLIDATED BALANCE SHEET

	December 31, 2020	December 31, 2019
	(Dollars in millions)	
ASSETS		
Current assets:		
Cash and cash equivalents	$ 14,275	$ 9,067
Short-term investments	945	1,349
Accounts receivable—net	6,827	7,493
Inventories	4,489	4,421
Other current assets	1,639	1,973
Total current assets	28,175	24,303
Investments and long-term receivables	685	588
Property, plant and equipment—net	5,570	5,325
Goodwill	16,058	15,563
Other intangible assets—net	3,560	3,734
Insurance recoveries for asbestos related liabilities	366	392
Deferred income taxes	760	86
Other assets	9,412	8,688
Total assets	$ 64,586	$ 58,679
LIABILITIES		
Current liabilities:		
Accounts payable	$ 5,750	$ 5,730
Commercial paper and other short-term borrowings	3,597	3,516
Current maturities of long-term debt	2,445	1,376
Accrued liabilities	7,405	7,476
Total current liabilities	19,197	18,098
Long-term debt	16,342	11,110
Deferred income taxes	2,113	1,670
Postretirement benefit obligations other than pensions	242	326
Asbestos related liabilities	1,920	1,996
Other liabilities	6,975	6,766
Redeemable noncontrolling interest	7	7
SHAREOWNERS' EQUITY		
Capital—common stock issued	958	958
—additional paid-in capital	7,292	6,876
Common stock held in treasury, at cost	(27,229)	(23,836)
Accumulated other comprehensive income (loss)	(3,377)	(3,197)
Retained earnings	39,905	37,693
Total Honeywell shareowners' equity	17,549	18,494
Noncontrolling interest	241	212
Total shareowners' equity	17,790	18,706
Total liabilities, redeemable noncontrolling interest and shareowners' equity	$ 64,586	$ 58,679

The Notes to Consolidated Financial Statements are an integral part of this statement.

HONEYWELL INTERNATIONAL INC.
CONSOLIDATED STATEMENT OF CASH FLOWS

	Years Ended December 31,		
	2020	2019	20
	(Dollars in millions)		
Cash flows from operating activities:			
Net income	$ 4,865	$ 6,230	$
Less: Net income attributable to the noncontrolling interest	86	87	
Net income attributable to Honeywell	4,779	6,143	
Adjustments to reconcile net income attributable to Honeywell to net cash provided by operating activities:			
Depreciation	644	673	
Amortization	358	415	
Repositioning and other charges	575	546	
Net payments for repositioning and other charges	(833)	(376)	
Pension and other postretirement income	(798)	(516)	
Pension and other postretirement benefit payments	(47)	(78)	
Stock compensation expense	168	153	
Deferred income taxes	(175)	179	
Reimbursement receivables charge	509	—	
Other	(335)	(286)	
Changes in assets and liabilities, net of the effects of acquisitions and divestitures:			
Accounts receivable	669	11	
Inventories	(67)	(100)	
Other current assets	191	(430)	
Accounts payable	15	118	
Accrued liabilities	555	445	
Net cash provided by (used for) operating activities	6,208	6,897	
Cash flows from investing activities:			
Expenditures for property, plant and equipment	(906)	(839)	
Proceeds from disposals of property, plant and equipment	57	43	
Increase in investments	(3,236)	(4,253)	
Decrease in investments	3,508	4,464	
Receipts (payments) from settlements of derivative contracts	(149)	102	
Cash paid for acquisitions, net of cash acquired	(261)	(50)	
Net cash provided by (used for) investing activities	(987)	(533)	
Cash flows from financing activities:			
Proceeds from issuance of commercial paper and other short-term borrowings	10,474	14,199	
Payments of commercial paper and other short-term borrowings	(10,400)	(14,199)	(
Proceeds from issuance of common stock	393	498	
Proceeds from issuance of long-term debt	10,125	2,726	
Payments of long-term debt	(4,308)	(2,903)	
Repurchases of common stock	(3,714)	(4,400)	
Cash dividends paid	(2,592)	(2,442)	
Pre-separation funding	—	—	
Spin-off cash	—	—	
Other	(59)	(79)	
Net cash provided by (used for) financing activities	(81)	(6,600)	
Effect of foreign exchange rate changes on cash and cash equivalents	68	16	

The Notes to Consolidated Financial Statements are an integral part of this statement.

HONEYWELL INTERNATIONAL INC.
CONSOLIDATED STATEMENT OF SHAREOWNERS' EQUITY

	Years Ended December 31,					
	2020		2019		2018	
	Shares	$	Shares	$	Shares	$
	(in millions, except per share amounts)					
Common stock, par value	957.6	958	957.6	958	957.6	958
Additional paid-in capital						
Beginning balance		6,876		6,452		6,212
Issued for employee savings and option plans		248		271		65
Stock-based compensation expense		168		153		175
Ending balance		7,292		6,876		6,452
Treasury stock						
Beginning balance	(246.5)	(23,836)	(228.0)	(19,771)	(206.7)	(15,914)
Reacquired stock or repurchases of common stock	(20.7)	(3,714)	(26.5)	(4,400)	(26.5)	(4,000)
Issued for employee savings and option plans	6.4	321	8.0	335	5.2	143
Ending balance	(260.8)	(27,229)	(246.5)	(23,836)	(228.0)	(19,771)
Retained earnings						
Beginning balance		37,693		33,978		27,481
Adoption of new accounting standards		—		—		264
Net income attributable to Honeywell		4,779		6,143		6,765
Dividends on common stock		(2,567)		(2,428)		(2,279)
Spin-offs		—		—		1,749
Redemption value adjustment		—		—		(2)
Ending balance		39,905		37,693		33,978
Accumulated other comprehensive income (loss)						
Beginning balance		(3,197)		(3,437)		(2,235)
Foreign exchange translation adjustment		(214)		143		(728)
Pensions and other postretirement benefit adjustments		74		86		(559)
Changes in fair value of available for sale investments		4		—		—
Changes in fair value of cash flow hedges		(44)		11		85
Ending balance		(3,377)		(3,197)		(3,437)
Noncontrolling interest						
Beginning balance		212		178		163
Acquisitions, divestitures, and other		(6)		(3)		(12)
Net income attributable to noncontrolling interest		86		87		63
Foreign exchange translation adjustment		3		(5)		(10)
Dividends paid		(54)		(45)		(26)
Ending balance		241		212		178
Total shareowners' equity	696.8	17,790	711.1	18,706	729.6	18,358
Cash dividends per share of common stock		$ 3.630		$ 3.360		$ 3.055

The Notes to Consolidated Financial Statements are an integral part of this statement.

NOTE 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

ACCOUNTING PRINCIPLES

The financial statements and accompanying notes are prepared in accordance with accounting principles generally accepted in the United States of America. The following is a description of Honeywell's significant accounting policies.

PRINCIPLES OF CONSOLIDATION

The Consolidated Financial Statements include the accounts of Honeywell International Inc. and all of its subsidiaries and entities in which a controlling interest is maintained. Our consolidation policy requires equity investments that we exercise significant influence over but do not control the investee and are not the primary beneficiary of the investee's activities to be accounted for using the equity method. Investments through which we are not able to exercise significant influence over the investee and which we do not have readily determinable fair values are accounted for under the cost method. All intercompany transactions and balances are eliminated in consolidation.

RECLASSIFICATIONS

Certain prior year amounts have been reclassified to conform to the current year presentation.

RECENT ACCOUNTING PRONOUNCEMENTS

The Company considers the applicability and impact of all Accounting Standards Updates (ASUs) issued by the Financial Accounting Standards Board (FASB). ASUs not listed below were assessed and determined to be either not applicable or are expected to have minimal impact on our consolidated statement of operations, balance sheet and cash flows (Consolidated Financial Statements).

In December 2019, the FASB issued an ASU to simplify the accounting for income taxes. The standard's amendments include changes in various subtopics of accounting for income taxes including, but not limited to, accounting for "hybrid" tax regimes, tax basis step-up in goodwill obtained in a transaction that is not a business combination, intraperiod tax allocation exception to incremental approach, ownership changes in investments, interim-period accounting for enacted changes in tax law, and year-to-date loss limitation in interim-period tax accounting. Effective January 1, 2021, the Company adopted this standard. The adoption of this standard does not have a material impact on the Company's Consolidated Financial Statements.

In March 2020, the FASB issued guidance that provides optional expedients and exceptions for applying generally accepted accounted principles to contracts, hedging relationships, and other transactions affected by the transition away from reference rates expected to be discontinued to alternative reference rates. The guidance was effective upon issuance and may be applied prospectively to contract modifications made and hedging relationships entered into on or before December 31, 2022. The Company is currently evaluating the impacts of this guidance on the Company's Consolidated Financial Statements. The Company does not expect the adoption of this standard to have a material impact on the Company's Consolidated Financial Statements.

RESEARCH AND DEVELOPMENT

Research and development costs for projects are expensed as incurred, unless these costs relate to contracts with customers where we receive reimbursements. Amounts expensed as incurred for Company-sponsored research and development projects are included in Cost of products and services sold and were $1,334 million, $1,556 million and $1,809 million for the years ended December 31, 2020, 2019 and 2018. Costs related to contracts with customers for customer-sponsored research and development projects are included as a contract cost and included in Cost of products and services sold when revenue from such contracts is recognized, consistent with our sales recognition policies. This revenue was $1,200 million, $1,079 million and $1,069 million for the years ended December 31, 2020, 2019 and 2018.

CASH AND CASH EQUIVALENTS

Cash and cash equivalents include cash on hand and highly liquid investments having an original maturity of three months or less.

PROPERTY, PLANT AND EQUIPMENT

Property, plant and equipment are recorded at cost, including any asset retirement obligations, less accumulated depreciation. For financial reporting, the straight-line method of depreciation is used over the estimated useful lives of 10 to 50 years for buildings and improvements and 2 to 16 years for machinery and equipment. Recognition of the fair value of obligations associated with the retirement of tangible long-lived assets is required when there is a legal obligation to incur such costs. Upon initial recognition of a liability, the cost is capitalized as part of the related long-lived asset and depreciated over the corresponding asset's useful life.

GOODWILL AND INDEFINITE-LIVED INTANGIBLE ASSETS

Goodwill and indefinite-lived intangible assets are subject to impairment testing annually as of March 31, and whenever events or changes in circumstances indicate that the carrying amount may not be fully recoverable. This testing compares carrying values to fair values and, when appropriate, the carrying value of these assets is reduced to fair value. We completed our annual goodwill impairment test as of March 31, 2020 and determined that there was no impairment as of that date. In addition, due to the economic impact of COVID-19, we updated our assessment as of June 30, 2020, and determined there was no impairment. We are not aware of any additional triggering events.

FINITE-LIVED INTANGIBLE ASSETS

Other intangible assets with determinable lives consist of customer lists, technology, patents and trademarks and other intangibles and are amortized over their estimated useful lives, ranging from 2 to 24 years.

FOREIGN CURRENCY TRANSLATION

Assets and liabilities of subsidiaries operating outside the United States with a functional currency other than U.S. Dollars are translated into U.S. Dollars using year-end exchange rates. Sales, costs and expenses are translated at the average exchange rates in effect during the year. Foreign currency translation gains and losses are included as a component of Accumulated other comprehensive income (loss). For subsidiaries operating in highly inflationary environments, inventories and property, plant and equipment, including related expenses, are remeasured at the exchange rate in effect on the date the assets were acquired, while monetary assets and liabilities are remeasured at year-end exchange rates. Remeasurement adjustments for these subsidiaries are included in earnings.

DERIVATIVE FINANCIAL INSTRUMENTS

All derivative financial instruments are recorded on the balance sheet as assets or liabilities and measured at fair value. For derivatives designated as hedges of the fair value of assets or liabilities, the changes in fair values of both the derivatives and the hedged items are recorded in current earnings. For derivatives designated as cash flow hedges, the changes in fair value of the derivatives are recorded in Accumulated other comprehensive income (loss) and subsequently recognized in earnings when the hedged items impact earnings.

Derivative financial instruments designated as hedges must be designated and effective as a hedge of the identified risk exposure at the inception of the contract. Changes in fair value of the derivative contract must be highly correlated with changes in fair value of the underlying hedged item at inception and over the life of the hedge contract. Cash flows of such derivative financial instruments are classified consistent with the underlying hedged item. We elected to exclude the time value of the derivatives (i.e., the forward points) from the assessment of hedge effectiveness and recognize the initial value of the excluded component in earnings using the amortization approach. For derivative instruments that are designated and qualify as a net investment hedge, the gain or loss is reported as a component of Other comprehensive income (loss) and recorded in Accumulated other comprehensive income (loss). The gain or loss will be subsequently reclassified into net earnings when the hedged net investment is either sold or substantially liquidated.

LEASES

At the inception of a contract, the Company assesses whether the contract is, or contains, a lease. The assessment is based on (1) whether the contract involves the use of a distinct identified asset, (2) whether the Company obtains the right to substantially all the economic benefit from the use of the asset throughout the period, and (3) whether the Company has the right to direct the use of the asset.

All significant lease arrangements are generally recognized at lease commencement. Operating lease right-of-use (ROU) assets and lease liabilities are recognized at commencement. An ROU asset and corresponding lease liability are not recorded for leases with an initial term of 12 months or less (short-term leases), and we recognize lease expense for these leases as incurred over the lease term.

ROU assets represent our right to use an underlying asset during the reasonably certain lease term, and lease liabilities represent our obligation to make lease payments arising from the lease. Our lease terms may include options to extend or terminate the lease when it is reasonably certain that we will exercise that option.

Operating lease ROU assets and liabilities are recognized at commencement date based on the present value of lease payments over the lease term. Lease payments may be fixed or variable, however, only fixed payments or in-substance fixed payments are included in determining the lease liability. Variable lease payments are recognized in operating expenses in the period in which the obligation for those payments are incurred. The operating lease ROU asset also includes any lease payments related to initial direct cost and prepayments and excludes lease incentives. Lease expense is recognized on a straight-line basis over the lease term. We have lease agreements with lease and non-lease components, which are generally accounted for separately.

The Company primarily uses our incremental borrowing rate, which is based on the information available at the lease commencement date, in determining the present value of the lease payments. In determining the borrowing rate, we consider the lease term, secured incremental borrowing rate, and for leases denominated in a currency different than U.S. dollar, the collateralized borrowing rate in the foreign currency using the U.S. dollar and foreign currency swap spread, when available.

PENSION BENEFITS

The Company presents net periodic pensions costs by disaggregating the service cost component of such costs and reports those costs in the same line item or items in the Consolidated Statement of Operations as other compensation costs arising from services rendered by the pertinent employees during the period. The other non-service components of such costs are required to be presented separately from the service cost component.

The Company records the service cost component of Pension ongoing (income) expense in Costs of products and services sold and Selling, general and administrative expenses. The remaining components of costs within Pension ongoing (income) expense, primarily interest costs and assumed return on plan assets, are recorded in Other (income) expense. We recognize net actuarial gains or losses in excess of 10% of the greater of the fair value of plan assets or the plan's projected benefit obligation (the corridor) annually in the fourth quarter each year (MTM Adjustment). The MTM Adjustment is also reported in Other (income) expense.

SALES RECOGNITION

Product and service sales are recognized when or as the Company transfers control of the promised products or services to its customers. Revenue is measured as the amount of consideration we expect to receive in exchange for transferring goods or providing services. Service sales, principally representing repair, maintenance and engineering activities, are recognized over the contractual period or as services are rendered. Sales under long-term contracts with performance obligations satisfied over time are recognized using either an input or output method. We recognize revenue over time as we perform on these contracts because of the continuous transfer of control to the customer. With control transferring over time, revenue is recognized based on the extent of progress towards completion of the performance obligation. We generally use the cost-to-cost input method of progress for our contracts because it best depicts the transfer of control to the customer that occurs as we incur costs. Under the cost-to-cost method, the extent of progress towards completion is measured based on the proportion of costs incurred to date to the total estimated costs at completion of the performance obligation. We review our cost estimates on significant contracts on a periodic basis, or when circumstances change and warrant a modification to a previous estimate. Cost estimates are largely based on negotiated or estimated purchase contract terms, historical performance trends and other economic projections. Significant factors that influence these estimates include inflationary trends, technical and schedule risk, internal and subcontractor performance trends, business volume assumptions, asset utilization, and anticipated labor agreements. Provisions for anticipated losses on long-term contracts are recorded in full when such losses become evident, to the extent required.

The customer funding for costs incurred for nonrecurring engineering and development activities of our products under agreements with commercial customers is deferred and subsequently recognized as revenue as products are delivered to the customers. Additionally, expenses incurred, up to the customer agreed funded amount, are deferred as an asset and recognized as cost of sales when products are delivered to the customer. The deferred customer funding and costs result in recognition of deferred costs (asset) and deferred revenue (liability) on our Consolidated Balance Sheet. Capitalized contract fulfillment costs were approximately $1.3 billion and $1 billion as of December 31, 2020 and 2019. The amounts recognized as Cost of products and services sold were approximately $0.1 billion for the years ended December 31, 2020, 2019 and 2018.

Revenues for our mechanical service programs are recognized as performance obligations that are satisfied over time, with recognition reflecting a series of distinct services using the output method.

The terms of a contract or the historical business practice can give rise to variable consideration due to, but not limited to, cash-based incentives, rebates, performance awards, or credits. We estimate variable consideration at the most likely amount we will receive from customers. We include estimated amounts in the transaction price to the extent it is probable that a significant reversal of cumulative revenue recognized for such transaction will not occur, or when the uncertainty associated with the variable consideration is resolved. Our estimates of variable consideration and determination of whether to include estimated amounts in the transaction price are based largely on an assessment of our anticipated performance and all information (historical, current and forecasted) that is reasonably available to us.

STOCK-BASED COMPENSATION PLANS

The principal awards issued under our stock-based compensation plans, which are described in Note 16 Stock-Based Compensation Plans, are non-qualified stock options and restricted stock units. The cost for such awards is measured at the grant date based on the fair value of the award. The value of the portion of the award that is ultimately expected to vest is recognized as expense over the requisite service periods (generally the vesting period of the equity award) and is included in Selling, general and administrative expenses. Forfeitures are estimated at the time of grant to recognize expense for those awards that are expected to vest and are based on our historical forfeiture rates.

INCOME TAXES

Significant judgment is required in evaluating tax positions. We establish reserves for income taxes when, despite the belief that tax positions are fully supportable, there remain certain positions that do not meet the minimum recognition threshold. The approach for evaluating certain and uncertain tax positions is defined by the authoritative guidance which determines when a tax position is more likely than not to be sustained upon examination by the applicable taxing authority. In the normal course of business, the Company and its subsidiaries are examined by various federal, state and foreign tax authorities. We regularly assess the potential outcomes of these examinations and any future examinations for the current or prior years in determining the adequacy of our provision for income taxes. We continually assess the likelihood and amount of potential adjustments and adjust the income tax provision, the current tax liability and deferred taxes in the period in which the facts that give rise to a change in estimate become known. During 2020, the Company revised the disclosure of deferred tax assets and deferred tax liabilities in Note 5 Income Taxes as of December 31, 2019, to present separately the deferred tax liability for Right-of-use assets of $159 million and the deferred tax asset for Lease liabilities of $167 million, which were previously reported net within the deferred tax liability for Property, plant and equipment. This had no other impact to our Consolidated Financial Statements. For additional information, see Note 5 Income Taxes.

EARNINGS PER SHARE

Basic earnings per share is based on the weighted average number of common shares outstanding. Diluted earnings per share is based on the weighted average number of common shares outstanding and all dilutive potential common shares outstanding.

ENVIRONMENTAL

The Company accrues costs related to environmental matters when it is probable that it has incurred a liability related to a contaminated site and the amount can be reasonably estimated. For additional information, see Note 20 Commitments and Contingencies.

ASBESTOS RELATED LIABILITIES AND INSURANCE RECOVERIES

The Company recognizes a liability for any asbestos related contingency that is probable of occurrence and reasonably estimable. In connection with the recognition of liabilities for asbestos related matters, we record asbestos related insurance recoveries that are deemed probable. For additional information, see Note 20 Commitments and Contingencies.

REIMBURSEMENT RECEIVABLES

In conjunction with the Garrett and Resideo spin-offs, the Company entered into reimbursement agreements under which Honeywell receives cash payments as reimbursement primarily for asbestos related liability payments related to the Bendix business in the U.S. (Garrett) and for net spending for environmental matters at certain sites as defined in the agreement (Resideo). Accordingly, the Company recorded receivables based on estimates of the underlying reimbursable Honeywell asbestos and environmental spend, and we monitor the recoverability of such receivables, which are subject to the terms of applicable credit agreements and general ability to pay. For Garrett, the Company established an allowance based on the developments associated with Garrett's Chapter 11 bankruptcy filing. See Note 20 Commitments and Contingencies for a discussion of the recognition and measurement of our reimbursement receivables, including the allowance established for Garrett.

NOTE 2. ACQUISITIONS AND DIVESTITURES

During 2020, the Company acquired businesses for an aggregate cost (net of cash and debt assumed) of approximately $261 million, which included the October 2020 acquisition of Rocky Research and the December 2020 acquisition of Sine Group. Rocky Research is a technology leader specializing in thermal, energy and power management solutions and is included within our Aerospace segment. Sine Group offers a Software-as-a-Service (SaaS) that handles visitor management, workplace and supply chain solutions and is included in the Honeywell Building Technologies segment. The preliminary determination of the assets and liabilities acquired with Rocky Research and Sine Group is included in the Consolidated Balance Sheet as of December 31, 2020, including $167 million allocated to goodwill, which is non-deductible for tax purposes. There were no significant divestitures during 2020.

On December 22, 2020, the Company agreed to acquire 100% of the outstanding stock of Sparta Systems from New Mountain Capital in an all-cash transaction for $1.3 billion. Sparta Systems is a leading provider of enterprise quality management software for the life sciences industry and is expected to further strengthen the Company's leadership in industrial automation, digital transformation solutions, and enterprise performance management software. The transaction is subject to regulatory review and approval and customary closing conditions. The transaction is expected to close in the first quarter of 2021 and the business will be reported within the Performance Materials and Technologies segment.

During 2019, there were no significant acquisitions or divestitures individually or in the aggregate.

During 2018, the Company acquired businesses for an aggregate cost (net of cash and debt assumed) of approximately $535 million, mainly due to the November 2018 acquisition of Transnorm, a global leader in high-performance conveyor and warehouse solutions, including approximately $380 million allocated to goodwill. Transnorm is part of Safety and Productivity Solutions. The goodwill is non-deductible for tax purposes.

On October 1, 2018, the Company completed the tax-free spin-off to Honeywell shareowners of its Transportation Systems business, part of Aerospace, into a standalone publicly-traded company, Garrett. On October 29, 2018, the Company completed the tax-free spin-off to Honeywell shareowners of its Homes and Global Distribution business, part of Home and Building Technologies (renamed Honeywell Building Technologies following the spin-off), into a standalone publicly-traded company, Resideo. The assets of approximately $5.5 billion, including approximately $2.8 billion of goodwill and net of recorded receivables, and liabilities of approximately $7.2 billion, associated with the spin-off entities were removed through Retained Earnings from the Company’s Consolidated Balance Sheet as of the effective date of the spin-off. The results of operations and cash flows are included in the Consolidated Statement of Operations and Consolidated Statement of Cash Flows through the effective date of the spin-off. The Income before taxes attributable to the spin-off businesses were $0.4 billion for 2018.

Honeywell shareowners of record as of the close of business on October 16, 2018 received one share of Resideo common stock for every 6 shares of Honeywell common stock. Immediately prior to the effective date of the spin-off, Resideo incurred debt of $1.2 billion to make a cash distribution to the Company.

Honeywell shareowners of record as of the close of business on September 18, 2018 received one share of Garrett common stock for every 10 shares of Honeywell common stock. Immediately prior to the effective date of the spin-off, Garrett incurred debt of $1.6 billion to make a cash distribution to the Company.

In 2018, in connection with the spin-off, the Company entered into certain agreements with Resideo and Garrett to effect our legal and structural separation, including transition services agreements to provide certain administrative and other services for a limited time, and tax matters and indemnification and reimbursement agreements. For additional information, see Note 20 Commitments and Contingencies.

(Dollars in tables in millions, except per share amounts)

NOTE 3. REVENUE RECOGNITION AND CONTRACTS WITH CUSTOMERS

The Company has a comprehensive offering of products and services, including software and technologies, that are sold to a variety of customers in multiple end markets. See the following disaggregated revenue table and related discussions by operating segment for details.

	Years Ended December 31,		
	2020	2019	2018
Aerospace			
Commercial Aviation Original Equipment	$ 1,932	$ 2,997	$ 2,833
Commercial Aviation Aftermarket	3,786	5,731	5,373
Defense and Space	5,826	5,326	4,665
Transportation Systems	—	—	2,622
	11,544	14,054	15,493
Honeywell Building Technologies			
Homes Products and Software	—	—	1,732
Distribution (ADI)	—	—	2,196
Products	2,995	3,314	2,953
Building Solutions	2,194	2,403	2,417
	5,189	5,717	9,298
Performance Materials and Technologies			
UOP	2,177	2,890	2,845
Process Solutions	4,590	5,146	4,981
Specialty Products	1,075	1,062	1,134
Fluorine Products	1,581	1,736	1,714
	9,423	10,834	10,674
Safety and Productivity Solutions			
Safety and Retail	2,414	2,215	2,278
Productivity Solutions and Services	1,256	1,270	1,540
Warehouse and Workflow Solutions	2,018	1,771	1,662
Sensing & Internet-of-Things (IoT)	793	848	857
	6,481	6,104	6,337
Net sales	$ 32,637	$ 36,709	$ 41,802

Aerospace – A global supplier of products, software and services for aircrafts that it sells to OEM and other customers in a variety of end markets including: air transport, regional, business and general aviation aircraft, airlines, aircraft operators and defense and space contractors. Aerospace products and services include auxiliary power units, propulsion engines, environmental control systems, integrated avionics, wireless connectivity services, electric power systems, engine controls, flight safety, communications, navigation hardware, data and software applications, radar and surveillance systems, aircraft lighting, management and technical services, advanced systems and instruments, satellite and space components, aircraft wheels and brakes, repair and overhaul services and thermal systems. Aerospace also provides spare parts, repair, overhaul and maintenance services (principally to aircraft operators) for the aftermarket. Honeywell Forge solutions are leveraged by our customers as tools to turn data into predictive maintenance and predictive analytics to enable better fleet management and make flight operations more efficient.

Honeywell Building Technologies – A global provider of products, software, solutions and technologies that enable building owners and occupants to ensure their facilities are safe, energy efficient, sustainable and productive. Honeywell Building Technologies products and services include advanced software applications for building control and optimization; sensors, switches, control systems and instruments for energy management; access control; video surveillance; fire products; remote patient monitoring systems; and installation, maintenance and upgrades of systems. Honeywell Forge solutions enable our customers to digitally manage buildings, connecting data from different assets to enable smart maintenance, improve building performance and even protect from incoming security threats.

Performance Materials and Technologies – A global provider in developing and manufacturing high-quality performance chemicals and materials, process technologies and automation solutions. The segment is comprised of Process Solutions, UOP and Advanced Materials. Process Solutions provides automation control, instrumentation, advanced software and related services for the oil and gas, refining, pulp and paper, industrial power generation, chemicals and petrochemicals, biofuels, life sciences, and metals, minerals and mining industries. Through its smart energy products, Process Solutions enables utilities and distribution companies to deploy advanced capabilities to improve operations, reliability and environmental sustainability. UOP provides process technology, products, including catalysts and adsorbents, equipment, and consulting services that enable customers to efficiently produce gasoline, diesel, jet fuel, petrochemicals and renewable fuels for the petroleum refining, gas processing, petrochemical, and other industries. Advanced Materials manufactures a wide variety of high-performance products, including materials used to manufacture end products such as bullet-resistant armor, nylon, computer chips and pharmaceutical packaging, and provides reduced and low global-warming-potential materials based on hydrofluoro-olefin technology. In the industrial environment, Honeywell Forge solutions enable integration and connectivity to provide a holistic view of operations and turn data into clear actions to maximize productivity and efficiency. Honeywell Forge's cybersecurity capabilities help identify risks and act on cyber-related incidents, together enabling improved operations and protecting processes, people and assets.

Safety and Productivity Solutions – A global provider of products and software that improve productivity, workplace safety and asset performance to customers around the globe. Safety products include PPE, apparel, gear, and footwear designed for work, play and outdoor activities; gas detection technology; and cloud-based notification and emergency messaging. Productivity Solutions products and services include mobile devices and software for computing, data collection and thermal printing; supply chain and warehouse automation equipment, software and solutions; custom-engineered sensors, switches and controls for sensing and productivity solutions; and software-based data and asset management productivity solutions. Honeywell Forge solutions digitally automate processes to improve efficiency while reducing downtime and safety costs.

For a summary by disaggregated product and services sales for each segment, refer to Note 23 Segment Financial Data.

The Company recognizes revenue arising from performance obligations outlined in contracts with its customers that are satisfied at a point in time and over time. The disaggregation of our revenue based off timing of recognition is as follows:

	Years Ended December 31,		
	2020	2019	2018
Products, transferred point in time	61 %	61 %	67 %
Products, transferred over time	15	14	12
Net product sales	76	75	79
Services, transferred point in time	8	9	7
Services, transferred over time	16	16	14
Net service sales	24	25	21
Net sales	100 %	100 %	100 %

(Dollars in tables in millions, except per share amounts)

CONTRACT BALANCES

The Company records progress on satisfying performance obligations under contracts with customers and the related billings and cash collections are recorded on the Consolidated Balance Sheet in Accounts receivable—net and Other assets (unbilled receivables (contract assets) and billed receivables) and Accrued liabilities and Other liabilities (customer advances and deposits (contract liabilities)). Unbilled receivables (contract assets) arise when the timing of cash collected from customers differs from the timing of revenue recognition, such as when contract provisions require specific milestones to be met before a customer can be billed. Those assets are recognized when the revenue associated with the contract is recognized prior to billing and derecognized when billed in accordance with the terms of the contract. Contract liabilities are recorded when customers remit contractual cash payments in advance of us satisfying performance obligations under contractual arrangements, including those with performance obligations to be satisfied over a period of time. Contract liabilities are derecognized when revenue is recorded, either when a milestone is met triggering the contractual right to bill or when the performance obligation is satisfied.

Contract balances are classified as assets or liabilities on a contract-by-contract basis at the end of each reporting period.

The following table summarizes the Company's contract assets and liabilities balances:

	2020	2019
Contract assets—January 1	$ 1,602	$ 1,548
Contract assets—December 31	1,618	1,602
Change in contract assets—increase (decrease)	$ 16	$ 54
Contract liabilities—January 1	$ (3,501)	$ (3,378)
Contract liabilities—December 31	(4,033)	(3,501)
Change in contract liabilities—(increase) decrease	$ (532)	$ (123)
Net change	$ (516)	$ (69)

The net change in 2020 and 2019 was primarily driven by the receipt of advance payments from customers exceeding recognition of revenue as performance obligations were satisfied prior to billing. For the years ended December 31, 2020 and 2019, the Company recognized revenue of $1,709 million and $1,543 million that was previously included in the beginning balance of contract liabilities.

When contracts are modified to account for changes in contract specifications and requirements, the Company considers whether the modification either creates new or changes the existing enforceable rights and obligations. Contract modifications for goods or services and not distinct from the existing contract, due to the significant integration with the original good or service provided, are accounted for as if they were part of that existing contract. The effect of a contract modification on the transaction price and our measure of progress for the performance obligation to which it relates, is recognized as an adjustment to revenue (either as an increase in or a reduction of revenue) on a cumulative catch-up basis. When the modifications include additional performance obligations that are distinct and at relative stand-alone selling price, they are accounted for as a new contract and performance obligation, which are recognized prospectively.

(Dollars in tables in millions, except per share amounts)

PERFORMANCE OBLIGATIONS

A performance obligation is a promise in a contract to transfer a distinct good or service to the customer, and is defined as the unit of account. A contract's transaction price is allocated to each distinct performance obligation and recognized as revenue when, or as, the performance obligation is satisfied. When our contracts with customers require highly complex integration or manufacturing services that are not separately identifiable from other promises in the contracts and, therefore, not distinct, then the entire contract is accounted for as a single performance obligation. In situations when our contract includes distinct goods or services that are substantially the same and have the same pattern of transfer to the customer over time, they are recognized as a series of distinct goods or services. For any contracts with multiple performance obligations, we allocate the contract's transaction price to each performance obligation based on the estimated relative standalone selling price of each distinct good or service in the contract. For product sales, each product sold to a customer typically represents a distinct performance obligation. In such cases, the observable standalone sales are used to determine the stand alone selling price.

Performance obligations are satisfied as of a point in time or over time. Performance obligations are supported by contracts with customers, providing a framework for the nature of the distinct goods, services or bundle of goods and services. The timing of satisfying the performance obligation is typically indicated by the terms of the contract.

The following table outlines the Company's remaining performance obligations disaggregated by segment:

	December 31, 2020
Aerospace	$ 9,493
Honeywell Building Technologies	5,924
Performance Materials and Technologies	6,704
Safety and Productivity Solutions	4,255
	$ 26,376

Performance obligations recognized as of December 31, 2020 will be satisfied over the course of future periods. Our disclosure of the timing for satisfying the performance obligation is based on the requirements of contracts with customers. However, from time to time, these contracts may be subject to modifications, impacting the timing of satisfying the performance obligations. Performance obligations expected to be satisfied within one year and greater than one year are 55% and 45%, respectively.

The timing of satisfaction of the Company's performance obligations does not significantly vary from the typical timing of payment. Typical payment terms of our fixed-price over time contracts include progress payments based on specified events or milestones, or based on project progress. For some contracts we may be entitled to receive an advance payment.

The Company has applied the practical expedient for certain revenue streams to exclude the value of remaining performance obligations for (i) contracts with an original expected term of one year or less or (ii) contracts for which we recognize revenue in proportion to the amount we have the right to invoice for services performed.

(Dollars in tables in millions, except per share amounts)

NOTE 4. REPOSITIONING AND OTHER CHARGES

A summary of repositioning and other charges follows:

	Years Ended December 31, 2020	2019	2018
Severance	$ 475	$ 260	$ 289
Asset impairments	21	95	162
Exit costs	69	83	79
Reserve adjustments	(47)	(5)	(10)
Total net repositioning charge	518	433	520
Asbestos related litigation charges, net of insurance and reimbursements	50	42	163
Probable and reasonably estimable environmental liabilities, net of reimbursements	27	59	345
Other	(20)	12	63
Total net repositioning and other charges	$ 575	$ 546	$ 1,091

The following table summarizes the pre-tax distribution of total net repositioning and other charges by classification:

	Years Ended December 31, 2020	2019	2018
Cost of products and services sold	$ 308	$ 276	$ 811
Selling, general and administrative expenses	267	270	239
Other (income) expense	—	—	41
	$ 575	$ 546	$ 1,091

The following table summarizes the pre-tax impact of total net repositioning and other charges by segment:

	Years Ended December 31, 2020	2019	2018
Aerospace	$ 157	$ 33	$ 154
Honeywell Building Technologies	100	108	111
Performance Materials and Technologies	167	93	191
Safety and Productivity Solutions	41	71	133
Corporate	110	241	502
	$ 575	$ 546	$ 1,091

In 2020, the Company recognized repositioning charges totaling $565 million, including severance costs of $475 million related to workforce reductions of 14,159 manufacturing and administrative positions across our segments, with a majority of the workforce reductions in Aerospace and Performance Materials and

Technologies. The workforce reductions primarily related to the Company aligning its cost structure with the slowdown in demand for many of its products and services due to the global recession, and with our productivity and ongoing functional transformation initiatives and to site consolidations and hub strategies. The repositioning charge included exit costs of $69 million primarily related to current period exit costs incurred for previously approved repositioning projects. Also, $47 million of previously established reserves, primarily for severance, were returned to income mainly as a result of higher attrition than anticipated in prior severance actions resulting in lower payments.

In 2019, the Company recognized repositioning charges totaling $438 million, including severance costs of $260 million related to workforce reductions of 5,336 manufacturing and administrative positions across our segments. The workforce reductions related to our productivity and ongoing functional transformation initiatives and to site transitions, mainly in Honeywell Building Technologies, as we transition manufacturing to more cost-effective locations. The repositioning charge included asset impairments of $95 million largely related to a write down in connection with assets held for sale. The repositioning charge included exit costs of $83 million primarily related to current period exit costs incurred for previously approved repositioning projects, termination fees associated with the early cancellation of supply agreements for certain raw materials in Performance Materials and Technologies and Honeywell Building Technologies and for closure obligations associated with site transitions.

In 2018, the Company recognized repositioning charges totaling $530 million, including severance costs of $289 million related to workforce reductions of 6,486 manufacturing and administrative positions across our segments. The workforce reductions were primarily related to planned site closures, mainly in Safety and Productivity Solutions, Performance Materials and Technologies and Honeywell Building Technologies, as we transition manufacturing sites to more cost-effective locations. The workforce reductions were also related to our productivity and ongoing functional transformation initiatives. The repositioning charge included asset impairments of $162 million mainly related to manufacturing plant and equipment associated with planned site closures. Asset impairments also included the write-down of a legacy property in Corporate in connection with its planned disposition and the write-off of certain capitalized assets in Corporate. The repositioning charge included exit costs of $79 million primarily related to a termination fee associated with the early cancellation of a supply agreement for certain raw materials in Performance Materials and Technologies and for closure obligations associated with planned site closures.

The following table summarizes the status of the Company's total repositioning reserves:

	Severance Costs	Asset Impairments	Exit Costs	Total
Balance at December 31, 2017	$ 442	$ —	$ 71	$ 513
Charges	289	162	79	530
Usage—cash	(218)	—	(67)	(285)
Usage—noncash	—	(163)	—	(163)
Divestitures	(11)	—	(3)	(14)
Adjustments	(8)	1	(3)	(10)
Foreign currency translation	(5)	—	—	(5)
Balance at December 31, 2018	489	—	77	566
Charges	260	95	83	438
Usage—cash	(186)	—	(63)	(249)
Usage—noncash	—	(100)	—	(100)
Divestitures	—	—	—	—
Adjustments	(8)	5	(2)	(5)
Foreign currency translation	—	—	1	1
Balance at December 31, 2019	555	—	96	651
Charges	475	21	69	565
Usage—cash	(474)	—	(90)	(564)
Usage—noncash	—	(21)	—	(21)
Divestitures	—	—	—	—
Adjustments	(44)	—	(3)	(47)
Foreign currency translation	15	—	2	17
Balance at December 31, 2020	$ 527	$ —	$ 74	$ 601

Certain repositioning projects will recognize exit costs in future periods when the actual liability is incurred. Such exit costs incurred in 2020, 2019 and 2018 were not significant.

In 2018, the other charge of $63 million mainly relates to reserves taken due to the required wind-down of the Company's activities in Iran and the evaluation of potential resolution of a certain legal matter.

(Dollars in tables in millions, except per share amounts)

NOTE 5. INCOME TAXES

INCOME BEFORE TAXES

	Years Ended December 31,		
	2020	2019	2018
U.S.	$ 3,318	$ 4,178	$ 2,919
Non-U.S.	2,694	3,381	4,568
	$ 6,012	$ 7,559	$ 7,487

TAX EXPENSE (BENEFIT)

	Years Ended December 31,		
	2020	2019	2018
Tax expense (benefit) consists of			
Current:			
U.S. Federal	$ 475	$ 8	$ (21)
U.S. State	79	43	89
Non-U.S.	768	1,099	1,177
	$ 1,322	$ 1,150	$ 1,245
Deferred:			
U.S. Federal	$ 234	$ 332	$ 396
U.S. State	39	63	8
Non-U.S.	(448)	(216)	(990)
	(175)	179	(586)
	$ 1,147	$ 1,329	$ 659

	Years Ended December 31,		
	2020	2019	2018
The U.S. federal statutory income tax rate is reconciled to our effective income tax rate as follows:			
U.S. federal statutory income tax rate	21.0 %	21.0 %	21.0 %
Taxes on non-U.S. earnings[(1)(2)]	(0.8)	(0.5)	0.2
U.S. state income taxes[(1)]	1.3	1.1	1.6
Reserves for tax contingencies	(2.6)	2.0	0.3
Employee share-based payments	(1.2)	(1.2)	(0.7)
Reduction of certain receivables	2.0	—	—
U.S. Tax Cuts and Jobs Act	—	(3.6)	(5.8)
Reduction of taxes on unremitted earnings	—	—	(14.2)
Separation tax costs	—	—	5.5
All other items—net	(0.6)	(1.2)	0.9
	19.1 %	17.6 %	8.8 %

(1) Net of changes in valuation allowance
(2) Includes U.S. taxes on non-U.S. earnings

The effective tax rate increased by 1.5 percentage points in 2020 compared to 2019. The increase was primarily attributable to accrued withholding taxes related to unremitted foreign earnings and non-cash charges related to the reduction of the aggregate carrying value of certain receivables with no corresponding tax benefit, offset by the favorable resolution of a foreign tax matter related to the previously completed spin-off transactions, tax impact of restructuring, tax law changes in India, and the resolution of certain U.S. tax matters. The Company's non-U.S. effective tax rate was 11.9%, a decrease of approximately 14.2 percentage points compared to 2019. The decrease in the foreign effective tax rate was primarily attributable to the favorable resolution of a foreign tax matter related to the previously completed spin-off transactions, tax impact of restructuring, and tax law changes in India offset by accrued withholding taxes related to unremitted foreign earnings.

The effective tax rate increased by 8.8 percentage points in 2019 compared to 2018. The increase was primarily attributable to a lower income tax benefit resulting from revised guidance related to the U.S. Tax Cuts and Jobs Act and internal restructuring initiatives that resulted in a $281 million reduction of accrued withholding taxes related to unremitted foreign earnings when compared to the prior year. The Company's non-U.S. effective tax rate was 26.1%, an increase of approximately 22.0 percentage points compared to 2018. The increase in the foreign effective tax rate was primarily attributable to a lower income tax benefit related to the Company's internal restructuring initiatives when compared to the prior year.

DEFERRED TAX ASSETS (LIABILITIES)

The tax effects of temporary differences and tax carryforwards which give rise to future income tax benefits and payables are as follows:

Deferred tax assets:	December 31, 2020	December 31, 2019
Postretirement benefits other than pensions	$ 85	$ 111
Asbestos and environmental	508	531
Employee compensation and benefits	180	205
Lease liabilities	197	167
Other accruals and reserves	110	279
Net operating and capital losses	779	652
Tax credit carryforwards	219	246
Gross deferred tax assets	2,078	2,191
Valuation allowance	(766)	(656)
Total deferred tax assets	$ 1,312	$ 1,535
Deferred tax liabilities:		
Pension	$ (548)	$ (469)
Property, plant and equipment	(437)	(477)
Right-of-use asset	(184)	(159)
Intangibles	(898)	(1,296)
Unremitted earnings of foreign subsidiaries	(398)	(419)
Other asset basis differences	(169)	(136)
Other	(31)	(163)
Total deferred tax liabilities	(2,665)	(3,119)
Net deferred tax liability	$ (1,353)	$ (1,584)

(Dollars in tables in millions, except per share amounts)

The Company's gross deferred tax assets include $872 million related to non-U.S. operations comprised principally of net operating losses, capital loss and tax credit carryforwards (mainly in Canada, France, Germany, Luxembourg and the United Kingdom) and deductible temporary differences. We maintain a valuation allowance of $758 million against a portion of the non-U.S. gross deferred tax assets. The change in the valuation allowance resulted in an increase of $105 million, a decrease of $23 million and an increase of $57 million to income tax expense in 2020, 2019 and 2018. In the event we determine that we will not be able to realize our net deferred tax assets in the future, we will reduce such amounts through an increase to income tax expense in the period such determination is made. Conversely, if we determine that we will be able to realize net deferred tax assets in excess of the carrying amounts, we will decrease the recorded valuation allowance through a reduction to income tax expense in the period that such determination is made.

As of December 31, 2020, the Company recorded a $398 million deferred tax liability on all our unremitted foreign earnings based on estimated earnings and profits of approximately $22.4 billion as of the balance sheet date.

As of December 31, 2020, the Company's net operating loss, capital loss and tax credit carryforwards were as follows:

Jurisdiction	Expiration Period	Net Operating and Capital Loss Carryforwards	Tax Credit Carryforwards
U.S. Federal	2040	$ 24	$ 92
U.S. State	2040	382	21
Non-U.S.	2040	314	111
Non-U.S.	Indefinite	2,532	—
		$ 3,252	$ 224

Many jurisdictions impose limitations on the timing and utilization of net operating loss and tax credit carryforwards. In those instances, whereby there is an expected permanent limitation on the utilization of the net operating loss or tax credit carryforward, the deferred tax asset and amount of the carryforward have been reduced.

	Years Ended December 31,		
	2020	2019	2018
Change in unrecognized tax benefits:			
Balance at beginning of year	$ 1,164	$ 1,089	$ 947
Gross increases related to current period tax positions	94	51	370
Gross increases related to prior periods tax positions	68	83	82
Gross decreases related to prior periods tax positions	(256)	(34)	(201)
Decrease related to resolutions of audits with tax authorities	(35)	(3)	(40)
Expiration of the statute of limitations for the assessment of taxes	(76)	(13)	(50)
Foreign currency translation	32	(9)	(19)
Balance at end of year	$ 991	$ 1,164	$ 1,089

As of December 31, 2020, 2019 and 2018, there were $991 million, $1,164 million, and $1,089 million of unrecognized tax benefits that if recognized would be recorded as a component of Tax expense.

(Dollars in tables in millions, except per share amounts)

The following table summarizes tax years that remain subject to examination by major tax jurisdictions as of December 31, 2020:

Jurisdiction	Open Tax Years Based on Originally Filed Returns: Examination in progress	Open Tax Years Based on Originally Filed Returns: Examination not yet initiated
U.S. Federal	2017 - 2018	2019 - 2020
U.S. State	2011 - 2019	2016 - 2019
Australia	N/A	2017 - 2020
Canada(1)	2015 - 2018	2019 - 2020
China	2010 - 2019	2020
France	2017 - 2019	2020
Germany(1)	2008 - 2018	2019 - 2020
India	1999 - 2018	2019 - 2020
Italy	2012 - 2017	2018 - 2020
Netherlands	2016 - 2017	2018 - 2020
Switzerland(1)	2015 - 2018	2019 - 2020
United Kingdom	2013 - 2018	2019 - 2020

(1) Includes provincial or similar local jurisdictions, as applicable.

Based on the outcome of these examinations, or as a result of the expiration of statute of limitations for specific jurisdictions, it is reasonably possible that certain unrecognized tax benefits for tax positions taken on previously filed tax returns will materially change from those recorded as liabilities in our financial statements. In addition, the outcome of these examinations may impact the valuation of certain deferred tax assets (such as net operating losses) in future periods.

Unrecognized tax benefits for examinations in progress were $556 million, $413 million and $304 million, as of December 31, 2020, 2019 and 2018. Estimated interest and penalties related to the underpayment of income taxes are classified as a component of Tax expense in the Consolidated Statement of Operations and totaled $80 million, $73 million and $45 million for the years ended December 31, 2020, 2019 and 2018. Accrued interest and penalties were $507 million, $487 million and $426 million, as of December 31, 2020, 2019 and 2018.

NOTE 6. ACCOUNTS RECEIVABLE

	December 31, 2020	December 31, 2019
Trade	$ 7,029	$ 7,639
Less—Allowance for doubtful accounts	(202)	(146)
	$ 6,827	$ 7,493

Trade Receivables includes $1,589 million and $1,586 million of unbilled balances under long-term contracts as of December 31, 2020 and 2019. These amounts are billed in accordance with the terms of customer contracts to which they relate.

(Dollars in tables in millions, except per share amounts)

NOTE 7. INVENTORIES

	December 31, 2020	December 31, 2019
Raw materials	$ 1,079	$ 1,056
Work in process	798	817
Finished products	2,612	2,593
	4,489	4,466
Reduction to LIFO cost basis	—	(45)
	$ 4,489	$ 4,421

During the third quarter of 2020, the Company changed the method of valuing inventory from the last-in, first-out (LIFO) method to the first-in, first-out (FIFO) method for inventories within our Performance Materials and Technologies segment not previously valued using FIFO. The Company believes the FIFO method is preferable and better reflects the current value of inventory reported in the Consolidated Balance Sheet. The cumulative effect of this change in accounting principle was $7 million and was recorded as a reduction to Cost of products sold for the year ended December 31, 2020. The inventories subject to this change totaled approximately 6% of consolidated inventories at the time of this change. This change was not material to the Consolidated Financial Statements, and therefore prior periods were not adjusted retrospectively. Inventories valued at LIFO amounted to $292 million at December 31, 2019. Had such LIFO inventories been valued at current costs, the carrying values would have been approximately $45 million higher at December 31, 2019. There are no remaining inventories valued at LIFO.

NOTE 8. PROPERTY, PLANT AND EQUIPMENT—NET

	December 31, 2020	December 31, 2019
Land and improvements	$ 259	$ 251
Machinery and equipment	10,008	9,586
Buildings and improvements	3,245	3,152
Construction in progress	825	724
	14,337	13,713
Less—Accumulated depreciation	(8,767)	(8,388)
	$ 5,570	$ 5,325

Depreciation expense was $644 million, $673 million and $721 million for the years ended December 31, 2020, 2019 and 2018.

(Dollars in tables in millions, except per share amounts)

NOTE 9. GOODWILL AND OTHER INTANGIBLE ASSETS—NET

The following table summarizes the change in the carrying amount of goodwill for the years ended December 31, 2020 and 2019 by segment.

	December 31, 2019	Acquisitions/ Divestitures	Currency Translation Adjustment	December 31, 2020
Aerospace	$ 2,266	$ 105	$ 7	$ 2,378
Honeywell Building Technologies	3,215	62	108	3,385
Performance Materials and Technologies	5,105	—	150	5,255
Safety and Productivity Solutions	4,977	—	63	5,040
	$ 15,563	$ 167	$ 328	$ 16,058

Other intangible assets are comprised of:

	December 31, 2020			December 31, 2019		
	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
Determinable life intangibles:						
Patents and technology	$ 2,159	$ (1,595)	$ 564	$ 2,060	$ (1,481)	$ 579
Customer relationships	3,889	(2,050)	1,839	3,769	(1,766)	2,003
Trademarks	327	(247)	80	317	(228)	89
Other	298	(267)	31	297	(262)	35
	6,673	(4,159)	2,514	6,443	(3,737)	2,706
Indefinite life intangibles:						
Trademarks	1,046	—	1,046	1,028	—	1,028
	$ 7,719	$ (4,159)	$ 3,560	$ 7,471	$ (3,737)	$ 3,734

Intangible assets amortization expense was $358 million, $415 million and $395 million for the years ended December 31, 2020, 2019 and 2018. Estimated intangible asset amortization expense for each of the next five years approximates $335 million in 2021, $311 million in 2022, $272 million in 2023, $250 million in 2024 and $239 million in 2025.

(Dollars in tables in millions, except per share amounts)

NOTE 10. LONG-TERM DEBT AND CREDIT AGREEMENTS

	December 31, 2020	December 31, 2019
0.65% Euro notes due 2020	$ —	$ 1,123
4.25% notes due 2021	800	800
1.85% notes due 2021	1,500	1,500
0.483% notes due 2022	2,500	—
2.15% notes due 2022	600	600
Floating rate notes due 2022	1,100	600
1.30% Euro notes due 2023	1,534	1,404
3.35% notes due 2023	300	300
0.00% Euro notes due 2024	614	—
2.30% notes due 2024	750	750
1.35% notes due 2025	1,250	—
2.50% notes due 2026	1,500	1,500
2.25% Euro notes due 2028	920	842
2.70% notes due 2029	750	750
1.95% notes due 2030	1,000	—
0.75% Euro notes due 2032	614	—
5.70% notes due 2036	441	441
5.70% notes due 2037	462	462
5.375% notes due 2041	417	417
3.812% notes due 2047	445	445
2.80% notes due 2050	750	—
Industrial development bond obligations, floating rate maturing at various dates through 2037	22	22
6.625% debentures due 2028	201	201
9.065% debentures due 2033	51	51
Other (including capitalized leases and debt issuance costs), 8.9% weighted average interest rate maturing at various dates through 2025	266	278
	18,787	12,486
Less-current portion	(2,445)	(1,376)
	$ 16,342	$ 11,110

(Dollars in tables in millions, except per share amounts)

The schedule of principal payments on long-term debt is as follows:

	December 31, 2020
2021	$ 2,445
2022	4,240
2023	1,862
2024	1,392
2025	1,255
Thereafter	7,593
	18,787
Less-current portion	(2,445)
	$ 16,342

On August 19, 2020, the Company issued $2.5 billion 0.483% Senior Notes due 2022 and $500 million Floating Rate Senior Notes due 2022 (collectively, the 2022 Callable Notes). The $500 million Floating Rate Senior Notes due 2022 were issued at a variable interest rate equal to the three-month LIBOR plus the applicable margin of 0.23%. The Company may redeem the 2022 fixed rate notes at any time, in whole or in part, at the Company's option. The Company may redeem the 2022 floating rate notes at any time, in whole or in part, on or after August 19, 2021. The 2022 Callable Notes resulted in gross proceeds of $3.0 billion, offset by $10 million in discount and closing costs related to the offering. The Company used the proceeds of the offering to repay $3.0 billion of borrowings under the Term Loan Agreement (defined below).

On May 18, 2020, the Company issued $1.25 billion 1.35% Senior Notes due 2025, $1.0 billion 1.95% Senior Notes due 2030, and $750 million 2.80% Senior Notes due 2050 (collectively, the 2020 Notes) to replace and, accordingly, permanently reduce $3.0 billion of undrawn commitments under the Term Loan Agreement, referenced below. The Company may redeem the 2020 Notes at any time, in whole or in part, at the Company's option. The offering provided gross proceeds of $3.0 billion, offset by $27 million in discount and closing costs related to the offering.

On March 10, 2020, the Company issued €500 million 0.00% Senior Notes due 2024 and €500 million 0.75% Senior Notes due 2032 (collectively, the 2020 Euro Notes). The offering provided gross proceeds of $1.1 billion, offset by $9 million in discount and closing costs related to the offering.

The 2022 Callable Notes, 2020 Notes, and 2020 Euro Notes are senior unsecured and unsubordinated obligations of the Company and rank equally with each other and with all of the Company's existing and future senior unsecured debt and senior to all of the Company's subordinated debt.

On April 10, 2020, the Company entered into a $1.5 billion 364-Day Credit Agreement (the 364-Day Credit Agreement) with a syndicate of banks. This 364-Day Credit Agreement is maintained for general corporate purposes. The 364-Day Credit Agreement replaced the previous 364-day credit agreement dated as of April 26, 2019, which was terminated on April 10, 2020.

On March 26, 2020, the Company entered into a Delayed Draw Term Loan Agreement (the Term Loan Agreement) with a syndicate of banks. The Term Loan Agreement provided for a two-year, delayed draw term loan facility in the aggregate principal amount of $6.0 billion. Effective May 22, 2020, the Company permanently reduced the undrawn commitments under the Term Loan Agreement by an aggregate amount of $3.0 billion. On June 24, 2020, the Company drew on the remaining $3.0 billion of commitments under the Term Loan Agreement at a variable interest rate equal to the one-month LIBOR plus the applicable margin of 1.25%. The draw provided gross proceeds of $3.0 billion, offset by $7 million in closing costs related to the borrowing. On August 20, 2020, the Company prepaid the outstanding principal amount of $3.0 billion, using the proceeds from the offering of the 2022 Callable Notes.

On February 21, 2020, the Company paid its 0.65% Euro notes due 2020.

On April 26, 2019, the Company entered into a $4.0 billion Five Year Credit Agreement (the 5-Year Credit Agreement) with a syndicate of banks, dated April 26, 2019. This 5-Year Credit Agreement is maintained for general corporate purposes. Commitments under the 5-Year Credit Agreement can be increased pursuant to the terms of the 5-Year Credit Agreement to an aggregate amount not to exceed $4.5 billion.

(Dollars in tables in millions, except per share amounts)

As of December 31, 2020, there were no outstanding borrowings under the 364-Day Credit Agreement, Term Loan Agreement, or 5-Year Credit Agreement.

NOTE 11. LEASES

A significant portion of the Company's operating and finance lease portfolio includes corporate offices, research and development facilities, manufacturing sites, information technology equipment, and automobiles. The majority of our leases have remaining lease terms of 1 year to 20 years, some of which include options to extend the leases for 5 years or more. Operating lease ROU assets are included in Other assets. The current portion of operating lease liabilities are included in Accrued liabilities, and the non-current portion of operating lease liabilities are included in Other liabilities on the Consolidated Balance Sheet. Finance lease ROU assets are included in Property, plant and equipment—net. The current portion of finance lease liabilities are included in Current maturities of long-term debt, and the non-current portion of finance lease liabilities are included in Long-term debt on the Consolidated Balance Sheet.

A portion of the Company's real estate leases is generally subject to annual changes in the Consumer Price Index (CPI). The changes to the CPI are treated as variable lease payments and recognized in the period in which the obligation for those payments was incurred. In addition, a subset of our automobile leases is considered variable. The variable lease payments for such automobiles leases are based on actual mileage incurred at the stated contractual rate and recognized in the period in which the obligation for those payments was incurred.

	Years Ended D
	2020
Operating lease cost	$ 214
Variable lease cost	18
Short-term lease cost	17
Finance lease cost:	
Amortization of right-of-use assets	69
Interest on lease liability	27
Total finance lease cost	96
Total lease cost	$ 345

Supplemental cash flow information related to leases was as follows:

	Years Ended December 31,	
	2020	2019
Cash paid for amounts included in the measurement of lease liabilities:		
Operating cash flows for operating leases	$ 206	$ 224
Operating cash flows for finance leases	32	32
Financing cash flows for finance leases	65	61
Right-of-use assets obtained in exchange for lease obligations:		
Operating leases	$ 245	$ 179
Finance leases	27	34

(Dollars in tables in millions, except per share amounts)

Supplemental balance sheet information related to leases was as follows:

	December 31, 2020	December 31, 2019
Operating leases		
Other assets	$ 773	$ 673
Accrued liabilities	187	171
Other liabilities	641	534
Total operating lease liabilities	$ 828	$ 705
Finance leases		
Property, plant and equipment	$ 357	$ 361
Accumulated depreciation	(180)	(152)
Property, plant and equipment—net	$ 177	$ 209
Current maturities of long-term debt	60	59
Long-term debt	124	156
Total finance lease liabilities	$ 184	$ 215
Weighted-average remaining lease term		
Operating leases	7 years	6 years
Finance leases	3 years	4 years
Weighted-average discount rate		
Operating leases	2.9 %	3.3 %
Finance leases	16.3 %	16.2 %

As of December 31, 2020, maturities of lease liabilities were as follows:

	Operating Leases	Finance Leases
2021	$ 204	$ 83
2022	169	63
2023	137	46
2024	103	40
2025	69	13
Thereafter	231	—
Total lease payments	913	245
Less-interest	(85)	(61)
Total	$ 828	$ 184

NOTE 12. DERIVATIVE INSTRUMENTS AND HEDGING TRANSACTIONS

DERIVATIVES AND HEDGING ACTIVITIES

The Company uses derivative financial instruments to manage its risks related to interest rates and foreign currency exchange rate fluctuations. Derivative financial instruments are not used for trading or other speculative purposes. To qualify as a hedge, derivative financial instruments must be evaluated for hedge effectiveness at the inception of the contract and designated as a hedge. Changes in fair value of the derivative contract must be highly correlated with changes in fair value of the underlying hedged item at inception and over the life of the hedge contract.

FOREIGN CURRENCY RISK MANAGEMENT

The Company operates a global business in a wide variety of foreign currencies. Our exposure to market risk for changes in foreign currency exchange rates arises from international financing activities between subsidiaries, foreign currency denominated monetary assets and liabilities and transactions arising from international trade. The Company's objective is to preserve the U.S. Dollar value of foreign currency denominated cash flows and earnings. The Company monitors its collective foreign currency exposure and enters into foreign currency exchange forward and option contracts (foreign currency exchange contracts) with third parties, when necessary, to minimize the impact of changes in foreign currency exchange rates.

The Company has monetary assets and liabilities denominated in non-functional currencies. Prior to conversion into U.S. dollars, these assets and liabilities are remeasured at spot exchange rates in effect on the balance sheet date. The effects of changes in spot rates are recognized in earnings and included in Other (income) expense. We use foreign currency exchange contracts to hedge our foreign currency exposure. These contracts are marked-to-market with the resulting gains and losses recognized in earnings offsetting the gains and losses on the non-functional currency denominated monetary assets and liabilities being hedged. The Company uses foreign currency contracts to hedge forecasted sales and purchases, which are denominated in non-functional currencies. Changes in the forecasted non-functional currency cash flows due to movements in exchange rates are substantially offset by changes in the fair value of these foreign currency exchange contracts designated as hedges. Market value gains and losses on these contracts are recognized in earnings when the hedged transaction is recognized. As of December 31, 2020 and 2019, the Company held contracts with notional amounts of $16,123 million and $12,746 million to exchange foreign currencies, principally the U.S. Dollar, Euro, Canadian Dollar, British Pound, Swiss Franc, Mexican Peso, Chinese Renminbi, Indian Rupee, and Malaysian Ringgit.

The Company also designates certain foreign currency debt and derivative contracts as hedges against portions of its net investment in foreign operations. Gains or losses of the foreign currency debt and derivative contracts designated as net investment hedges are recorded in the same manner as foreign currency translation adjustments.

INTEREST RATE RISK MANAGEMENT

Financial instruments, including derivatives, expose the Company to market risk related to changes in interest rates. The Company uses a combination of financial instruments, including long-term, medium-term and short-term financing, variable-rate commercial paper, and interest rate swaps to convert the interest rate mix of our total debt portfolio and related overall cost of borrowing.

CREDIT RISK MANAGEMENT

The Company continues to monitor the creditworthiness of its counterparties to mitigate the risk of nonperformance. Financial instruments, including derivatives, expose the Company to counterparty credit risk. In addition, the Company grants credit terms to its customers in the normal course of business. The terms and conditions of our credit sales are designed to mitigate or eliminate concentrations of credit risk with any single customer. Our sales are not materially dependent on a single customer or a small group of customers.

(Dollars in tables in millions, except per share amounts)

DERIVATIVE AND HEDGING INSTRUMENTS

The following table summarizes the notional amounts and fair values of the Company's outstanding derivatives by risk category and instrument type within the Consolidated Balance Sheet as of December 31, 2020 and 2019:

	Notional		Fair Value Asset		Fair Value (Liability)	
	December 31, 2020	December 31, 2019	December 31, 2020	December 31, 2019	December 31, 2020	December 31, 2019
Derivatives in Fair Value Hedging Relationships:						
Interest rate swap agreements	$ 3,950	$ 3,950	$ 194	$ 38	$ —	$ (13)
Derivatives in Cash Flow Hedging Relationships:						
Foreign currency exchange contracts	488	3,340	65	218	(58)	(16)
Derivatives in Net Investment Hedging Relationships:						
Foreign currency exchange contracts	806	866	45	71	(1)	—
Cross currency swap agreements	1,200	1,200	—	51	(50)	—
Total Derivatives Designated as Hedging Instruments	6,444	9,356	304	378	(109)	(29)
Derivatives Not Designated as Hedging Instruments:						
Foreign currency exchange contracts	14,829	8,540	92	2	(91)	(5)
Total Derivatives at Fair Value	$ 21,273	$ 17,896	$ 396	$ 380	$ (200)	$ (34)

All derivative assets are presented in Other current assets or Other assets. All derivative liabilities are presented in Accrued liabilities or Other liabilities. As of December 31, 2020, cash collateral received that has not been offset against our derivatives of $34 million was recorded in Accrued liabilities and Other assets.

In addition to the foreign currency derivative contracts designated as net investment hedges, certain of the Company's foreign currency denominated debt instruments are designated as net investment hedges. The carrying value of those debt instruments designated as net investment hedges, which includes the adjustment for the foreign currency transaction gain or loss on those instruments, was $4,414 million and $6,882 million as of December 31, 2020 and 2019.

Interest rate swap agreements are designated as hedge relationships with gains or losses on the derivative recognized in Interest and other financial charges offsetting the gains and losses on the underlying debt being hedged. Gains and losses on interest rate swap agreements recognized in earnings were $169 million of income, $70 million of income and $37 million of expense for the years ended December 31, 2020, 2019 and 2018. Gains and losses are fully offset by losses and gains on the underlying debt being hedged.

The following table sets forth the amounts recorded on the Consolidated Balance Sheet related to cumulative basis adjustments for fair value hedges:

Line in the Consolidated Balance Sheet of Hedged Item	Carrying Amount of the Hedged Item		Cumulative Amount of Fair Value Hedging Adjustment Included in the Carrying Amount of the Hedged Item	
	December 31, 2020	December 31, 2019	December 31, 2020	December 31, 2019
Long-term debt	$ 4,144	$ 3,975	$ 194	$ 25

(Dollars in tables in millions, except per share amounts)

The following tables summarize the location and impact to the Consolidated Statement of Operations related to derivative instruments:

	Year Ended December 31, 2020				
	Revenue	Cost of Products and Services Sold	SG&A	Other (Income) Expense	Interest and Other Financial Charges
	$ 32,637	$ 22,169	$ 4,772	$ (675)	$ 359
Gain or (loss) on cash flow hedges:					
Foreign Currency Exchange Contracts:					
Amount reclassified from accumulated other comprehensive income into income	(3)	54	(4)	28	—
Amount excluded from effectiveness testing recognized in earnings using an amortization approach	—	13	—	29	—
Gain or (loss) on fair value hedges:					
Interest Rate Swap Agreements:					
Hedged items	—	—	—	—	(169)
Derivatives designated as hedges	—	—	—	—	169
Gain or (loss) on net investment hedges:					
Foreign Currency Exchange Contracts:					
Amount excluded from effectiveness testing recognized in earnings using an amortization approach	—	—	—	—	18
Gain or (loss) on derivatives not designated as hedging instruments:					
Foreign currency exchange contracts	—	—	—	(166)	—

(Dollars in tables in millions, except per share amounts)

	Year Ended December 31, 2019				
	Revenue	Cost of Products and Services Sold	SG&A	Other (Income) Expense	Interest and Other Financial Charges
	$ 36,709	$ 24,339	$ 5,519	$ (1,065)	$ 357
Gain or (loss) on cash flow hedges:					
Foreign Currency Exchange Contracts:					
Amount reclassified from accumulated other comprehensive income into income	3	44	1	73	—
Amount excluded from effectiveness testing recognized in earnings using an amortization approach	—	22	—	35	—
Gain or (loss) on fair value hedges:					
Interest Rate Swap Agreements:					
Hedged items	—	—	—	—	(70)
Derivatives designated as hedges	—	—	—	—	70
Gain or (loss) on net investment hedges:					
Foreign Currency Exchange Contracts:					
Amount excluded from effectiveness testing recognized in earnings using an amortization approach	—	—	—	—	19
Gain or (loss) on derivatives not designated as hedging instruments:					
Foreign currency exchange contracts	—	—	—	106	—

As of December 31, 2020, the Company estimates that approximately $8 million of net derivative gains related to its cash flow hedges included in Accumulated other comprehensive income (loss) will be reclassified into earnings within the next 12 months.

The following table summarizes the amounts of gain or (loss) on net investment hedges recognized in Accumulated other comprehensive income (loss):

Derivatives Net Investment Hedging Relationships	Years Ended December 31, 2020	2019
Euro-denominated long-term debt	$ (256)	$ 68
Euro-denominated commercial paper	(8)	71
Cross currency swap	(109)	32
Foreign currency exchange contracts	(94)	23

(Dollars in tables in millions, except per share amounts)

NOTE 13. FAIR VALUE MEASUREMENTS

The accounting guidance for fair value measurements and disclosures establishes a three-level fair value hierarchy.

- Level 1 - Inputs are based on quoted prices in active markets for identical assets and liabilities.
- Level 2 - Inputs are based on observable inputs other than quoted prices in active markets for identical or similar assets and liabilities.
- Level 3 - One or more inputs are unobservable and significant.

Financial and nonfinancial assets and liabilities are classified in their entirety based on the lowest level of input that is significant to the fair value measurement.

The following table sets forth the Company's financial assets and liabilities that were accounted for at fair value on a recurring basis as of December 31, 2020 and 2019:

	December 31,	
	2020	2019
Assets:		
Foreign currency exchange contracts	$ 202	$ 291
Available for sale investments	1,118	1,523
Interest rate swap agreements	194	38
Cross currency swap agreements	—	51
Liabilities:		
Foreign currency exchange contracts	$ 150	$ 21
Interest rate swap agreements	—	13
Cross currency swap agreements	50	—

The foreign currency exchange contracts, interest rate swap agreements, and cross currency swap agreements are valued using broker quotations, or market transactions in either the listed or over-the-counter markets. As such, these derivative instruments are classified within level 2. The Company also holds investments in commercial paper, certificates of deposits, and time deposits that are designated as available for sale and are valued using published prices based on observable market data. As such, these investments are classified within level 2. The Company also holds available for sale investments in U.S. government and corporate debt securities valued utilizing published prices based on quoted market pricing, which are classified within level 1.

The carrying value of cash and cash equivalents, trade accounts and notes receivables, payables, commercial paper and short-term borrowings contained in the Consolidated Balance Sheet approximates fair value.

The following table sets forth the Company's financial assets and liabilities that were not carried at fair value:

	December 31, 2020		December 31, 2019	
	Carrying Value	Fair Value	Carrying Value	Fair Value
Assets:				
Long-term receivables	$ 137	$ 132	$ 129	$ 127
Liabilities:				
Long-term debt and related current maturities	$ 18,787	$ 20,176	$ 12,486	$ 13,578

(Dollars in tables in millions, except per share amounts)

NOTE 14. ACCRUED LIABILITIES

	December 31, 2020	December 31, 2019
Customer advances and deferred income	$ 2,932	$ 2,490
Compensation, benefit and other employee related	1,244	1,551
Repositioning	601	640
Asbestos related liabilities	300	361
Income taxes	307	253
Other taxes	281	239
Environmental costs	225	222
Operating lease liabilities	187	171
Product warranties and performance guarantees	183	213
Insurance	140	143
Accrued interest	102	91
Other (primarily operating expenses)	903	1,102
	$ 7,405	$ 7,476

NOTE 15. OTHER LIABILITIES

	December 31, 2020	December 31, 2019
Income taxes	$ 2,009	$ 2,115
Pension and other employee related	1,923	1,873
Deferred income	1,356	1,310
Operating lease liabilities	641	534
Environmental	435	487
Insurance	280	247
Product warranties and performance guarantees	60	56
Asset retirement obligations	31	61
Other	240	83
	$ 6,975	$ 6,766

(Dollars in tables in millions, except per share amounts)

NOTE 16. STOCK-BASED COMPENSATION PLANS

The 2016 Stock Incentive Plan of Honeywell International Inc. and its Affiliates (2016 Plan) and 2016 Stock Plan for Non-Employee Directors of Honeywell International Inc. (2016 Directors Plan) were both approved by the shareowners at the Annual Meeting of Shareowners effective on April 25, 2016. At December 31, 2020, there were 34,104,522, and 832,309 shares of Honeywell common stock available for future grants under terms of the 2016 Plan and 2016 Directors Plan, respectively.

STOCK OPTIONS

The exercise price, term and other conditions applicable to each option granted under the Company's stock plans are generally determined by the Management Development and Compensation Committee of the Board of Directors. The exercise price of stock options is set on the grant date and may not be less than the fair market value per share of our stock on that date. The fair value is recognized as an expense over the employee's requisite service period (generally the vesting period of the award). Options generally vest over a four-year period and expire after ten years.

The fair value of each option award is estimated on the date of grant using the Black-Scholes option-pricing model. Expected volatility is based on implied volatilities from traded options on our common stock and historical volatility of our common stock. We used a Monte Carlo simulation model to derive an expected term which represents an estimate of the time options are expected to remain outstanding. Such model uses historical data to estimate option exercise activity and post-vest termination behavior. The risk-free rate for periods within the contractual life of the option is based on the U.S. treasury yield curve in effect at the time of grant.

The following table summarizes the impact to the Consolidated Statement of Operations from stock options:

	Years Ended December 31,		
	2020	2019	2018
Compensation expense	$ 50	$ 47	$ 64
Future income tax benefit recognized	10	10	13

The following table sets forth fair value per share information, including related weighted-average assumptions, used to determine compensation cost.

	Years Ended December 31,		
	2020	2019	2018
Weighted average fair value per share of options granted during the year(1)	$ 21.30	$ 21.57	$ 23.63
Assumptions:			
Expected annual dividend yield	2.59 %	2.65 %	2.49 %
Expected volatility	18.76 %	18.40 %	18.93 %
Risk-free rate of return	1.32 %	2.46 %	2.71 %
Expected option term (years)	4.62	4.87	4.95

(1) Estimated on date of grant using Black-Scholes option-pricing model.

(Dollars in tables in millions, except per share amounts)

The following table summarizes information about stock option activity for the three years ended December 31, 2020:

	Number of Options	Weighted Average Exercise Price
Outstanding at December 31, 2017	23,409,293	$ 94.16
Spin related adjustment[1]	989,158	
Granted	3,303,722	148.48
Exercised	(3,399,375)	78.29
Lapsed or canceled	(1,824,217)	123.01
Outstanding at December 31, 2018	22,478,581	97.83
Granted	3,136,058	155.43
Exercised	(5,897,060)	84.31
Lapsed or canceled	(986,017)	136.15
Outstanding at December 31, 2019	18,731,562	109.87
Granted	3,192,693	176.93
Exercised	(4,424,754)	88.96
Lapsed or canceled	(930,972)	156.62
Outstanding at December 31, 2020	16,568,529	$ 125.75
Vested and expected to vest at December 31, 2020[2]	15,442,367	$ 122.63
Exercisable at December 31, 2020	10,120,793	$ 103.89

(1) Additional options granted to offset the dilutive impact of the spin-offs on outstanding options.
(2) Represents the sum of vested options of 10.1 million and expected to vest options of 5.3 million. Expected to vest options are derived by applying the pre-vesting forfeiture rate assumption to total outstanding unvested options of 6.4 million.

The following table summarizes information about stock options outstanding and exercisable at December 31, 2020:

	Options Outstanding				Options Exercisable		
Range of Exercise Prices	Number Outstanding	Weighted Average Life[1]	Weighted Average Exercise Price	Aggregate Intrinsic Value	Number Exercisable	Weighted Average Exercise Price	Aggregate Intrinsic Value
$27.00–$64.99	236,938	1	$ 56.58	$ 37	236,938	$ 56.58	$ 37
$65.00–$89.99	2,541,403	2.7	78.96	340	2,541,403	78.96	340
$90.00–$99.99	3,980,975	4.68	98.80	453	3,980,975	98.80	453
$100.00–$134.99	2,892,011	6.78	119.58	270	1,985,364	118.64	187
$135.00–$180.99	6,917,202	8.34	163.40	341	1,376,113	151.53	84
	16,568,529	6.22	$ 125.75	$ 1,441	10,120,793	$ 103.89	$ 1,101

(1) Average remaining contractual life in years.

There were 11,620,992 and 14,073,120 options exercisable at weighted average exercise prices of $92.19 and $83.42 at December 31, 2019 and 2018.

(Dollars in tables in millions, except per share amounts)

The following table summarizes the financial statement impact from stock options exercised:

	Years Ended December 31,		
Options Exercised	**2020**	**2019**	**2018**
Intrinsic value[1]	$ 379	$ 483	$ 238
Tax benefit realized	84	117	47

(1) Represents the amount by which the stock price exceeded the exercise price of the options on the date of exercise.

At December 31, 2020, there was $88 million of total unrecognized compensation cost related to non-vested stock option awards which is expected to be recognized over a weighted-average period of 2.46 years. The total fair value of options vested for the years ended December 31, 2020, 2019 and 2018 was $55 million, $61 million and $73 million.

RESTRICTED STOCK UNITS

Restricted stock unit (RSU) awards entitle the holder to receive one share of common stock for each unit when the units vest. RSUs are issued to certain key employees and directors as compensation at fair market value at the date of grant. RSUs generally become fully vested over periods ranging from three to six years and are payable in Honeywell common stock upon vesting.

The following table summarizes information about RSU activity for the three years ended December 31, 2020:

	Number of Restricted Stock Units	Weighted Average Grant Date Fair Value Per Share
Non-vested at December 31, 2017	3,946,827	$ 108.60
Spin related adjustment[1]	154,346	
Granted	1,360,338	153.46
Vested	(988,787)	91.68
Forfeited	(814,851)	117.40
Non-vested at December 31, 2018	3,657,873	125.35
Granted	1,200,202	162.43
Vested	(1,160,333)	104.32
Forfeited	(457,677)	134.50
Non-vested at December 31, 2019	3,240,065	143.07
Granted	1,551,675	158.52
Vested	(1,001,101)	117.84
Forfeited	(394,116)	145.42
Non-vested at December 31, 2020	3,396,523	$ 148.23

(1) Additional RSU grants to offset the dilutive impact of the spin-offs on non-vested RSUs.

As of December 31, 2020, there was approximately $290 million of total unrecognized compensation cost related to non-vested RSUs granted under our stock plans which is expected to be recognized over a weighted-average period of 3.30 years.

The following table summarizes the impact to the Consolidated Statement of Operations from RSUs:

	Years Ended December 31,		
	2020	2019	2018
Compensation expense	$ 118	$ 106	$ 111
Future income tax benefit recognized	24	21	21

NOTE 17. EARNINGS PER SHARE

The details of the earnings per share calculations for the years ended December 31, 2020, 2019 and 2018 are as follows (shares in millions):

	Years Ended December 31,		
Basic	**2020**	**2019**	**2018**
Net income attributable to Honeywell	$ 4,779	$ 6,143	$ 6,765
Weighted average shares outstanding	704.1	721.0	743.0
Earnings per share of common stock	$ 6.79	$ 8.52	$ 9.10

	Years Ended December 31,		
Assuming Dilution	**2020**	**2019**	**2018**
Net income attributable to Honeywell	$ 4,779	$ 6,143	$ 6,765
Average Shares			
Weighted average shares outstanding	704.1	721.0	743.0
Dilutive securities issuable—stock plans	7.1	9.3	10.0
Total weighted average diluted shares outstanding	711.2	730.3	753.0
Earnings per share of common stock—assuming dilution	$ 6.72	$ 8.41	$ 8.98

The diluted earnings per share calculations exclude the effect of stock options when the options' assumed proceeds exceed the average market price of the common shares during the period. In 2020, 2019 and 2018 the weighted number of stock options excluded from the computations were 5.5 million, 2.5 million and 2.5 million. These stock options were outstanding at the end of each of the respective periods.

NOTE 18. ACCUMULATED OTHER COMPREHENSIVE INCOME (LOSS)

The changes in Accumulated other comprehensive income (loss) are provided in the tables below. Comprehensive income (loss) attributable to noncontrolling interest consists predominantly of net income.

	Pre-tax	Tax	After-Tax
Year Ended December 31, 2020			
Foreign exchange translation adjustment	$ (214)	$ —	$ (214)
Pensions and other postretirement benefit adjustments	76	(2)	74
Changes in fair value of available for sale investments	4	—	4
Changes in fair value of designated cash flow hedges	(61)	17	(44)
	$ (195)	$ 15	$ (180)
Year Ended December 31, 2019			
Foreign exchange translation adjustment	$ 143	$ —	$ 143
Pensions and other postretirement benefit adjustments	115	(29)	86
Changes in fair value of designated cash flow hedges	20	(9)	11
	$ 278	$ (38)	$ 240
Year Ended December 31, 2018			
Foreign exchange translation adjustment	$ (728)	$ —	$ (728)
Pensions and other postretirement benefit adjustments	(727)	168	(559)
Changes in fair value of designated cash flow hedges	102	(17)	85
	$ (1,353)	$ 151	$ (1,202)

(Dollars in tables in millions, except per share amounts)

COMPONENTS OF ACCUMULATED OTHER COMPREHENSIVE INCOME (LOSS)

	December 31, 2020	December 31, 2019
Cumulative foreign exchange translation adjustment	$ (2,780)	$ (2,566)
Pensions and other postretirement benefit adjustments	(601)	(675)
Changes in fair value of available for sale investments	4	—
Changes in fair value of designated cash flow hedges	—	44
	$ (3,377)	$ (3,197)

CHANGES IN ACCUMULATED OTHER COMPREHENSIVE INCOME (LOSS) BY COMPONENT

	Foreign Exchange Translation Adjustment	Pension and Other Postretirement Adjustments	Changes in Fair Value of Available for Sale Investments	Changes in Fair Value of Cash Flow Hedges	Total
Balance at December 31, 2018	$ (2,709)	$ (761)	$ —	$ 33	$ (3,437)
Other comprehensive income (loss) before reclassifications	156	149	—	103	408
Amounts reclassified from accumulated other comprehensive income	(13)	(63)	—	(92)	(168)
Net current period other comprehensive income (loss)	143	86	—	11	240
Balance at December 31, 2019	$ (2,566)	$ (675)	$ —	$ 44	$ (3,197)
Other comprehensive income (loss) before reclassifications	(201)	115	4	10	(72)
Amounts reclassified from accumulated other comprehensive income	(13)	(41)	—	(54)	(108)
Net current period other comprehensive income (loss)	(214)	74	4	(44)	(180)
Balance at December 31, 2020	$ (2,780)	$ (601)	$ 4	$ —	$ (3,377)

(Dollars in tables in millions, except per share amounts)

RECLASSIFICATIONS OUT OF ACCUMULATED OTHER COMPREHENSIVE INCOME (LOSS)

	Year Ended December 31, 2020						
	Affected Line in the Consolidated Statement of Operations						
	Product Sales	Cost of Products Sold	Cost of Services Sold	Selling, General and Admin. Expenses	Other (Income) Expense	Interest and Other Financial Charges	Total
Amortization of Pension and Other Postretirement Items:							
Actuarial losses recognized	$ —	$ —	$ —	$ —	$ 57	$ —	$ 57
Prior service (credit) recognized	—	—	—	—	(108)	—	(108)
Losses (gains) on cash flow hedges	3	(43)	(11)	4	(28)	—	(75)
Losses (gains) on excluded component of net investment hedges	—	—	—	—	—	(18)	(18)
Total before tax	$ 3	$ (43)	$ (11)	$ 4	$ (79)	$ (18)	$ (144)
Tax expense (benefit)							36
Total reclassifications for the period, net of tax							$ (108)

	Year Ended December 31, 2019					
	Affected Line in the Consolidated Statement of Operations					
	Product Sales	Cost of Products Sold	Cost of Services Sold	Selling, General and Admin. Expenses	Other (Income) Expense	Total
Amortization of Pension and Other Postretirement Items:						
Actuarial losses recognized	$ —	$ —	$ —	$ —	$ 135	$ 135
Prior service (credit) recognized	—	—	—	—	(104)	(104)
Losses (gains) on cash flow hedges	(3)	(35)	(9)	(1)	(73)	(121)
Losses (gains) on excluded component of net investment hedges	—	—	—	—	(19)	(19)
Total before tax	$ (3)	$ (35)	$ (9)	$ (1)	$ (61)	$ (109)
Tax expense (benefit)						(59)
Total reclassifications for the period, net of tax						$ (168)

NOTE 19. CAPITAL STOCK

The Company is authorized to issue up to 2,000,000,000 shares of common stock, with a par value of $1. Common shareowners are entitled to receive such dividends as may be declared by the Board of Directors, are entitled to one vote per share, and are entitled, in the event of liquidation, to share ratably in all the assets of the Company which are available for distribution to the common shareowners. Common shareowners do not have preemptive or conversion rights. Shares of common stock issued and outstanding or held in the treasury are not liable to further calls or assessments. There are no restrictions on the Company relative to dividends or the repurchase or redemption of common stock.

In April 2019, the Board of Directors authorized the repurchase of up to a total of $10.0 billion of Honeywell common stock. Approximately $3.3 billion and $7.0 billion remained available as of December 31, 2020 and 2019 for additional share repurchases.

Honeywell repurchased approximately 20.7 million and 26.5 million shares of its common stock during the years ended December 31, 2020 and 2019, for $3,714 million and $4,400 million.

The Company is authorized to issue up to 40,000,000 shares of preferred stock, without par value, and can determine the number of shares of each series, and the rights, preferences and limitations of each series. At December 31, 2020, there was no preferred stock outstanding.

NOTE 20. COMMITMENTS AND CONTINGENCIES

ENVIRONMENTAL MATTERS

The Company is subject to various federal, state, local and foreign government requirements relating to the protection of the environment. We believe that, as a general matter, our policies, practices and procedures are properly designed to prevent unreasonable risk of environmental damage and personal injury and that our handling, manufacture, use and disposal of hazardous substances are in accordance with environmental and safety laws and regulations. However, mainly because of past operations and operations of predecessor companies, we, like other companies engaged in similar businesses, have incurred remedial response and voluntary cleanup costs for site contamination and are a party to lawsuits and claims associated with environmental and safety matters, including past production of products containing hazardous substances. Additional lawsuits, claims and costs involving environmental matters are likely to continue to arise in the future.

With respect to environmental matters involving site contamination, the Company continually conducts studies, individually or jointly with other potentially responsible parties, to determine the feasibility of various remedial techniques. It is our policy to record appropriate liabilities for environmental matters when remedial efforts or damage claim payments are probable and the costs can be reasonably estimated. Such liabilities are based on our best estimate of the undiscounted future costs required to complete the remedial work. The recorded liabilities are adjusted periodically as remediation efforts progress or as additional technical, regulatory or legal information becomes available. Given the uncertainties regarding the status of laws, regulations, enforcement policies, the impact of other potentially responsible parties, technology and information related to individual sites, we do not believe it is possible to develop an estimate of the range of reasonably possible environmental loss in excess of our recorded liabilities. We expect to fund expenditures for these matters from operating cash flow. The timing of cash expenditures depends on a number of factors, including the timing of remedial investigations and feasibility studies, the timing of litigation and settlements of remediation liability, personal injury and property damage claims, regulatory approval of cleanup projects, remedial techniques to be utilized and agreements with other parties.

(Dollars in tables in millions, except per share amounts)

The following table summarizes information concerning the Company's recorded liabilities for environmental costs:

	Years Ended December 31,		
	2020	2019	2018
Beginning of year	$ 709	$ 755	$ 595
Accruals for environmental matters deemed probable and reasonably estimable	173	213	395
Environmental liability payments	(216)	(256)	(218)
Other	(6)	(3)	(17)
End of year	$ 660	$ 709	$ 755

Environmental liabilities are included in the following balance sheet accounts:

	December 31,	
	2020	2019
Accrued liabilities	$ 225	$ 222
Other liabilities	435	487
	$ 660	$ 709

The Company does not currently possess sufficient information to reasonably estimate the amounts of environmental liabilities to be recorded upon future completion of studies, litigation or settlements, and neither the timing nor the amount of the ultimate costs associated with environmental matters can be determined, although they could be material to our Consolidated Statement of Operations and operating cash flows in the periods recognized or paid. However, considering our past experience and existing reserves, the Company does not expect that environmental matters will have a material adverse effect on its Consolidated Balance Sheet.

In conjunction with the Resideo spin-off, the Company entered into an indemnification and reimbursement agreement with a Resideo subsidiary, pursuant to which Resideo's subsidiary has an ongoing obligation to make cash payments to Honeywell in amounts equal to 90% of Honeywell's annual net spending for environmental matters at certain sites as defined in the agreement. The amount payable to Honeywell in any given year is subject to a cap of $140 million, and the obligation will continue until the earlier of December 31, 2043, or December 31 of the third consecutive year during which the annual payment obligation is less than $25 million.

Reimbursements associated with this agreement are collected from Resideo quarterly and were $140 million in both 2020 and 2019 and offset operating cash outflows incurred by the Company. On July 28, 2020, the Company and Resideo agreed to a second amendment of the indemnification and reimbursement agreement to extend the payment due date to October 30, 2020 for the reimbursement amount of $35 million (originally due on April 30, 2020). The Company had previously agreed to extend the payment date for such amount to July 30, 2020. On October 30, 2020, Resideo paid Honeywell the regularly scheduled reimbursement amount of $35 million due on that date as well as the deferred reimbursement amount of $35 million. As the Company incurs costs for environmental matters deemed probable and reasonably estimable related to the sites covered by the indemnification and reimbursement agreement, a corresponding receivable from Resideo for 90% of such costs is also recorded. This receivable amount recorded in 2020 and 2019 was $146 million and $109 million, respectively. As of

December 31, 2020, Other Current Assets and Other Assets included $140 million and $451 million, respectively, for the short-term and long-term portion of the receivable amount due from Resideo under the indemnification and reimbursement agreement. As of December 31, 2019, Other Current Assets and Other Assets included $140 million and $445 million, respectively, for the short-term and long-term portion of the receivable amount due from Resideo under the indemnification and reimbursement agreement.

(Dollars in tables in millions, except per share amounts)

ASBESTOS MATTERS

Honeywell is named in asbestos related personal injury claims related to North American Refractories Company (NARCO), which was sold in 1986, and the Bendix Friction Materials (Bendix) business, which was sold in 2014.

The following tables summarize information concerning NARCO and Bendix asbestos related balances:

ASBESTOS RELATED LIABILITIES

	Year Ended December 31, 2020			Year Ended December 31, 2019			Year Ended December 31, 2018		
	Bendix	NARCO	Total	Bendix	NARCO	Total	Bendix	NARCO	Total
Beginning of year	$ 1,499	$ 858	$ 2,357	$ 1,623	$ 891	$ 2,514	$ 1,703	$ 907	$ 2,610
Accrual for update to estimated liability	80	18	98	78	22	100	197	32	229
Change in estimated cost of future claims	42	—	42	(22)	—	(22)	(72)	—	(72)
Update of expected resolution values for pending claims	10	—	10	(4)	—	(4)	1	—	1
Asbestos related liability payments	(190)	(97)	(287)	(176)	(55)	(231)	(206)	(48)	(254)
End of year	$ 1,441	$ 779	$ 2,220	$ 1,499	$ 858	$ 2,357	$ 1,623	$ 891	$ 2,514

INSURANCE RECOVERIES FOR ASBESTOS RELATED LIABILITIES

	Year Ended December 31, 2020			Year Ended December 31, 2019			Year Ended December 31, 2018		
	Bendix	NARCO	Total	Bendix	NARCO	Total	Bendix	NARCO	Total
Beginning of year	$ 153	$ 281	$ 434	$ 170	$ 307	$ 477	$ 191	$ 312	$ 503
Probable insurance recoveries related to estimated liability	10	—	10	3	—	3	11	—	11
Insurance receipts for asbestos related liabilities	(33)	(25)	(58)	(39)	(29)	(68)	(33)	(5)	(38)
Insurance receivables settlements and write offs	18	(2)	16	19	3	22	1	—	1
End of year	$ 148	$ 254	$ 402	$ 153	$ 281	$ 434	$ 170	$ 307	$ 477

NARCO and Bendix asbestos related balances are included in the following balance sheet accounts:

	December 31,	
	2020	2019
Other current assets	$ 36	$ 42
Insurance recoveries for asbestos related liabilities	366	392
	$ 402	$ 434
Accrued liabilities	$ 300	$ 361
Asbestos related liabilities	1,920	1,996
	$ 2,220	$ 2,357

NARCO Products – NARCO manufactured high-grade, heat-resistant, refractory products for various industries. Honeywell's predecessor, Allied Corporation, owned NARCO from 1979 to 1986. Allied Corporation sold the NARCO business in 1986 and entered into a cross-indemnity agreement which included an obligation to indemnify the purchaser for asbestos claims. Such claims arise primarily from alleged occupational exposure to asbestos-containing refractory brick and mortar for high-temperature applications. NARCO ceased manufacturing these products in 1980 and ultimately filed for bankruptcy in January 2002, at which point in time all then current and future NARCO asbestos claims were stayed against both NARCO and Honeywell pending the reorganization of NARCO. The Company established its initial liability for NARCO asbestos claims in 2002.

NARCO emerged from bankruptcy in April 2013, at which time a federally authorized 524(g) trust was established to evaluate and resolve all existing NARCO asbestos claims (the Trust). Both Honeywell and NARCO are protected by a permanent channeling injunction barring all present and future individual actions in state or federal courts and requiring all asbestos-related claims based on exposure to NARCO asbestos-containing products to be made against the Trust. The NARCO Trust Agreement (TA) and the NARCO Trust Distribution Procedures (TDP) are the principal documents setting forth the structure of the Trust, establishing Honeywell's evergreen funding obligations and the material operating rules for the Trust.

Per the TA, the Trust is eligible to receive cash dividends from Harbison-Walker International Inc. (HWI), the reorganized and renamed entity that emerged, fully operational, from the NARCO bankruptcy. The cash dividends are required to be used to pay claims which qualify for payment under the TDP (Annual Contribution Claims) until those funds are exhausted, at which point Honeywell's funding obligation, subject to an annual cap of $145 million, is triggered. The Company is also required to fund amounts owed pursuant to settlement agreements reached during the pendency of the NARCO bankruptcy proceedings that provide for the right to submit claims to the Trust subject to qualification under the terms of the settlement agreements and TDP (Pre-Established Unliquidated Claims), as well as fund the annual operating costs of the Trust. There is no annual funding cap relative to Pre-Established Unliquidated Claims. Dividends from HWI were exhausted during the fourth quarter of 2019 and there have been no further dividends from HWI to date.

The operating rules per the TDP include Honeywell's audit rights and the criteria claimants must meet for a claim to be considered valid and paid, which include adequate medical evidence of the claimant's asbestos-related condition and credible evidence of exposure to a specific NARCO asbestos-containing product. Once operational in 2014, the Trust began to receive, process and pay claims, at which point the Company began to assert its audit rights to review and monitor the claims processor's adherence to the established requirements of the TDP. While doing so, the Company identified several issues with the way the Trust was adhering to the TDP and the Company continues to identify and dispute these matters as further claims are processed. Although the Company is attempting to resolve instances where it believes the Trust is not processing claims in accordance with the established TDP, the Company reserves the right to seek judicial intervention should it fail to resolve the disputed issues.

Due to the bankruptcy filing in 2002, claimants were not permitted to file additional claims until the Trust became operative in 2014. As a consequence, there was a large backlog of claims that were filed with the Trust upon becoming operative through December 31, 2017, the date by which these claims had to be filed or else be barred by the statute of limitations (subject to tolling exceptions in the TDP). Therefore, the claims filing rate did not start to normalize until 2018 and thereafter. As a result, between 2002 and 2018, the Company lacked a history of sufficiently reliable claims data to derive a reasonable estimate and the Company continued to update its original NARCO asbestos liability, as appropriate, using all available information.

With three years of sufficiently reliable claims data, the Company updated its estimate of the NARCO asbestos liability utilizing claims data from January 1, 2018 through December 31, 2020. The Company utilized an asbestos liability valuation specialist to support our preparation of the NARCO asbestos liability estimates. Our estimates, which involve significant management judgment, include consideration of multiple scenarios, including the impact of the COVID-19 pandemic on the Trust's ability to process claims during 2020. The estimate for the resolution of asserted Annual Contribution Claims and Pre-Established Unliquidated Claims uses average payment values for the relevant historical period. For unasserted claims, the estimate is based on historic and anticipated claims filing experience and payment rates, disease classifications and type of claim, and average payment values by the Trust for the relevant historical period. The Company's estimate also includes all years of epidemiological disease projection through 2059.

(Dollars in tables in millions, except per share amounts)

Our updated estimate of NARCO asbestos liability, which was consistent with the previously recorded NARCO liability estimate, was $779 million as of December 31, 2020. The liability reflects an estimate for the resolution of Annual Contribution Claims and Pre-Established Unliquidated Claims filed with the Trust, as well as unasserted Annual Contribution Claims and Pre-Established Unliquidated Claims. The NARCO asbestos liability excludes the annual operating expenses of the Trust which are expensed as they are incurred.

The Company's insurance receivable of $254 million as of December 31, 2020, corresponding to the estimated liability for asserted and unasserted NARCO asbestos claims, reflects coverage which reimburses Honeywell for portions of NARCO-related indemnity and defense costs and is provided by a large number of insurance policies written by dozens of insurance companies in both the domestic insurance market and the London excess market. Honeywell conducts analyses to estimate the probable amount of insurance that is recoverable for asbestos claims. Most of our insurance carriers remain solvent. However, select individual insurance carriers are now insolvent, which we have considered in our analysis of probable recoveries. Our judgments related to our insurance carriers and insurance coverages are reasonable and consistent with Honeywell's historical dealings and Honeywell's knowledge of any pertinent solvency issues surrounding insurers.

Bendix Products – Bendix manufactured automotive brake linings that contained chrysotile asbestos in an encapsulated form. Claimants consist largely of individuals who allege exposure to asbestos from brakes from either performing or being in the vicinity of individuals who performed brake replacements. The following tables present information regarding Bendix related asbestos claims activity:

	Years Ended December 31,	
Claims Activity	**2020**	**2019**
Claims Unresolved at the beginning of year	6,480	6,209
Claims Filed	2,233	2,659
Claims Resolved	(2,471)	(2,388)
Claims Unresolved at the end of year	6,242	6,480

	December 31,	
Disease Distribution of Unresolved Claims	**2020**	**2019**
Mesothelioma and Other Cancer Claims	3,422	3,399
Nonmalignant Claims	2,820	3,081
Total Claims	6,242	6,480

Honeywell has experienced average resolution values per claim excluding legal costs as follows:

	Years Ended December 31,				
	2020	2019	2018	2017	2016
	(in whole dollars)				
Malignant claims	$ 61,500	$ 50,200	$ 55,300	$ 56,000	$ 44,000
Nonmalignant claims	$ 550	$ 3,900	$ 4,700	$ 2,800	$ 4,485

It is not possible to predict whether resolution values for Bendix-related asbestos claims will increase, decrease or stabilize in the future.

The Consolidated Financial Statements reflect an estimated liability for resolution of asserted (claims filed as of the financial statement date) and unasserted Bendix-related asbestos claims and excludes the Company's ongoing legal fees to defend such asbestos claims which will continue to be expensed as they are incurred. The Company has valued Bendix asserted and unasserted claims using average resolution values for the previous five years. The Company updates the resolution values used to estimate the cost of Bendix asserted and unasserted claims during the fourth quarter each year.

The Company reflects the inclusion of all years of epidemiological disease projection through 2059 when estimating the liability for unasserted Bendix-related asbestos claims. Such liability for unasserted Bendix-related asbestos claims is based on historic and anticipated claims filing experience and dismissal rates, disease classifications, and resolution values in the tort system for the previous five years.

The Company's insurance receivable corresponding to the liability for settlement of asserted and unasserted Bendix asbestos claims reflects coverage which is provided by a large number of insurance policies written by dozens of insurance companies in both the domestic insurance market and the London excess market. Based on our ongoing analysis of the probable insurance recovery, insurance receivables are recorded in the financial statements simultaneous with the recording of the estimated liability for the underlying asbestos claims. This determination is based on our analysis of the underlying insurance policies, our historical experience with our insurers, our ongoing review of the solvency of our insurers, judicial determinations relevant to our insurance programs, and our consideration of the impacts of any settlements reached with our insurers.

On October 31, 2018, David Kanefsky, a Honeywell shareholder, filed a putative class action complaint in the U.S. District Court for the District of New Jersey alleging violations of the Securities Exchange Act of 1934 and Rule 10b-5 related to the prior accounting for Bendix asbestos claims. An Amended Complaint was filed on December 30, 2019, and on February 7, 2020, we filed a Motion to Dismiss. On May 18, 2020, the court denied our Motion to Dismiss. We believe the claims have no merit.

GARRETT MATTER

In conjunction with the Garrett spin-off, the Company entered into a binding indemnification and reimbursement agreement (Garrett Indemnity) with a Garrett subsidiary, pursuant to which Garrett's subsidiary has an ongoing obligation to make cash payments to Honeywell in amounts equal to (i) 90% of Honeywell's asbestos-related liability payments primarily related to the Bendix business in the United States, as well as certain environmental-related liability payments and accounts payable and non-United States asbestos-related liability payments, including the legal costs of defending and resolving such liabilities, less (ii) 90% of Honeywell's net insurance receipts and, as may be applicable, certain other recoveries associated with such liabilities. The amount payable to Honeywell in respect of such liabilities arising in any given year is subject to a cap of approximately Euro 150 million (equivalent to $175 million at the time the Garrett Indemnity was entered into). The obligation under the terms of the Garrett Indemnity continues until the earlier of December 31, 2048, or December 31 of the third consecutive year during which the annual obligation is less than the Euro equivalent, at the fixed exchange rate at the time the indemnification and reimbursement agreement was entered into, of $25 million.

On June 12, 2020, the Company and Garrett entered into an amendment of the Garrett Indemnity in connection with Garrett's amendment of its 2018 credit agreement. These amendments provided Garrett with temporary financial covenant relief with respect to the total leverage and interest coverage ratios, for a period that could extend to as late as June 30, 2022. Garrett's payments to the Company under the Garrett Indemnity were deferred to the extent Garrett is (or to the extent such payments would cause Garrett to be) out of compliance with the original financial covenants and resume to the extent Garrett is in compliance with such original financial covenants. Any deferred amounts were to be paid to the extent Garrett was in compliance with such original financial covenants and had available capacity to make such payments pursuant to the terms of the Garrett Indemnity and its current credit agreement.

Reimbursements associated with the Garrett Indemnity are scheduled under the agreement to be collected from Garrett quarterly and offset operating cash outflows incurred by the Company. As a result of the extension referenced above and below, such amounts were $36 million in 2020 as compared with $152 million in 2019. As the Company records the accruals for matters covered by the Garrett Indemnity, a corresponding receivable from Garrett is recorded for 90% of that accrual as determined by the terms of the Garrett Indemnity.

In conjunction with the spin-off, Honeywell also entered into a binding tax matters agreement with Garrett and a Garrett subsidiary (the Tax Matters Agreement). The Tax Matters Agreement generally provides that Garrett is responsible and must indemnify Honeywell for all ordinary operating taxes, including income taxes, sales taxes, value-added taxes and payroll taxes, relating to Garrett for all periods, including periods prior to the spin-off, to the extent not paid prior to the spin-off date. In addition, among other items, as a result of the mandatory transition tax imposed by the U.S. Tax Cuts and Jobs Act, Garrett is required to make payments to Honeywell in the amount representing the net tax liability of Honeywell under the mandatory transition tax attributable to Garrett.

GARRETT LITIGATION AND BANKRUPTCY PROCEEDINGS

On December 2, 2019, Garrett and Garrett ASASCO Inc. filed a Summons with Notice and commenced a lawsuit in the Commercial Division of the Supreme Court of the State of New York, County of New York (the State Court), seeking to invalidate the Garrett Indemnity. Garrett sought damages and a declaratory judgment based on various claims set forth in the Summons with Notice. On January 15, 2020, Garrett filed its complaint in the action, which asserted the same claims, and on March 5, 2020, we filed a Motion to Dismiss. On June 12, 2020, given the challenges of operating in the COVID-19 environment, Honeywell and Garrett entered into a litigation status agreement pursuant to which (i) the parties agreed to make good faith efforts to limit near-term litigation spend on this matter, and (ii) the Company agreed to extend both the $2 million payment owed by Garrett to the Company on May 1, 2020 under the Garrett Indemnity and the $18 million payment owed by Garrett to the Company on April 1, 2020 under the Tax Matters Agreement until December 31, 2020 (which amounts, as previously disclosed, had been deferred to May 31, 2020). On July 17, 2020, the Company received a notice from Garrett asserting that Honeywell has caused material breaches of the Tax Matters Agreement and that the Tax Matters Agreement is unenforceable.

On September 20, 2020, Garrett and 36 of its affiliates filed voluntary petitions for relief under Chapter 11 of the United States Bankruptcy Code in the United States Bankruptcy Court for the Southern District of New York (the Bankruptcy Court). On September 23, 2020, Garrett moved the existing State Court litigation against Honeywell to the Bankruptcy Court. Honeywell again moved to dismiss all of Garrett's claims on October 13, 2020. On November 2, 2020, Garrett filed a motion seeking to establish procedures to estimate the value of Honeywell's claims. Honeywell objected to the motion. On November 18, 2020, the Bankruptcy Court did not rule on the motion to dismiss but suggested that two weeks be set aside in February 2021 for an evidentiary hearing to establish the actual allowed amount or net amount of Honeywell's claim against Garrett. Honeywell and Garrett agreed to proceed with the estimation of Honeywell's claims. We believe we have fully complied with our obligations under the Garrett Indemnity and the Tax Matters Agreement and that both agreements are valid and enforceable.

Garrett's operations have and are expected to continue, without interruption, throughout the bankruptcy proceedings. Garrett initially proposed to sell its business while in bankruptcy, and entered into a Share and Asset Purchase Agreement, dated as of September 20, 2020, with KPS Capital Partners, LP (the Stalking Horse Agreement) and filed proposed bidding procedures for a marketing and sale process, auction and other procedures related to the proposed sale. In October 2020, Honeywell signed a coordination agreement with Oaktree Capital Management, L.P. (Oaktree) and Centerbridge Partners, L.P. (Centerbridge), which was subsequently signed by additional equity holders that, collectively with Honeywell, Centerbridge and Oaktree, represent approximately 58% of Garrett's outstanding common stock and noteholders representing approximately 88% of the principal amount of Garrett's outstanding senior notes (the Coordination Agreement). The Coordination Agreement and related term sheet set forth the terms of a proposed plan of reorganization (the Initial COH Proposal).

In October 2020, the Bankruptcy Court approved the bidding procedures and the Stalking Horse Agreement (as amended), and Garrett conducted a marketing and auction process through January 8, 2021. On January 11, 2021, after further revisions to the Initial COH Proposal, Garrett determined that the revised proposal (the Final COH Plan) was higher and better than all other proposals received and entered into a plan support agreement (the Plan Support Agreement), pursuant to which all parties agreed to pursue Bankruptcy Court confirmation of the Final COH Plan. On January 15, 2021, KPS Capital Partners, LP terminated the Stalking Horse Agreement with Garrett.

As set forth in the Plan Support Agreement, the Final COH Plan provides that, if it is confirmed by the Bankruptcy Court, Honeywell will receive from Garrett at the time of Garrett's emergence from bankruptcy an initial payment of $375 million in cash and Series B Preferred Stock, which will provide for cash payments to Honeywell of $35 million in 2022 and $100 million per year from 2023 to 2030 (inclusive), subject to various put and call rights set forth therein. The initial cash payment, together with the Series B Preferred Stock, would be paid/issued in full and final satisfaction of Garrett's obligations to Honeywell under the Garrett Indemnity and the Tax Matters Agreement. Upon Garrett's emergence from bankruptcy, both agreements would be terminated, Honeywell and Garrett would mutually release each other from the claims asserted in all pending legal actions, and all pending litigation with Garrett would be resolved. In light of these developments, the hearing scheduled to estimate Honeywell's claims and the adversary proceeding seeking to invalidate the Indemnity Agreement have been stayed and all related litigation suspended. If the Final COH Plan is confirmed by the Bankruptcy Court, both proceedings would be dismissed with prejudice on the effective date of the Final COH Plan.

We regularly review the aggregate carrying value of the receivable amounts due in connection with the Garrett Indemnity and the Tax Matters Agreement. Following Garrett's bankruptcy filing on September 20, 2020, the Company reduced the aggregate carrying value of the receivable by $350 million to reflect the present value of amounts owed to us over the full term of these agreements. Because Garrett is now a party to the Plan Support Agreement, we believe the present value of payments to Honeywell under the Final COH Plan, discounted at a rate reflective of the terms of the agreement, is an appropriate estimate of receivable amounts. On this basis, Honeywell recorded an additional adjustment of $92 million to lower the aggregate carrying value of the receivable amounts due in connection with the Garrett Indemnity and Tax Matters Agreement to $959 million as of December 31, 2020. Other Current Assets and Other Assets include $10 million and $949 million, respectively, for the short-term and long-term portion of the receivable amount due from the Garrett Indemnity and Tax Matters Agreement. As of December 31, 2019, Other Current Assets and Other Assets include $133 million and $1,188 million, respectively, for the short-term and long-term portion of the receivable amount due from the Garrett Indemnity and Tax Matters Agreement. For the year ended December 31, 2020, a non-cash charge of $509 million is recognized in Other (income) expense, which includes the adjustments to the carrying value of the receivable described above.

There can be no assurance that the Final COH Plan will be confirmed by the Bankruptcy Court or that Garrett will be able to substantially consummate the restructuring transactions contemplated in the Final COH Plan. The ultimate outcome of the bankruptcy process is uncertain. Depending on the transaction and/or plan of reorganization ultimately approved and confirmed by the Bankruptcy Court, the amount collected could differ from the receivable amounts currently recorded in our financial statements. There can be no assurance that recording an additional adjustment (positive or negative) against the remaining receivable amounts in whole or in part (together with a related statement of operations charge) will not be necessary in a future period or periods. Honeywell will continue to participate in the Bankruptcy Court proceedings in order to appropriately assess and enforce our rights in this matter. Should the Final COH Plan not be confirmed in the form currently contemplated, Honeywell intends to vigorously defend its rights to collect amounts due under the Garrett Indemnity and Tax Matters Agreement with Garrett.

OTHER MATTERS

The Company is subject to a number of other lawsuits, investigations and disputes (some of which involve substantial amounts claimed) arising out of the conduct of our business, including matters relating to commercial transactions, government contracts, product liability, prior acquisitions and divestitures, employee benefit plans, intellectual property, and environmental, health and safety matters. We recognize a liability for any contingency that is probable of occurrence and reasonably estimable. We continually assess the likelihood of adverse judgments or outcomes in these matters, as well as potential ranges of possible losses (taking into consideration any insurance recoveries), based on a careful analysis of each matter with the assistance of outside legal counsel and, if applicable, other experts. Included in these other matters is the following:

Honeywell v. United Auto Workers (UAW) et. al – In September 2011, the UAW and certain Honeywell retirees (Plaintiffs) filed a suit in the Eastern District of Michigan (the District Court) alleging that a series of Master Collective Bargaining Agreements (MCBAs) between Honeywell and the UAW provided the retirees with rights to lifetime, vested healthcare benefits that could never be changed or reduced. Plaintiffs alleged that Honeywell had violated those vested rights by implementing express limitations (CAPS) on the amount Honeywell contributed toward healthcare coverage for the retirees. Honeywell subsequently answered the UAW's complaint and asserted counterclaims, including for breach of implied warranty.

Between 2014 and 2015, Honeywell began enforcing the CAPS against former employees. In response, the UAW and certain of the Plaintiffs filed a motion seeking a ruling that the MCBAs do not limit Honeywell's obligation to contribute to healthcare coverage for those retirees.

On March 29, 2018, the District Court issued its opinion resolving all pending summary judgment motions, except for Honeywell's counterclaim for breach of implied warranty, which has since been dismissed without prejudice.

In the opinion, the District Court held that the MCBAs do not promise retirees vested, lifetime benefits that survive expiration of the MCBAs. Based on this ruling, Honeywell terminated the retirees healthcare coverage benefits altogether as of July 31, 2018. In response, the UAW filed a motion to enjoin Honeywell from completely terminating coverage as of July 31, 2018, arguing that the CAPS themselves are vested and that Honeywell must continue to provide retiree medical benefits at the capped level. On July 28, 2018, the District Court denied the UAW's motion and entered a final judgment consistent with its March 2018 ruling. The UAW appealed this decision to the Sixth Circuit Court of Appeals.

In the March 2018 opinion, the District Court also held that Honeywell is obligated under the MCBAs to pay the "full premium" for retiree healthcare rather than the capped amount. Based on this ruling, Honeywell would be required to pay monetary damages to retirees for any past years in which Honeywell paid less than the “full premium” of their healthcare coverage. Such damages would be limited, depending on the retiree group, to a two to three-year period ending when the 2017 MCBA expired, and Honeywell would have no ongoing obligation to continue funding healthcare coverage for subsequent periods. Honeywell appealed the District Court’s ruling on this “full premium” damages issue.

On April 3, 2020, the Sixth Circuit Court of Appeals issued an opinion ruling for Honeywell in all respects. The Court of Appeals affirmed the District Court's ruling that the MCBAs do not promise retirees vested, lifetime benefits that survive expiration of the MCBAs. In addition, the Court of Appeals reversed the District Court's ruling that Honeywell was obligated under the MCBAs to pay the "full premium" for retiree healthcare, rather than the capped amount. As a result of these rulings, Honeywell is not required to pay any monetary damages to the Plaintiffs.

Plaintiffs sought rehearing en banc from the Sixth Circuit Court of Appeals, which petition was denied. Plaintiffs failed to timely appeal the Sixth Circuit's ruling to the Supreme Court of the United States. Accordingly, as of October 8, 2020, the case was fully resolved.

Petrobras and Unaoil – We are cooperating with certain investigations by the U.S. Department of Justice (DOJ), the SEC and Brazilian authorities relating to our use of third parties who previously worked for our UOP business in Brazil in relation to Petróleo Brasileiro S.A. (Petrobras). The investigations are focused on compliance with the U.S. Foreign Corrupt Practices Act and similar Brazilian laws, and involve, among other things, document production and interviews with former and current management and employees. The DOJ and the SEC are also examining a matter involving a foreign subsidiary’s prior engagement of Unaoil S.A.M. in Algeria. We are cooperating with the authorities in each of the above matters. While we cannot predict the outcome of these matters, based on the facts currently known to us, we do not anticipate that these matters will have a material adverse effect on our financial condition, results of operations, or cash flows.

Given the uncertainty inherent in litigation and investigations (including the specific matters referenced above), we do not believe it is possible to develop estimates of reasonably possible loss in excess of current accruals for these matters (other than as specifically set forth above). Considering our past experience and existing accruals, we do not expect the outcome of these matters, either individually or in the aggregate, to have a material adverse effect on our consolidated financial position. Because most contingencies are resolved over long periods of time, potential liabilities are subject to change due to new developments, changes in settlement strategy or the impact of evidentiary requirements, which could cause us to pay damage awards or settlements (or become subject to equitable remedies) that could have a material adverse effect on our Consolidated Results of Operations or operating cash flows in the periods recognized or paid.

WARRANTIES AND GUARANTEES

In the normal course of business, the Company issues product warranties and product performance guarantees. We accrue for the estimated cost of product warranties and performance guarantees based on contract terms and historical experience at the time of sale. Adjustments to initial obligations for warranties and guarantees are made as changes to the obligations become reasonably estimable. The following table summarizes information concerning our recorded obligations for product warranties and product performance guarantees.

	Years Ended December 31,		
	2020	2019	2018
Beginning of year	$ 269	$ 310	$ 408
Accruals for warranties/guarantees issued during the year	164	173	208
Adjustment of pre-existing warranties/guarantees	(18)	(34)	(78)
Settlement of warranty/guarantee claims	(172)	(180)	(228)
End of year	$ 243	$ 269	$ 310

(Dollars in tables in millions, except per share amounts)

Product warranties and product performance guarantees are included in the following balance sheet accounts:

	December 31,	
	2020	2019
Accrued liabilities	$ 183	$ 213
Other liabilities	60	56
	$ 243	$ 269

NOTE 21. PENSION AND OTHER POSTRETIREMENT BENEFITS

The Company sponsors a number of both funded and unfunded U.S. and non-U.S. defined benefit pension plans. Pension benefits for many of our U.S. employees are provided through non-contributory, qualified and non-qualified defined benefit plans. All non-union hourly and salaried employees joining Honeywell for the first time after December 31, 2012, are not eligible to participate in Honeywell's U.S. defined benefit pension plans. We also sponsor defined benefit pension plans which cover non-U.S. employees who are not U.S. citizens, in certain jurisdictions, principally the UK, Netherlands, Germany, and Canada. Other pension plans outside of the U.S. are not material to the Company either individually or in the aggregate.

The Company also sponsors postretirement benefit plans that provide health care benefits and life insurance coverage mainly to U.S. eligible retirees. None of Honeywell's U.S. employees are eligible for a retiree medical subsidy from the Company. In addition, the vast majority of Honeywell's U.S. retirees either have no Company subsidy or have a fixed-dollar subsidy amount. This significantly limits our exposure to the impact of future health care cost increases. The retiree medical and life insurance plans are not funded. Claims and expenses are paid from our cash flows from operations.

(Dollars in tables in millions, except per share amounts)

The following tables summarize the balance sheet impact, including the benefit obligations, assets and funded status associated with the Company's significant pension and other postretirement benefit plans.

	Pension Benefits			
	U.S. Plans		Non-U.S. Plans	
	2020	2019	2020	2019
Change in benefit obligation:				
Benefit obligation at beginning of year	$ 17,283	$ 16,141	$ 6,897	$ 6,182
Service cost	99	82	23	22
Interest cost	461	613	106	142
Plan amendments	—	—	2	—
Actuarial (gains) losses(1)	1,331	2,064	509	708
Benefits paid	(1,100)	(1,111)	(246)	(269)
Settlements and curtailments	(21)	(507)	—	—
Foreign currency translation	—	—	291	107
Other	1	1	88	5
Benefit obligation at end of year	18,054	17,283	7,670	6,897
Change in plan assets:				
Fair value of plan assets at beginning of year	18,995	17,109	7,307	6,481
Actual return on plan assets	2,475	3,458	918	863
Company contributions	46	45	116	62
Benefits paid	(1,100)	(1,111)	(246)	(269)
Settlements and curtailments	(21)	(507)	—	—
Foreign currency translation	—	—	253	165
Other	1	1	102	5
Fair value of plan assets at end of year	20,396	18,995	8,450	7,307
Funded status of plans	$ 2,342	$ 1,712	$ 780	$ 410
Amounts recognized in Consolidated Balance Sheet consist of:				
Prepaid pension benefit cost(2)	$ 2,695	$ 2,069	$ 1,688	$ 1,196
Accrued pension liabilities—current(3)	(29)	(32)	(14)	(13)
Accrued pension liabilities—noncurrent(4)	(324)	(325)	(894)	(773)
Net amount recognized	$ 2,342	$ 1,712	$ 780	$ 410

(1) Actuarial losses incurred in 2020 related to our U.S. and non-U.S. plans are primarily the result of a decrease in the discount rate assumptions used to estimate the benefit obligations as of December 31, 2020 compared to December 31, 2019. Actuarial losses incurred in 2019 related to our U.S. and non-U.S. plans are primarily the result of a decrease in the discount rate assumptions used to estimate the benefit obligations as of December 31, 2019 compared to December 31, 2018.

(2) Included in Other assets on the Consolidated Balance Sheet

(3) Included in Accrued liabilities on the Consolidated Balance Sheet

(4) Included in Other liabilities on the Consolidated Balance Sheet

(Dollars in tables in millions, except per share amounts)

	Other Postretirement Benefits	
	2020	2019
Change in benefit obligation:		
Benefit obligation at beginning of year	$ 325	$ 364
Service cost	—	—
Interest cost	8	14
Plan amendments	(65)	(2)
Actuarial (gains) losses	(8)	(16)
Benefits paid	(31)	(35)
Benefit obligation at end of year	229	325
Change in plan assets:		
Fair value of plan assets at beginning of year	—	—
Actual return on plan assets	—	—
Company contributions	—	—
Benefits paid	—	—
Fair value of plan assets at end of year	—	—
Funded status of plans	$ (229)	$ (325)
Amounts recognized in Consolidated Balance Sheet consist of:		
Accrued liabilities	$ (27)	$ (40)
Postretirement benefit obligations other than pensions(1)	(202)	(285)
Net amount recognized	$ (229)	$ (325)

(1) Excludes non-U.S. plan of $40 million and $41 million as of December 31, 2020 and 2019.

Amounts recognized in Accumulated other comprehensive (income) loss associated with the Company's significant pension and other postretirement benefit plans at December 31, 2020 and 2019 are as follows:

	Pension Benefits			
	U.S. Plans		Non-U.S. Plans	
	2020	2019	2020	2019
Prior service (credit) cost	$ (134)	$ (176)	$ 23	$ 21
Net actuarial (gain) loss	505	544	629	701
Net amount recognized	$ 371	$ 368	$ 652	$ 722

	Other Postretirement Benefits	
	2020	2019
Prior service (credit) cost	$ (165)	$ (166)
Net actuarial (gain) loss	(28)	(20)
Net amount recognized	$ (193)	$ (186)

(Dollars in tables in millions, except per share amounts)

The components of net periodic benefit (income) cost and other amounts recognized in Other comprehensive (income) loss for the Company's significant pension and other postretirement benefit plans include the following components:

	Pension Benefits					
	U.S. Plans			Non-U.S. Plans		
Net Periodic Benefit Cost	2020	2019	2018	2020	2019	2018
Service cost	$ 99	$ 82	$ 140	$ 23	$ 22	$ 26
Interest cost	461	613	573	106	142	143
Expected return on plan assets	(1,135)	(1,117)	(1,426)	(336)	(331)	(443)
Amortization of prior service (credit) cost	(42)	(42)	(43)	—	—	(1)
Recognition of actuarial losses	26	35	—	18	88	37
Settlements and curtailments	4	4	—	—	—	(3)
Net periodic benefit (income) cost	$ (587)	$ (425)	$ (756)	$ (189)	$ (79)	$ (241)

	U.S. Plans			Non-U.S. Plans		
Other Changes in Plan Assets and Benefits Obligations Recognized in Other Comprehensive (Income) Loss	2020	2019	2018	2020	2019	2018
Actuarial (gains) losses	$ (9)	$ (277)	$ 619	$ (73)	$ 176	$ 250
Prior service (credit) cost	—	—	—	2	—	30
Prior service credit recognized during year	42	42	43	—	—	4
Actuarial losses recognized during year	(30)	(39)	—	(18)	(88)	(37)
Foreign currency translation	—	—	—	19	14	(34)
Total recognized in other comprehensive (income) loss	$ 3	$ (274)	$ 662	$ (70)	$ 102	$ 213
Total recognized in net periodic benefit (income) cost and other comprehensive (income) loss	$ (584)	$ (699)	$ (94)	$ (259)	$ 23	$ (28)

(Dollars in tables in millions, except per share amounts)

	Other Postretirement Benefits		
	Years Ended December 31,		
Net Periodic Benefit Cost	**2020**	**2019**	**2018**
Service cost	$ —	$ —	$ —
Interest cost	8	14	15
Amortization of prior service (credit) cost	(66)	(62)	(52)
Recognition of actuarial losses	—	—	3
Net periodic benefit (income) cost	$ (58)	$ (48)	$ (34)

	Years Ended December 31,		
Other Changes in Plan Assets and Benefits Obligations Recognized in Other Comprehensive (Income) Loss	**2020**	**2019**	**2018**
Actuarial (gains) losses	$ (8)	$ (16)	$ (110)
Prior service (credit) cost	(65)	(2)	(34)
Prior service credit recognized during year	66	62	52
Actuarial losses recognized during year	—	—	(3)
Total recognized in other comprehensive (income) loss	$ (7)	$ 44	$ (95)
Total recognized in net periodic benefit (income) cost and other comprehensive (income) loss	$ (65)	$ (4)	$ (129)

(Dollars in tables in millions, except per share amounts)

Major actuarial assumptions used in determining the benefit obligations and net periodic benefit (income) cost for our significant benefit plans are presented in the following table as weighted averages.

	Pension Benefits					
	U.S. Plans			Non-U.S. Plans		
	2020	2019	2018	2020	2019	2018
Actuarial assumptions used to determine benefit obligations as of December 31:						
Discount rate	2.50 %	3.22 %	4.35 %	1.23 %	1.81 %	2.63 %
Expected annual rate of compensation increase	3.25 %	3.25 %	3.25 %	2.43 %	2.47 %	2.46 %
Actuarial assumptions used to determine net periodic benefit (income) cost for years ended December 31:						
Discount rate—benefit obligation	3.22 %	4.35 %	3.68 %	1.81 %	2.63 %	2.36 %
Discount rate—service cost	3.33 %	4.47 %	3.77 %	1.48 %	2.26 %	2.20 %
Discount rate—interest cost	2.76 %	3.94 %	3.27 %	1.56 %	2.34 %	2.08 %
Expected rate of return on plan assets	6.15 %	6.75 %	7.75 %	4.66 %	5.14 %	6.23 %
Expected annual rate of compensation increase	3.25 %	3.25 %	4.50 %	2.47 %	2.46 %	2.49 %

	Other Postretirement Benefits		
	2020	2019	2018
Actuarial assumptions used to determine benefit obligations as of December 31:			
Discount rate	2.20 %	3.03 %	4.07 %
Actuarial assumptions used to determine net periodic benefit cost for years ended December 31:			
Discount rate(1)	2.36 %	4.07 %	3.39 %

(1) Discount rate was 3.03% for January 1, 2020 through September 30, 2020. The rate was changed to 2.36% for the remainder of 2020 due to a Plan remeasurement as of October 1, 2020.

The discount rate for the Company's U.S. pension and other postretirement benefits plans reflects the current rate at which the associated liabilities could be settled at the measurement date of December 31. To determine discount rates for our U.S. pension and other postretirement benefit plans, we use a modeling process that involves matching the expected cash outflows of our benefit plans to a yield curve constructed from a portfolio of high quality, fixed-income debt instruments. We use the single weighted-average yield of this hypothetical portfolio as a discount rate benchmark. We utilize a full yield curve approach in the estimation of the service and interest cost components of net periodic pension benefit (income) for our significant pension plans. This approach applies the specific spot rates along the yield curve used in the determination of the pension benefit obligation to their underlying projected cash flows and provides a more precise measurement of service and interest costs by improving the correlation between projected cash flows and their corresponding spot rates. For our U.S. pension plans, the single weighted average spot rates used to determine service and interest costs for 2021 are 2.67% and 1.76%. The discount rate used to determine the other postretirement benefit obligation is lower principally due to a shorter expected duration of other postretirement plan obligations as compared to pension plan obligations.

(Dollars in tables in millions, except per share amounts)

The Company plans to use an expected rate of return on U.S. plan assets of 6.15% for 2021, matching the 6.15% assumption used for 2020. Our asset return assumption is based on historical plan asset returns over varying long-term periods combined with current market conditions and broad asset mix considerations with a focus on long-term trends rather than short-term market conditions. We review the expected rate of return on an annual basis and revise it as appropriate.

For non-U.S. benefit plans actuarial assumptions reflect economic and market factors relevant to each country.

PENSION BENEFITS

The following amounts relate to the Company's significant pension plans with accumulated benefit obligations exceeding the fair value of plan assets:

	December 31,			
	U.S. Plans		Non-U.S. Plans	
	2020	2019	2020	2019
Projected benefit obligation	$ 353	$ 357	$ 2,116	$ 1,018
Accumulated benefit obligation	$ 341	$ 347	$ 2,042	$ 973
Fair value of plan assets	$ —	$ —	$ 1,208	$ 233

The accumulated benefit obligation for the Company's U.S. defined benefit pension plans was $17.9 billion and $17.2 billion and for our Non-U.S. defined benefit pension plans was $7.6 billion and $6.8 billion at December 31, 2020 and 2019.

The Company's asset investment strategy for our U.S. pension plans focuses on maintaining a diversified portfolio using various asset classes in order to achieve our long-term investment objectives on a risk adjusted basis. During 2020, we continued to employ a de-risking strategy which increases the matching characteristics of our assets relative to our obligation. Our long-term target allocations are as follows: 55%-70% fixed income securities and cash, 25%-40% equity securities, 5%-10% real estate investments, and 10%-20% other types of investments. Equity securities include publicly-traded stock of companies located both inside and outside the United States. Fixed income securities include corporate bonds of companies from diversified industries, mortgage-backed securities, and U.S. Treasuries. Real estate investments include direct investments in commercial properties and investments in real estate funds. Other types of investments include investments in private equity and hedge funds that follow several different strategies. We review our assets on a regular basis to ensure that we are within the targeted asset allocation ranges and, if necessary, asset balances are adjusted back within target allocations.

The Company's non-U.S. pension assets are typically managed by decentralized fiduciary committees with the Honeywell Corporate Investments group providing funding and investment guidance. Our non-U.S. investment policies are different for each country as local regulations, funding requirements, and financial and tax considerations are part of the funding and investment allocation process in each country.

In accordance with ASU 2015-07, “Fair Value Measurement (Topic 820)”, certain investments that are measured at fair value using the net asset value (NAV) per share (or its equivalent) practical expedient have not been classified in the fair value hierarchy. The fair value amounts presented in the following tables are intended to permit reconciliation of the fair value hierarchy to the amounts presented for the total pension benefits plan assets.

(Dollars in tables in millions, except per share amounts)

The fair values of both the Company's U.S. and non-U.S. pension plans assets by asset category are as follows:

	U.S. Plans			
	December 31, 2020			
	Total	Level 1	Level 2	Level 3
Equities:				
Honeywell common stock	$ 3,319	$ 3,319	$ —	$ —
U.S. equities	—	—	—	—
Fixed income:				
Short term investments	1,314	1,314	—	—
Government securities	1,520	—	1,520	—
Corporate bonds	10,190	—	10,190	—
Mortgage/Asset-backed securities	982	—	982	—
Insurance contracts	7	—	7	—
Direct investments:				
Direct private investments	1,220	—	—	1,220
Real estate properties	651	—	—	651
Total	19,203	$ 4,633	$ 12,699	$ 1,871
Investments measured at NAV:				
Private funds	1,105			
Real estate funds	26			
Commingled Funds	62			
Total assets at fair value	$ 20,396			

	U.S. Plans			
	December 31, 2019			
	Total	Level 1	Level 2	Level 3
Equities:				
Honeywell common stock	$ 2,857	$ 2,857	$ —	$ —
U.S. equities	1,227	1,227	—	—
Fixed income:				
Short term investments	1,395	1,395	—	—
Government securities	1,146	—	1,146	—
Corporate bonds	8,603	—	8,603	—
Mortgage/Asset-backed securities	1,023	—	1,023	—
Insurance contracts	8	—	8	—
Direct investments:				
Direct private investments	950	—	—	950
Real estate properties	619	—	—	619
Total	17,828	$ 5,479	$ 10,780	$ 1,569
Investments measured at NAV:				
Private funds	1,019			
Real estate funds	42			
Commingled funds	106			
Total assets at fair value	$ 18,995			

(Dollars in tables in millions, except per share amounts)

	Non-U.S. Plans			
	December 31, 2020			
	Total	Level 1	Level 2	Level 3
Equities:				
U.S. equities	$ 207	$ —	$ 207	$ —
Non-U.S. equities	1,614	66	1,548	—
Fixed income:				
Short-term investments	596	596	—	—
Government securities	3,105	—	3,105	—
Corporate bonds	1,649	—	1,649	—
Mortgage/Asset-backed securities	93	—	93	—
Insurance contracts	142	—	142	—
Insurance buy-in contracts	767	—	—	767
Investments in private funds:				
Private funds	65	—	36	29
Real estate funds	147	—	—	147
Total	8,385	$ 662	$ 6,780	$ 943
Investments measured at NAV:				
Private funds	18			
Real estate funds	47			
Total assets at fair value	$ 8,450			

	Non-U.S. Plans			
	December 31, 2019			
	Total	Level 1	Level 2	Level 3
Equities:				
U.S. equities	$ 149	$ —	$ 149	$ —
Non-U.S. equities	1,384	54	1,330	—
Fixed income:				
Short-term investments	522	522	—	—
Government securities	3,006	—	3,006	—
Corporate bonds	1,746	—	1,746	—
Mortgage/Asset-backed securities	84	—	84	—
Insurance contracts	120	—	120	—
Insurance buy-in contracts	—	—	—	—
Investments in private funds:				
Private funds	69	—	35	34
Real estate funds	150	—	—	150
Total	7,230	$ 576	$ 6,470	$ 184
Investments measured at NAV:				
Private funds	21			
Real estate funds	56			
Total assets at fair value	$ 7,307			

(Dollars in tables in millions, except per share amounts)

The following table summarizes changes in the fair value of Level 3 assets for both U.S. and Non-U.S. plans:

	U.S. Plans		Non-U.S. Plans		
	Direct Private Investments	Real Estate Properties	Private Funds	Real Estate Funds	Insurance Buy-in Contracts
Balance at December 31, 2018	$ 829	$ 657	$ 34	$ 144	$ —
Actual return on plan assets:					
Relating to assets still held at year-end	15	40	—	7	—
Relating to assets sold during the year	89	(23)	—	1	—
Purchases	216	48	—	—	—
Sales and settlements	(199)	(103)	—	(2)	—
Balance at December 31, 2019	950	619	34	150	—
Actual return on plan assets:					
Relating to assets still held at year-end	100	(4)	(5)	(3)	—
Relating to assets sold during the year	53	—	—	—	—
Purchases	221	59	—	—	767
Sales and settlements	(104)	(23)	—	—	—
Balance at December 31, 2020	$ 1,220	$ 651	$ 29	$ 147	$ 767

The Company enters into futures contracts to gain exposure to certain markets. Sufficient cash or cash equivalents are held by our pension plans to cover the notional value of the futures contracts. At December 31, 2020 and 2019, our U.S. plans had contracts with notional amounts of $3,673 million and $4,463 million. At December 31, 2020 and 2019, our non-U.S. plans had contracts with notional amounts of $564 million and $479 million. In both our U.S. and non-U.S. pension plans, the notional derivative exposure is related to outstanding equity and fixed income futures contracts.

Common stocks, preferred stocks, real estate investment trusts, and short-term investments are valued at the closing price reported in the active market in which the individual securities are traded. Corporate bonds, mortgages/asset-backed securities, and government securities are valued either by using pricing models, bids provided by brokers or dealers, quoted prices of securities with similar characteristics or discounted cash flows and as such include adjustments for certain risks that may not be observable such as credit and liquidity risks. Certain securities are held in collective trust funds which are valued using net asset values provided by the administrators of the funds. Investments in private equity, debt, real estate and hedge funds and direct private investments are valued at estimated fair value based on quarterly financial information received from the investment advisor and/or general partner. Investments in real estate properties are valued on a quarterly basis using the income approach. Valuation estimates are periodically supplemented by third party appraisals. The insurance buy-in contracts represent policies held by the Honeywell UK Pension Scheme, whereby the cost of providing pension benefits to plan participants is funded by the policies. The cash flows from the policies are intended to match the pension benefits. The fair value of these policies is based on an estimate of the policies' exit price.

The Company's funding policy for qualified defined benefit pension plans is to contribute amounts at least sufficient to satisfy regulatory funding standards. In 2020, 2019, and 2018, we were not required to make contributions to our U.S. pension plans and no contributions were made. We are not required to make any contributions to our U.S. pension plans in 2021. In 2020, contributions of $109 million were made to our non-U.S. pension plans to satisfy regulatory funding requirements. In 2021, we expect to make contributions of cash and/or marketable securities of approximately $85 million to our non-U.S. pension plans to satisfy regulatory funding standards. Contributions for both our U.S. and non-U.S. pension plans do not reflect benefits paid directly from Company assets.

(Dollars in tables in millions, except per share amounts)

Benefit payments, including amounts to be paid from Company assets, and reflecting expected future service, as appropriate, are expected to be paid as follows:

	U.S. Plans	Non-U.S. Plans
2021	$ 1,147	$ 240
2022	1,143	242
2023	1,139	247
2024	1,130	252
2025	1,116	257
2026-2030	5,246	1,365

OTHER POSTRETIREMENT BENEFITS

	December 31,	
	2020	2019
Assumed health care cost trend rate:		
Health care cost trend rate assumed for next year	7.00 %	7.00 %
Rate that the cost trend rate gradually declines to	5.00 %	5.00 %
Year that the rate reaches the rate it is assumed to remain at	2029	2029

Benefit payments reflecting expected future service, as appropriate, are expected to be paid as follows:

	Without Impact of Medicare Subsidy	Net of Medicare Subsidy
2021	$ 29	$ 27
2022	28	25
2023	26	24
2024	15	14
2025	14	13
2026-2030	61	57

(Dollars in tables in millions, except per share amounts)

NOTE 22. OTHER (INCOME) EXPENSE

	Years Ended December 31,		
	2020	2019	2018
Interest income	$ (107)	$ (255)	$ (217)
Pension ongoing income—non-service	(901)	(606)	(1,165)
Other postretirement income—non-service	(57)	(47)	(32)
Equity income of affiliated companies	(66)	(52)	(50)
Loss (gain) on sale of non-strategic business and assets	3	1	—
Foreign exchange	(68)	(120)	(63)
Separation costs	—	—	321
Reimbursement receivables charge	509	—	—
Other (net)	12	14	57
	$ (675)	$ (1,065)	$ (1,149)

Separation costs are associated with the spin-offs of the Company's Homes and Global Distribution business and Transportation Systems business, and are primarily associated with third party services.

For more information on the reimbursement receivables related to Garrett, see Note 20 Commitments and Contingencies.

For the year ended December 31, 2018, Other (net) includes asset impairments in Corporate related to the write-down of a legacy property in connection with its planned disposition. See Note 4 Repositioning and Other Charges.

NOTE 23. SEGMENT FINANCIAL DATA

Honeywell globally manages its business operations through four reportable operating segments. Segment information is consistent with how management reviews the businesses, makes investing and resource allocation decisions and assesses operating performance.

Honeywell's senior management evaluates segment performance based on segment profit. Each segment's profit is measured as segment income (loss) before taxes excluding general corporate unallocated expense, interest and other financial charges, stock compensation expense, pension and other postretirement income (expense), repositioning and other charges, and other items within Other (income) expense.

	Years Ended December 31,		
	2020	2019	2018
Net Sales			
Aerospace			
Product	$ 7,194	$ 8,766	$ 10,415
Service	4,350	5,288	5,078
Total	11,544	14,054	15,493
Honeywell Building Technologies			
Product	3,868	4,395	7,868
Service	1,321	1,322	1,430
Total	5,189	5,717	9,298
Performance Materials and Technologies			
Product	7,548	8,732	8,589
Service	1,875	2,102	2,085
Total	9,423	10,834	10,674
Safety and Productivity Solutions			
Product	6,127	5,736	5,976
Service	354	368	361
Total	6,481	6,104	6,337
	$ 32,637	$ 36,709	$ 41,802
Depreciation and amortization			
Aerospace	$ 241	$ 234	$ 281
Honeywell Building Technologies	55	63	112
Performance Materials and Technologies	440	493	452
Safety and Productivity Solutions	223	222	216
Corporate	44	76	55
	$ 1,003	$ 1,088	$ 1,116
Segment Profit			
Aerospace	$ 2,904	$ 3,607	$ 3,503
Honeywell Building Technologies	1,099	1,165	1,608
Performance Materials and Technologies	1,851	2,433	2,328
Safety and Productivity Solutions	907	790	1,032
Corporate	(96)	(256)	(281)
	$ 6,665	$ 7,739	$ 8,190

(Dollars in tables in millions, except per share amounts)

	Years Ended December 31,		
	2020	2019	2018
Capital expenditures			
Aerospace	$ 248	$ 272	$ 308
Honeywell Building Technologies	66	43	125
Performance Materials and Technologies	252	314	254
Safety and Productivity Solutions	288	82	78
Corporate	52	128	63
	$ 906	$ 839	$ 828
Total Assets			
Aerospace	$ 11,035	$ 11,378	$ 11,234
Honeywell Building Technologies	6,351	5,968	6,010
Performance Materials and Technologies	16,772	16,888	17,827
Safety and Productivity Solutions	10,640	9,888	9,886
Corporate	19,788	14,557	12,816
	$ 64,586	$ 58,679	$ 57,773

A reconciliation of segment profit to consolidated income before taxes are as follows:

	Years Ended December 31,		
	2020	2019	2018
Segment Profit	$ 6,665	$ 7,739	$ 8,190
Interest and other financial charges	(359)	(357)	(367)
Stock compensation expense(1)	(168)	(153)	(175)
Pension ongoing income (expense)(2)	785	592	992
Pension mark-to-market expense(2)	(44)	(123)	(37)
Other postretirement income(2)	57	47	32
Repositioning and other charges(3)	(575)	(546)	(1,091)
Other(4)	(349)	360	(57)
Income before taxes	$ 6,012	$ 7,559	$ 7,487

(1) Amounts included in Selling, general and administrative expenses.

(2) Amounts included in Cost of products and services sold and Selling, general and administrative expenses (service cost component) and Other (income) expense (non-service cost component).

(3) Amounts included in Cost of products and services sold, Selling, general and administrative expenses, and Other (income) expense.

(4) Amounts include the other components of Other (income) expense not included within other categories in this reconciliation. Equity income of affiliated companies is included in segment profit.

(Dollars in tables in millions, except per share amounts)

NOTE 24. GEOGRAPHIC AREAS—FINANCIAL DATA

	Net Sales[1]			Long-lived Assets[2]		
	Years Ended December 31,			Years Ended December 31,		
	2020	2019	2018	2020	2019	2018
United States	$ 19,665	$ 21,910	$ 23,841	$ 3,823	$ 3,649	$ 3,601
Europe	6,356	7,424	10,066	628	579	571
Other International	6,616	7,375	7,895	1,119	1,097	1,124
	$ 32,637	$ 36,709	$ 41,802	$ 5,570	$ 5,325	$ 5,296

(1) Sales between geographic areas approximate market value and are not significant. Net sales are classified according to their country of origin. Included in United States Net sales are export sales of $4,000 million, $5,415 million and $5,293 million for the years ended December 31, 2020, 2019 and 2018.

(2) Long-lived assets are comprised of Property, plant and equipment - net.

NOTE 25. SUPPLEMENTAL CASH FLOW INFORMATION

	Years Ended December 31,		
	2020	2019	2018
Net payments for repositioning and other charges:			
Severance and exit cost payments	$ (564)	$ (249)	$ (285)
Environmental payments	(216)	(256)	(218)
Reimbursement receipts	176	292	67
Insurance receipts for asbestos related liabilities	58	68	38
Asbestos related liability payments	(287)	(231)	(254)
	$ (833)	$ (376)	$ (652)
Interest paid, net of amounts capitalized	$ 329	$ 344	$ 353
Income taxes paid, net of refunds	1,173	1,564	1,566
Non-cash investing and financing activities:			
Common stock contributed to savings plans	211	159	52
Marketable securities contributed to non-U.S. pension plans	93	—	99

(Dollars in tables in millions, except per share amounts)

NOTE 26. UNAUDITED QUARTERLY FINANCIAL INFORMATION

	2020				
	March 31	June 30	September 30	December 31	Year
Net sales	$ 8,463	$ 7,477	$ 7,797	$ 8,900	$ 32,637
Gross profit	2,929	2,201	2,414	2,924	10,468
Net income attributable to Honeywell	1,581	1,081	758	1,359	4,779
Earnings per common share—basic(1)	2.23	1.54	1.08	1.94	6.79
Earnings per common share—assuming dilution(1)	2.21	1.53	1.07	1.91	6.72
Cash dividends per common share	0.900	0.900	0.900	0.930	3.630

	2019				
	March 31	June 30	September 30	December 31	Year
Net sales	$ 8,884	$ 9,243	$ 9,086	$ 9,496	$ 36,709
Gross profit	3,005	3,149	3,048	3,168	12,370
Net income attributable to Honeywell	1,416	1,541	1,624	1,562	6,143
Earnings per common share—basic(1)	1.94	2.13	2.26	2.19	8.52
Earnings per common share—assuming dilution(1)	1.92	2.10	2.23	2.16	8.41
Cash dividends per common share	0.820	0.820	0.820	0.900	3.360

(1) Total for the full year may differ from the sum of the individual quarters due to the requirement to use weighted average shares each quarter, which may fluctuate with share repurchases and share issuances, and due to the impact of losses in a quarter.

Report of Independent Registered Public Accounting Firm

To the shareowners and the Board of Directors of Honeywell International Inc.

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated balance sheets of Honeywell International Inc. and subsidiaries (the "Company" or "Honeywell") as of December 31, 2020 and 2019, and the related consolidated statements of operations, comprehensive income, shareowners' equity, and cash flows, for each of the three years in the period ended December 31, 2020, and the related notes (collectively referred to as the "financial statements"). We also have audited the Company's internal control over financial reporting as of December 31, 2020, based on criteria established in *Internal Control — Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2020 and 2019, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2020, in conformity with accounting principles generally accepted in the United States of America ("generally accepted accounting principles"). Also, in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2020, based on criteria established in *Internal Control — Integrated Framework (2013)* issued by COSO.

Basis for Opinions

The Company's management is responsible for these financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Report on Internal Control Over Financial Reporting. Our responsibility is to express an opinion on these financial statements and an opinion on the Company's internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the financial statements included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures to respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

Definition and Limitations of Internal Control over Financial Reporting

A company’s internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company’s internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company’s assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Critical Audit Matters

The critical audit matters communicated below are matters arising from the current-period audit of the financial statements that were communicated or required to be communicated to the audit committee and that (1) relate to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the financial statements, taken as a whole, and we are not, by communicating the critical audit matters below, providing separate opinions on the critical audit matters or on the accounts or disclosures to which they relate.

Asbestos Related Liabilities - North American Refractories Company (NARCO) Asbestos Liability – Refer to Note 20 to the financial statements

Critical Audit Matter Description

The Company records an estimated liability for asbestos related personal injury claims related to a predecessor company, NARCO. Such claims arise primarily from alleged occupational exposure to asbestos-containing refractory brick and mortar.

The Company's NARCO asbestos liability reflects an estimated liability for the resolution of asserted and unasserted NARCO-related asbestos claims that are probable of occurrence and reasonably estimable. The Company records an estimated liability for the resolution of asserted Annual Contribution Claims and Pre-Established Unliquidated Claims filed with the NARCO Trust using average payment values for the relevant historical period. The Company also records an estimated liability for unasserted Annual Contribution Claims and Pre-Established Unliquidated Claims based on historic and anticipated claims filing experience and payment rates, disease classifications and type of claim, and average payment values by the NARCO Trust for the relevant historical period. The Company's estimate also includes all years of epidemiological disease projection through 2059 when estimating the liability for unasserted claims.

Establishing the NARCO asbestos liability is an inherently subjective exercise as it requires management to make significant assumptions and judgements. Given the subjectivity related to estimating the NARCO asbestos liability and the lack of a history of sufficiently reliable claims data, auditing of the NARCO asbestos liability involved especially subjective judgment.

How the Critical Audit Matter Was Addressed in the Audit

Our audit procedures related to the NARCO asbestos liability included the following, among others:

- We tested the effectiveness of internal controls over the estimate of the NARCO asbestos liability including management's controls over the estimate for asserted and unasserted Annual Contribution Claims and Pre-Established Unliquidated Claims.
- We evaluated the methods and assumptions used by management to estimate the NARCO asbestos liability by:
  - Reading the Company's analysis and third-party assessment to evaluate the Company's methods used in the analysis.
  - Confirming the claims data with the NARCO Trust to evaluate the appropriateness of the underlying data used in the analysis.
  - Making inquiries of the Company's third-party specialist to identify the significant assumptions used to develop the analysis.

    - Making inquiries of internal and external legal counsel regarding the regulatory and litigation environments related to the NARCO asbestos liability.
- With the assistance of our internal actuarial specialists, we developed a range of independent estimates and compared those to the Company’s recorded NARCO asbestos Liability.

Revenue Recognition and Contracts with Customers – Long-Term Fixed Price Contracts (Performance Materials and Technologies (PMT)) – Refer to Note 1 and Note 3 to the financial statements

Critical Audit Matter Description

The Company's PMT segment develops and manufactures performance chemicals and materials, process technologies, and automation solutions. A portion of PMT's revenue is generated from long-term fixed price contracts whereby revenue is recognized over the contract term ("over time") as the work progresses and control of the goods and services is transferred to the customer. Revenue for these contracts is recognized based on the extent of progress toward completion, generally measured by using a cost-to-cost basis input method.

Accounting for PMT's long-term fixed price contracts requires management's judgment in estimating total contract costs. Contract costs, which can be incurred over several years, are largely determined based on negotiated or estimated purchase contract terms and consider factors such as historical performance, technical and schedule risk, internal and subcontractor performance trends, and anticipated labor agreements.

Given the significant judgments necessary to estimate costs associated with these long-term contracts, auditing PMT's long-term fixed price contracts requires a high degree of auditor judgment.

How the Critical Audit Matter Was Addressed in the Audit

Our audit procedures related to PMT's long-term fixed price contracts included the following, among others:

- We tested the effectiveness of internal controls over the recognition of revenue and the determination of estimated contract costs including controls over the review of management's assumptions and key inputs used to recognize revenue and costs on long-term fixed price contracts using the cost-to-cost input method.
- We evaluated the appropriateness and consistency of management's methods and assumptions used to recognize revenue and costs on long-term fixed price contracts using the cost-to-cost input method to recognize revenue over time.
- We selected a sample of long-term fixed price contracts and evaluated the estimates of total cost for each of the long-term fixed price contracts by:
    - Comparing costs incurred to date to the costs management estimated to be incurred to date.
    - Evaluating management's ability to achieve the estimates of total cost by performing corroborating inquiries with Company personnel, including project managers, and comparing the estimates to documentation such as management's work plans, contract terms and requirements, and purchase orders with suppliers. Our evaluation of management's assumptions included consideration of historical and current project performance such as consistency of gross margin, identified risks related to project timing including technical and schedule matters, and the status of internal and third party activities such as hardware, software, and labor.

Reimbursement Receivables - Garrett Motion Inc. (Garrett) – Refer to Note 20 to the financial statements

Critical Audit Matter Description

In connection with the spin-off of Garrett in October 2018, the Company entered into a binding indemnification and reimbursement agreement (Garrett Indemnity) with a Garrett subsidiary and a binding tax matters agreement with Garrett and a Garrett subsidiary (the Tax Matters Agreement). Accordingly, the Company recorded a receivable based on estimates of the amounts reimbursable to Honeywell. On September 20, 2020, Garrett and 36 of its affiliates filed voluntary petitions for relief under Chapter 11 of the United States Bankruptcy Code in the United States Bankruptcy Court for the Southern District of New York (the Bankruptcy Court).

In October 2020, the Company signed a coordination agreement with Oaktree Capital Management, L.P. (Oaktree) and Centerbridge Partners, L.P. (Centerbridge), which was subsequently signed by additional equity holders that, collectively with Honeywell, Centerbridge and Oaktree, represent approximately 58% of Garrett's outstanding common stock and noteholders representing approximately 88% of the principal amount of Garrett's outstanding senior notes (the Coordination Agreement). The Coordination Agreement and related term sheet set forth the terms of a proposed plan of reorganization (the Initial COH Proposal). On January 11, 2021, after further revisions to the Initial COH Proposal, Garrett determined that the revised proposal (the Final COH Plan) was higher and better than all other proposals received and entered into a plan support agreement (the Plan Support Agreement), pursuant to which all parties agreed to pursue Bankruptcy Court confirmation of the Final COH Plan.

Because Garrett is now a party to the Plan Support Agreement, the Company believes the present value of payments to Honeywell under the Final COH Plan, discounted at a rate reflective of the terms of the agreement, is an appropriate estimate of receivable amounts due in connection with the Garrett Indemnity and Tax Matters Agreement.

Given the subjectivity in determining the present value of payments under the Final COH Plan, the auditing of the receivable amounts due in connection with the Garrett Indemnity and Tax Matters Agreement required a high degree of auditor judgment.

How the Critical Audit Matter Was Addressed in the Audit

Our audit procedures related to the receivable amounts due in connection with the Garrett Indemnity and Tax Matters Agreement included the following, among others:

- We tested the effectiveness of internal controls related to management's evaluation of the recoverability of the receivable amounts due from Garrett.
- We made inquiries of internal legal counsel regarding the Garrett bankruptcy proceedings.
- We developed an understanding of the process used by management in determining the aggregate carrying balance of the receivable amounts due in connection with the Garrett Indemnity and Tax Matters Agreement, which included obtaining and reading the Final COH Plan, evaluating the Company's methods, evaluating the appropriateness of the underlying data used, and the identification of significant assumptions used to develop the accounting estimate.
- With the assistance of our internal valuation specialists, we developed an independent expectation of the fair value of the Final COH Plan and compared our expectation to the Company's recorded amount.

/s/ Deloitte & Touche LLP

February 12, 2021
We have served as the Company's auditor since 2014.

CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

Not Applicable.

CONTROLS AND PROCEDURES

Honeywell management maintains disclosure controls and procedures designed to provide reasonable assurance that information required to be disclosed in reports filed under the Exchange Act is recorded, processed, summarized and reported within the specified time periods and accumulated and communicated to our management, including our principal executive officer and principal financial officer, as appropriate to allow timely decisions regarding required disclosure. There have been no changes that have materially affected, or are reasonably likely to materially affect, Honeywell's internal control over financial reporting that have occurred during the quarter ended December 31, 2020.

Our management, with the participation of our CEO and CFO, evaluated the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15(e) or 15d-15(e) promulgated under the Exchange Act) as of December 31, 2020. Based on these evaluations, our CEO and CFO concluded that our disclosure controls and procedures were effective as of December 31, 2020.

MANAGEMENT'S REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING

Honeywell management is responsible for establishing and maintaining adequate internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting as defined in Rules 13a-15(f) or 15d-15(f) under the Exchange Act. Honeywell's internal control over financial reporting is a process designed to provide reasonable assurance to our management and board of directors regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements.

Management assessed the effectiveness of Honeywell's internal control over financial reporting as of December 31, 2020. In making this assessment, management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in *Internal Control—Integrated Framework (2013)*.

We have not experienced any material impact to our internal control over financial reporting during the COVID-19 pandemic. Most of our employees worked remotely during the year in which we prepared these financial statements due to the impact of COVID-19. We enhanced our oversight and monitoring during the close and reporting process, including investments in expanded VPN capabilities and higher scrutiny and monitoring of cybersecurity threats. Other than enhancing our oversight and monitoring processes, we did not alter or compromise our disclosure controls and procedures. We are continually monitoring and assessing the need to modify or enhance our disclosure controls to ensure disclosure controls and procedures continue to be effective.

Based on this assessment, management determined that Honeywell maintained effective internal control over financial reporting as of December 31, 2020. In conducting management's evaluation as described above, Rocky Research acquired October 7, 2020, and Sine Group acquired December 14, 2020, were excluded. The operations of Rocky Research and Sine Group, excluded from management's assessment of internal control over financial reporting, collectively represent less than 0.1% of the Company's total revenues and approximately 0.5% of total assets as of December 31, 2020.

The effectiveness of Honeywell’s internal control over financial reporting as of December 31, 2020 has been audited by Deloitte & Touche LLP, an independent registered public accounting firm, as stated in their report which is included in the section titled Financial Statements and Supplementary Data.

OTHER INFORMATION

Not Applicable.

DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

Information relating to the Directors of Honeywell, as well as information relating to compliance with Section 16(a) of the Securities Exchange Act of 1934, will be contained in the Proxy Statement, which will be filed with the SEC pursuant to Regulation 14A not later than 120 days after December 31, 2020, and such information is incorporated herein by reference. Certain information relating to the Executive Officers of Honeywell appears in this Form 10-K under the heading titled Information about our Executive Officers.

The members of the Audit Committee of our Board of Directors are: George Paz (Chair), Kevin Burke, D. Scott Davis, Linnet F. Deily, Judd A. Gregg and Robin L. Washington. The Board has determined that Mr. Paz, Mr. Davis and Ms. Washington are audit committee financial experts as defined by applicable SEC rules and that Mr. Paz, Mr. Burke, Mr. Davis, Ms. Deily and Ms. Washington satisfy the accounting or related financial management expertise criteria established by the NYSE. All members of the Audit Committee are independent as that term is defined in applicable SEC rules and NYSE listing standards.

Honeywell's corporate governance policies and procedures, including the Code of Business Conduct, Corporate Governance Guidelines and Charters of the Committees of the Board of Directors are available, free of charge, on our website (honeywell.com) under the heading Investors (see Corporate Governance), or by writing to Honeywell, 300 South Tryon Street, Charlotte, North Carolina 28202, c/o Vice President and Corporate Secretary. Honeywell's Code of Business Conduct applies to all Honeywell directors, officers (including the Chief Executive Officer, Chief Financial Officer and Controller) and employees. Amendments to or waivers of the Code of Business Conduct granted to any of Honeywell's directors or executive officers will be published on our website within four business days of such amendment or waiver.

EXECUTIVE COMPENSATION

Information relating to executive compensation will be contained in the Proxy Statement, and such information is incorporated herein by reference.

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

Information relating to security ownership of certain beneficial owners and management and related stockholder matters will be contained in the Proxy Statement, and such information is incorporated herein by reference.

EQUITY COMPENSATION PLANS

As of December 31, 2020, information about our equity compensation plans is as follows:

Plan category	Number of Securities to be Issued Upon Exercise of Outstanding Options, Warrants and Rights (a)	Weighted-Average Exercise Price of Outstanding Options, Warrants and Rights (b)	Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans (Excluding Securities Reflected in Column (a)) (c)
Equity compensation plans approved by security holders	20,223,330 (1)	$ 125.60 (2)	36,673,110 (3)
Equity compensation plans not approved by security holders	261,718 (4)	N/A (5)	N/A (6)
Total	20,485,048	$ 125.60	36,673,110

(1) Equity compensation plans approved by shareowners which are included in column (a) of the table are the 2016 Stock Incentive Plan, the 2011 Stock Incentive Plan, and the 2006 Stock Incentive Plan (including 16,344,101 shares of Common Stock to be issued for options; 2,984,711 RSUs subject to continued employment; 196,542 RSUs at target level and subject to Company performance metrics and continued employment; and 471,395 deferred RSUs); and the 2016 Stock Plan for Non-Employee Directors and the 2006 Stock Plan for Non-

Employee Directors (including 210,822 shares of Common Stock to be issued for options; and 15,759 RSUs subject to continued services). RSUs included in column (a) of the table represent the full number of RSUs awarded and outstanding whereas the number of shares of Common Stock to be issued upon vesting will be lower than what is reflected on the table because the value of shares required to meet employee tax withholding requirements are not issued.

Because the number of future shares that may be distributed to employees participating in the Honeywell Global Stock Plan is unknown, no shares attributable to that plan are included in column (a) of the table above.

(2) Column (b) relates to stock options and does not include any exercise price for RSUs because an RSU's value is dependent upon attainment of certain performance goals or continued employment or service and they are settled for shares of Common Stock on a one-for-one basis.

(3) The number of shares that may be issued under the 2016 Stock Incentive Plan as of December 31, 2020 is 34,104,522, which includes the following additional shares that may again be available for issuance: shares that are settled for cash, expire, are canceled, or under similar prior plans, are tendered as option exercise price or tax withholding obligations, are reacquired with cash option exercise price or with monies attributable to any tax deduction to Honeywell upon the exercise of an option, or are under any outstanding awards assumed under any equity compensation plan of an entity acquired by the Company. No securities are available for future issuance under the 2011 Stock Incentive Plan or the 2006 Stock Incentive Plan.

The number of shares that may be issued under the Honeywell Global Stock Plan as of December 31, 2020 is 1,736,279. This plan is an umbrella plan for three plans described below maintained solely for eligible employees of participating non-U.S. countries.

- The UK Sharebuilder Plan allows an eligible UK employee to invest taxable earnings in Common Stock. The Company matches those shares and dividends paid are used to purchase additional shares of Common Stock. For the year ending December 31, 2020, 32,717 shares were credited to participants' accounts under the UK Sharebuilder Plan.
- The Honeywell Aerospace Ireland Share Participation Plan and the Honeywell Measurex (Ireland) Limited Group Employee Profit Sharing Plan allow eligible Irish employees to contribute a percentage of base pay and/or bonus that is invested in Common Stock. For the year ending December 31, 2020, 1,816 shares of Common Stock were credited to participants' accounts under these plans.

The remaining 832,309 shares included in column (c) are shares remaining under the 2016 Stock Plan for Non-Employee Directors.

(4) Equity compensation plans not approved by shareowners included in the table refer to the Honeywell Excess Benefit Plan and Supplemental Savings Plan.

The Honeywell Excess Benefit Plan and Supplemental Savings Plan for highly compensated employees is an unfunded, non-tax qualified plan that provides benefits equal to the employee deferrals and Company matching allocations that would have been provided under Honeywell's U.S. tax-qualified savings plan if the Internal Revenue Code limitations on compensation and contributions did not apply. The Company matching contribution is credited to participants' accounts in the form of notional shares of Common Stock. The notional shares are distributed in the form of actual shares of Common Stock. The number of shares to be issued under this plan based on the value of the notional shares as of December 31, 2020 is 261,718.

(5) Column (b) does not include any exercise price for notional shares allocated to employees under Honeywell's equity compensation plans not approved by shareowners because all of these shares are only settled for shares of Common Stock on a one-for-one basis.

(6) The amount of securities available for future issuance under the Honeywell Excess Benefit Plan and Supplemental Savings Plan is not determinable because the number of securities that may be issued under this plan depends upon the amount deferred to the plan by participants in future years.

CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

Information relating to certain relationships and related transactions and director independence will be contained in the Proxy Statement, and such information is incorporated herein by reference.

PRINCIPAL ACCOUNTING FEES AND SERVICES

Information relating to fees paid to and services performed by Deloitte & Touche LLP and our Audit Committee's pre-approval policies and procedures with respect to non-audit services will be contained in the Proxy Statement, and such information is incorporated herein by reference.

EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

	Page Number in Form 10-K
(a)(1.) Consolidated Financial Statements:	
Consolidated Statement of Operations for the years ended December 31, 2020, 2019 and 2018	46
Consolidated Statement of Comprehensive Income for the years ended December 31, 2020, 2019 and 2018	47
Consolidated Balance Sheet at December 31, 2020 and 2019	48
Consolidated Statement of Cash Flows for the years ended December 31, 2020, 2019 and 2018	49
Consolidated Statement of Shareowners' Equity for the years ended December 31, 2020, 2019 and 2018	50
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Report of Independent Registered Public Accounting Firm	110

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(a)(3.) Exhibits	
See the Exhibit Index of this Annual Report on Form 10-K	118

FORM 10-K SUMMARY

None.

EXHIBIT INDEX

Exhibit No.	Description
3(i)	Amended and Restated Certificate of Incorporation of Honeywell International Inc., as amended April 23, 2018 (incorporated by reference to Exhibit 3(i) to Honeywell's Form 10-Q for the quarter ended June 30, 2018)
3(ii)	By-laws of Honeywell International Inc., as amended April 23, 2018 (incorporated by reference to Exhibit 3(ii) to Honeywell's Form 10-Q for the quarter ended June 30, 2018)
4.1	Honeywell International Inc. is a party to several long-term debt instruments under which, in each case, the total amount of securities authorized does not exceed 10% of the total assets of Honeywell and its subsidiaries on a consolidated basis. Pursuant to paragraph 4(iii)(A) of Item 601(b) of Regulation S-K, Honeywell agrees to furnish a copy of such instruments to the Securities and Exchange Commission upon request.
4.2	Description of Honeywell International Description of Honeywell International Inc. Securities Registered Pursuant to Section 12 of the Securities Exchange Act of 1934 (filed herewith)
10.1*	Deferred Compensation Plan for Non-Employee Directors of Honeywell International Inc., as amended and restated (incorporated by reference to Exhibit 10.2 to Honeywell's Form 10-Q for the quarter ended June 30, 2003)
10.2*	Amendment to Deferred Compensation Plan for Non-Employee Directors of Honeywell International Inc., as amended and restated (incorporated by reference to Exhibit 10.1 to Honeywell's Form 8-K filed December 21, 2004)
10.3*	Amendment to Deferred Compensation Plan for Non-Employee Directors of Honeywell International Inc., as amended and restated (incorporated by reference to Exhibit 10.2 to Honeywell's Form 10-K for the year ended December 31, 2005)
10.4*	Honeywell International Inc. Incentive Compensation Plan for Executive Employees, as amended and restated (incorporated by reference to Exhibit 10.4 to Honeywell's Form 10-K for the year ended December 31, 2018)
10.5*	Honeywell Excess Benefit Plan and Honeywell Supplemental Savings Plan, as amended and restated (filed herewith)
10.6*	Honeywell International Inc. Severance Plan for Designated Officers, as amended and restated (incorporated by reference to Exhibit 10.6 to Honeywell's Form 10-K for the year ended December 31, 2013)
10.7*	Honeywell Deferred Incentive Compensation Plan, as amended and restated (filed herewith)
10.8*	Honeywell International Inc. Supplemental Pension Plan, as amended and restated (incorporated by reference to Exhibit 10.10 to Honeywell's Form 10-K for the year ended December 31, 2008)
10.9*	Amendment to Honeywell International Inc. Supplemental Pension Plan, as amended and restated (incorporated by reference to Exhibit 10.10 to Honeywell's Form 10-K for the year ended December 31, 2009)
10.10*	Amendment to Honeywell International Inc. Supplemental Pension Plan, as amended and restated (incorporated by reference to Exhibit 10.7 to Honeywell's Form 10-K for the year ended December 31, 2015)
10.11*	Honeywell International Inc. Supplemental Executive Retirement Plan for Executives in Career Band 6 and Above, as amended and restated (incorporated by reference to Exhibit 10.12 to Honeywell's Form 10-K for the year ended December 31, 2008)
10.12*	Amendment to Honeywell International Inc. Supplemental Executive Retirement Plan for Executives in Career Band 6 and Above, as amended and restated (incorporated by reference to Exhibit 10.12 to Honeywell's Form 10-K for the year ended December 31, 2009)
10.13*	Amendment to Honeywell International Inc. Supplemental Executive Retirement Plan for Executives in Career Band 6 and Above, as amended and restated (incorporated by reference to Exhibit 10.9 to Honeywell's Form 10-K for the year ended December 31, 2013)
10.14*	Amendment to Honeywell International Inc. Supplemental Executive Retirement Plan for Executives in Career Band 6 and Above, as amended and restated (incorporated by reference to Exhibit 10.8 to Honeywell's Form 10-K for the year ended December 31, 2015)

Exhibit No.	Description
10.15*	Honeywell Supplemental Defined Benefit Retirement Plan, as amended and restated (incorporated by reference to Exhibit 10.13 to Honeywell's Form 10-K for the year ended December 31, 2008)
10.16*	Amendment to Honeywell Supplemental Defined Benefit Retirement Plan, as amended and restated (incorporated by reference to Exhibit 10.13 to Honeywell's Form 10-K for the year ended December 31, 2009)
10.17*	Amendment to Honeywell Supplemental Defined Benefit Retirement Plan, as amended and restated (incorporated by reference to Exhibit 10.9 to Honeywell's Form 10-K for the year ended December 31, 2015)
10.18*	Honeywell International Inc. Severance Plan for Corporate Staff Employees (Involuntary Termination Following a Change in Control), as amended and restated (incorporated by reference to Exhibit 10.12 to Honeywell's Form 10-K for the year ended December 31, 2013)
10.19*	Honeywell Supplemental Retirement Plan (incorporated by reference to Exhibit 10.24 to Honeywell's Form 10-K for the year ended December 31, 2006)
10.20*	2006 Stock Incentive Plan of Honeywell International Inc. and Its Affiliates, as amended and restated (incorporated by reference to Exhibit 10.26 to Honeywell's Form 10-K for the year ended December 31, 2008)
10.21*	Amendment to the 2006 Stock Incentive Plan of Honeywell International Inc. and Its Affiliates, as amended and restated (incorporated by reference to Exhibit 10.1 to Honeywell's Form 10-Q for the quarter ended March 31, 2011)
10.22*	2006 Stock Incentive Plan of Honeywell International Inc. and Its Affiliates—Form of Option Award Agreement (incorporated by reference to Exhibit 10.2 to Honeywell's Form 10-Q for the quarter ended March 31, 2009)
10.23*	2006 Stock Plan for Non-Employee Directors of Honeywell International Inc., as amended and restated (incorporated by reference to Exhibit 10.31 to Honeywell's Form 10-K for the year ended December 31, 2008)
10.24*	Amendment to 2006 Stock Plan for Non-Employee Directors of Honeywell International Inc., as amended and restated (incorporated by reference to Exhibit 10.27 to Honeywell's Form 10-K for the year ended December 31, 2011)
10.25*	Amendment to 2006 Stock Plan for Non-Employee Directors of Honeywell International Inc., as amended and restated (incorporated by reference to Exhibit 10.24 to Honeywell's Form 10-K for the year ended December 31, 2014)
10.26*	2006 Stock Plan for Non-Employee Directors of Honeywell International Inc.—Form of Option Agreement (incorporated by reference to Exhibit 10.3 to Honeywell's Form 10-Q for the quarter ended March 31, 2012)
10.27*	2006 Stock Plan for Non-Employee Directors of Honeywell International Inc.—Form of Restricted Unit Agreement (incorporated by reference to Exhibit 10.4 to Honeywell's Form 10-Q for the quarter ended March 31, 2012)
10.28*	2007 Honeywell Global Employee Stock Plan (incorporated by reference to Exhibit A of Honeywell's Proxy Statement, dated March 12, 2007, filed pursuant to Rule 14a-6 of the Securities Exchange Act of 1934)
10.29*	2006 Stock Incentive Plan of Honeywell International Inc. and Its Affiliates—Form of Option Award Agreement, Form 2 (incorporated by reference to Exhibit 10.37 to Honeywell's Form 10-K for the year ended December 31, 2010)
10.30*	Letter Agreement dated September 3, 2009 between Honeywell and Timothy Mahoney (incorporated by reference to Exhibit 10.38 to Honeywell's Form 10-K for the year ended December 31, 2010)
10.31*	Form of Honeywell International Inc. Noncompete Agreement for Senior Executives (incorporated by reference to Exhibit 10.39 to Honeywell's Form 10-K for the year ended December 31, 2010)
10.32*	2011 Stock Incentive Plan of Honeywell International Inc. and its Affiliates (incorporated by

Exhibit No.	Description
10.33*	Amendment to 2011 Stock Incentive Plan of Honeywell International Inc. and its Affiliates (incorporated by reference to Exhibit 10.36 to Honeywell's Form 10-K for the year ended December 31, 2012)
10.34*	Amendment to 2011 Stock Incentive Plan of Honeywell International Inc. and its Affiliates (incorporated by reference to Exhibit 10.1 to Honeywell's Form 10-Q for the quarter ended March 31, 2014)
10.35*	2011 Stock Incentive Plan of Honeywell International Inc. and its Affiliates—Form of Restricted Unit Agreement (incorporated by reference to Exhibit 10.2 to Honeywell's Form 10-Q for the quarter ended March 31, 2014)
10.36*	2011 Stock Incentive Plan of Honeywell International Inc. and its Affiliates—Form of Restricted Unit Agreement, Form 2 (incorporated by reference to Exhibit 10.3 to Honeywell's Form 10-Q for the quarter ended March 31, 2014)
10.37*	2011 Stock Incentive Plan of Honeywell International Inc. and Its Affiliates—Form of Stock Option Award Agreement (incorporated by reference to Exhibit 10.4 to Honeywell's Form 10-Q for the quarter ended March 31, 2014)
10.38*	2011 Stock Incentive Plan of Honeywell International Inc. and Its Affiliates—Form of Stock Option Award Agreement, Form 2 (incorporated by reference to Exhibit 10.39 to Honeywell's Form 10-K for the year ended December 31, 2014)
10.39*	2011 Stock Incentive Plan of Honeywell International Inc. and Its Affiliates—Form of Growth Plan Agreement (incorporated by reference to Exhibit 10.5 to Honeywell's Form 10-Q for the quarter ended March 31, 2014)
10.40*	2016 Stock Incentive Plan of Honeywell International Inc. and its Affiliates–Form of Performance Plan Grant Agreement (incorporated by reference to Exhibit 10.2 to Honeywell's Form 10-Q for the quarter ended March 31, 2017)
10.41*	Letter Agreement dated February 24, 2012 between Honeywell and Darius Adamczyk (incorporated by reference to Exhibit 10.1 to Honeywell's Form 10-Q for the quarter ended March 31, 2016)
10.42*	Offer Letter dated March 31, 2016 from Honeywell International Inc. to Darius Adamczyk (incorporated by reference to Exhibit 99.1 to Honeywell's Form 8-K filed April 6, 2016)
10.43*	Employment Offer Letter dated March 1, 2017 between Honeywell and Darius Adamczyk (incorporated by reference to Exhibit 99.1 to Honeywell's Form 8-K filed March 6, 2017)
10.44*	2016 Stock Incentive Plan of Honeywell International Inc. and its Affiliates (incorporated by reference to Exhibit A of Honeywell's Proxy Statement, dated March 10, 2016, filed pursuant to Rule 14a-6 of the Securities Exchange Act of 1934)
10.45*	2016 Stock Incentive Plan of Honeywell International Inc. and its Affiliates—Form of Restricted Unit Agreement (incorporated by reference to Exhibit 10.1 to Honeywell's Form 10-Q for the quarter ended June 30, 2016)
10.46*	2016 Stock Incentive Plan of Honeywell International Inc. and its Affiliates—Form of Restricted Unit Agreement, Form 2 (incorporated by reference to Exhibit 10.2 to Honeywell's Form 10-Q for the quarter ended June 30, 2016)
10.47*	2016 Stock Incentive Plan of Honeywell International Inc. and its Affiliates—Form of Stock Option Award Agreement (incorporated by reference to Exhibit 10.3 to Honeywell's Form 10-Q for the quarter ended June 30, 2016)
10.48*	2016 Stock Plan for Non-Employee Directors (incorporated by reference to Exhibit B of Honeywell's Proxy Statement, dated March 10, 2016, filed pursuant to Rule 14a-6 of the Securities Exchange Act of 1934)
10.49*	2016 Stock Plan for Non-Employee Directors of Honeywell International Inc.—Form of Stock Option Award Agreement (incorporated by reference to Exhibit 10.74 to Honeywell's Form 10-K for the year ended December 31, 2017)
10.50*	2016 Stock Plan for Non-Employee Directors of Honeywell International Inc.—Form of Restricted Unit Agreement (incorporated by reference to Exhibit 10.6 to Honeywell's Form

Exhibit No.	Description
10.51*	UOP LLC Supplemental Pension Plan, as amended and restated (incorporated by reference to Exhibit 10.76 to Honeywell's 10-K for the year ended December 31, 2017)
10.52*	Letter Agreement dated April 1, 2016 between Honeywell and Rajeev Gautam (incorporated by reference to Exhibit 10.1 to Honeywell's Form 10-Q for the quarter ended March 31, 2018)
10.53*	Letter Agreement dated July 27, 2018 between Honeywell and Greg Lewis (incorporated by reference to Exhibit 99.1 to Honeywell's Form 8-K filed August 2, 2018)
10.54	364-Day Credit Agreement, dated as of April 10, 2020, among Honeywell International Inc., the banks, financial institutions, and other institutional lenders parties thereto, Citibank, N.A., as administrative agent, and JPMorgan Chase Bank, N.A., as syndication agent (incorporated by reference to Exhibit 10.1 to Honeywell's Form 8-K filed on April 10, 2020)
10.55	Amended and Restated Five-Year Credit Agreement, dated as of April 26, 2019, among Honeywell International Inc., the banks, financial institutions, and other institutional lenders parties thereto, Citibank, N.A., as administrative agent, Citibank Europe PLC, UK Branch, as swing line agent, JPMorgan Chase Bank, N.A., as syndication agent, Bank of America, N.A., Barclays Bank PLC, Deutsche Bank Securities Inc., Goldman Sachs Bank USA, Morgan Stanley MUFG Loan Partners, LLC, and Wells Fargo Bank, National Association, as documentation agents, and Citibank, N.A. and JPMorgan Chase Bank, N.A., as joint lead arrangers and co-bookrunners (incorporated by reference to Exhibit 10.2 to Honeywell's Form 8-K filed April 29, 2019)
10.56*	Offer Letter dated July 9, 2018 between Honeywell International Inc. and Mark R. James (incorporated by reference to Exhibit 10.1 to Honeywell's Form 10-Q for the quarter ended March 31, 2019)
10.57	Indemnification and Reimbursement Agreement, dated September 12, 2018, by and among Honeywell ASASCO Inc., Honeywell ASASCO 2 Inc., and Honeywell International Inc. (incorporated by reference to Exhibit 2.1 to Honeywell's Form 8-K filed September 14, 2018)
10.58	Indemnification and Reimbursement Agreement, dated October 14, 2018, by and among New HAPI Inc. and Honeywell International Inc. (incorporated by reference to Exhibit 2.1 to Honeywell's Form 8-K filed October 15, 2018)
10.59*	Amendment to the 2016 Stock Plan for Non-Employee Directors of Honeywell International Inc. (incorporated by reference to Exhibit 99.2 to Honeywell's Form 8-K filed October 8, 2019)
10.60*	Amendment to the 2016 Stock Incentive Plan of Honeywell International Inc. and its Affiliates (incorporated by reference to Exhibit 10.2 to Honeywell's Form 10-Q for the quarter ended September 30, 2020)
10.61*	Amendment to the 2016 Stock Plan for Non-Employee Directors (incorporated by reference to Exhibit 10.1 to Honeywell's Form 10-Q for the quarter ended June 30, 2020)
10.62*	2016 Stock Plan for Non-Employee Directors of Honeywell International Inc. – Form of Stock Option Award Agreement (incorporated by reference to Exhibit 10.2 to Honeywell's Form 10-Q for the quarter ended June 30, 2020)
10.63*	2016 Stock Plan for Non-Employee Directors of Honeywell International Inc. – Form of Restricted Unit Agreement (incorporated by reference to Exhibit 10.3 to Honeywell's Form 10-Q for the quarter ended June 30, 2020)
10.64*	Retirement Agreement, dated July 20, 2020, between Honeywell and Mark R. James (incorporated by reference to Exhibit 10.4 to Honeywell's Form 10-Q for the quarter ended June 30, 2020)
10.65	Delayed Draw Term Loan Agreement, dated as of March 26, 2020, among Honeywell International Inc., the initial lenders named therein, Citibank, N.A., as administrative agent, and Citibank, N.A., Bank of America, N.A., JPMorgan Chase Bank, N.A. and Wells Fargo Bank, National Association, as syndication agents (incorporated by reference to Exhibit 10.1 to Honeywell's Form 8-K filed on March 31, 2020)
10.66	Second Amendment, dated July 28, 2020, to Indemnification and Reimbursement

Exhibit No.	Description
10.68	First Amendment, dated June 12, 2020, to Indemnification and Reimbursement Agreement dated September 12, 2018 among Honeywell, Honeywell Holdings International Inc. and Garrett ASASCO Inc. (incorporated by reference to Exhibit 10.7 to Honeywell's Form 10-Q for the quarter ended June 30, 2020)
10.69*	Amendment to Honeywell International Inc. Incentive Compensation Plan for Executive Employees, as amended and restated (filed herewith)
10.70*	Letter agreement dated October 2, 2017, between Honeywell International Inc. and Anne Madden (filed herewith)
21	Subsidiaries of the Registrant (filed herewith)
23.1	Consent of Deloitte & Touche LLP (filed herewith)
24	Powers of Attorney (filed herewith)
31.1	Certification of Principal Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 (filed herewith)
31.2	Certification of Principal Financial Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 (filed herewith)
32.1	Certification of Principal Executive Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (furnished herewith)
32.2	Certification of Principal Financial Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (furnished herewith)
95	Mine Safety Disclosures (filed herewith)
101.INS	The following financial statements from the Company's Annual Report on Form 10-K for the year ended December 31, 2020, formatted in Inline XBRL: (i) Consolidated Statements of Cash Flows, (ii) Consolidated Statements of Operations, (iii) Consolidated Statements of Comprehensive Income, (iv) Consolidated Balance Sheets, (v) Consolidated Statements of Shareholders' Equity and (vi) Notes to Consolidated Financial Statements, tagged as blocks of text and including detailed tags.
101.SCH	iXBRL Taxonomy Extension Schema (filed herewith)
101.CAL	iXBRL Taxonomy Extension Calculation Linkbase (filed herewith)
101.DEF	iXBRL Taxonomy Extension Definition Linkbase (filed herewith)
101.LAB	iXBRL Taxonomy Extension Label Linkbase (filed herewith)
101.PRE	iXBRL Taxonomy Extension Presentation Linkbase (filed herewith)
104	Cover page from the Company's Annual Report on Form 10-K for the year ended December 31, 2020, formatted in Inline XBRL (and contained in Exhibit 101)

The Exhibits identified above with an asterisk (*) are management contracts or compensatory plans or arrangements.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

HONEYWELL INTERNATIONAL INC.

Date: February 12, 2021	By:	/s/ Robert D. Mailloux
		Robert D. Mailloux Vice President and Controller (on behalf of the Registrant and as the Registrant's Principal Accounting Officer)

Pursuant to the requirements of the Securities Exchange Act of 1934, this annual report has been signed below by the following persons on behalf of the Registrant and in the capacities and on the date indicated:

Name	Name
/s/ Darius E. Adamczyk Darius E. Adamczyk Chairman and Chief Executive Officer (Principal Executive Officer)	* Deborah Flint Director
* Duncan B. Angove Director	* Judd A. Gregg Director
* William S. Ayer Director	* Clive R. Hollick Director
* Kevin Burke Director	* Grace D. Lieblein Director
* D. Scott Davis Director	* Raymond T. Odierno Director
* Linnet F. Deily Director	* George Paz Director
	* Robin L. Washington Director
/s/ Gregory P. Lewis Gregory P. Lewis Senior Vice President and Chief Financial Officer (Principal Financial Officer)	/s/ Robert D. Mailloux Robert D. Mailloux Vice President and Controller (Principal Accounting Officer)

*By: /s/ Gregory P. Lewis
(Gregory P. Lewis
Attorney-in-fact)

February 12, 2021

FORM 10-K CROSS-REFERENCE INDEX

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

Form 10-K

☒ ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d)
OF THE SECURITIES EXCHANGE ACT OF 1934
For the fiscal year ended December 31, 2019
OR
☐ TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d)
OF THE SECURITIES EXCHANGE ACT OF 1934
For the transition period from to
Commission file number 1-8974

Honeywell International Inc.

(Exact name of registrant as specified in its charter)

Delaware	22-2640650
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
300 South Tryon Street Charlotte, NC	28202
(Address of principal executive offices)	(Zip Code)

Registrant's telephone number, including area code (704) 627-6200

Securities registered pursuant to Section 12(b) of the Act:

Title of Each Class	Trading Symbols	Name of each exchange on which registered
Common Stock, par value $1 per share*	HON	New York Stock Exchange
0.650% Senior Notes due 2020	HON 20	New York Stock Exchange
1.300% Senior Notes due 2023	HON 23A	New York Stock Exchange
2.250% Senior Notes due 2028	HON 28A	New York Stock Exchange

* The common stock is also listed on the London Stock Exchange.

Securities registered pursuant to Section 12(g) of the Act: None

Indicate by check mark if the Registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☒ No ☐

Indicate by check mark if the Registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Exchange Act. Yes ☐ No ☒

Indicate by check mark whether the Registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the Registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the Registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☒ No ☐

Indicate by check mark whether the Registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See definition of "accelerated filer," "large accelerated filer," and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check One):

Large accelerated filer ☒ Accelerated filer ☐ Non-accelerated filer ☐ Smaller reporting company ☐

Emerging growth company ☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards pursuant to section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the Registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes ☐ No ☒

The aggregate market value of the voting stock held by nonaffiliates of the Registrant was approximately $125.6 billion at June 30, 2019.

There were 712,599,803 shares of Common Stock outstanding at January 25, 2020.

Documents Incorporated by Reference

Part III: Proxy Statement for Annual Meeting of Shareowners to be held April 27, 2020.

TABLE OF CONTENTS

PART I.

Item 1. Business

Honeywell International Inc. (“Honeywell” or “the Company”) invents and commercializes technologies that address some of the world’s most critical challenges around energy, safety, security, air travel, productivity and global urbanization. As a diversified technology and manufacturing company, we are uniquely positioned to blend physical products with software to serve customers worldwide with aerospace products and services, energy efficient products and solutions for businesses, specialty chemicals, electronic and advanced materials, process technology for refining and petrochemicals, and productivity, sensing, safety and security technologies for buildings and industries. Our products and solutions enable a safer, more comfortable and more productive world, enhancing the quality of life of people around the globe. Honeywell was incorporated in Delaware in 1985.

Our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and any amendments to those reports, are available free of charge on our website (www.honeywell.com) under the heading Investors (see SEC Filings and Reports) immediately after they are filed with, or furnished to, the Securities and Exchange Commission (SEC). In addition, in this Annual Report on Form 10-K, the Company incorporates by reference certain information from parts of its Proxy Statement for the 2020 Annual Meeting of Stockholders, which we expect to file with the SEC on or about March 12, 2020, and which will also be available free of charge on our website.

Major Businesses

We globally manage our business operations through four segments: Aerospace, Honeywell Building Technologies, Performance Materials and Technologies, and Safety and Productivity Solutions. Financial information related to our segments is included in Note 22 Segment Financial Data of Notes to Consolidated Financial Statements. The major products/services, including Honeywell Forge solutions supported by Honeywell Connected Enterprise ("HCE"), customers/uses and key competitors of each of our segments are:

Aerospace

Aerospace is a leading global supplier of products, software and services for aircrafts that it sells to original equipment manufacturers (OEM) and other customers in a variety of end markets including: air transport, regional, business and general aviation aircraft, airlines, aircraft operators and defense and space contractors. Aerospace products and services include auxiliary power units, propulsion engines, environmental control systems, integrated avionics, wireless connectivity services, electric power systems, engine controls, flight safety, communications, navigation hardware, data and software applications, radar and surveillance systems, aircraft lighting, management and technical services, advanced systems and instruments, satellite and space components, aircraft wheels and brakes, repair and overhaul services and thermal systems. Aerospace also provides spare parts, repair, overhaul and maintenance services (principally to aircraft operators) for the aftermarket. Honeywell Forge solutions are designed to identify and resolve problems faster, making fleet management and flight operations more efficient.

Honeywell Building Technologies

Honeywell Building Technologies is a leading global provider of products, software, solutions and technologies that enable building owners and occupants to ensure their facilities are safe, energy efficient, sustainable and productive. Honeywell Building Technologies products and services include advanced software applications for building control and optimization; sensors, switches, control systems and instruments for energy management; access control; video surveillance; fire products; remote patient monitoring systems; and installation, maintenance and upgrades of systems. Honeywell Forge solutions are designed to digitally manage buildings to use space intelligently, cut operating expenses and reduce maintenance.

Performance Materials and Technologies

Performance Materials and Technologies is a global leader in developing and manufacturing high-quality performance chemicals and materials, process technologies and automation solutions, including Honeywell Forge connected solutions. The segment comprises Process Solutions, UOP and Advanced Materials. Process Solutions provides automation control, instrumentation, advanced software and related services for the oil and gas, refining, pulp and paper, industrial power generation, chemicals and petrochemicals, biofuels, life sciences, and metals, minerals and mining industries. Through its smart energy products, Process Solutions enables utilities and distribution companies to deploy advanced capabilities to improve operations, reliability and environmental sustainability. UOP provides process technology, products, including catalysts and adsorbents, equipment, and consulting services that enable customers to efficiently produce gasoline, diesel, jet fuel, petrochemicals and renewable fuels for the petroleum refining, gas processing, petrochemical, and other industries. Advanced Materials manufactures a wide variety of high-performance products, including materials used to manufacture end products such as bullet-resistant armor, nylon, computer chips and pharmaceutical packaging, and provides reduced and low global-warming-potential (GWP) materials based on hydrofluoro-olefin technology. In the industrial environment, Honeywell Forge solutions enable integration and connectivity to provide a holistic view of operations and turn data into clear actions to maximize productivity and efficiency. Honeywell Forge's cybersecurity capabilities help identify risks and act on cyber-related incidents, together enabling improved operations and protecting processes, people and assets.

Safety and Productivity Solutions

Safety and Productivity Solutions is a leading global provider of products and software that improve productivity, workplace safety and asset performance to customers around the globe. Safety products include personal protection equipment, apparel, gear, and footwear designed for work, play and outdoor activities; gas detection technology; and cloud-based notification and emergency messaging. Productivity Solutions products and services include mobile devices and software for computing, data collection and thermal printing; supply chain and warehouse automation equipment, software and solutions; custom-engineered sensors, switches and controls for sensing and productivity solutions; and software-based data and asset management productivity solutions. Honeywell Forge solutions digitally automate processes to improve efficiency while reducing downtime and safety costs.

Competition

We are subject to competition in substantially all product and service areas. Some of our key competitors are:

- Aerospace: Garmin, Safran, Thales, and United Technologies
- Honeywell Building Technologies: Johnson Controls, Schneider Electric, Siemens and United Technologies
- Performance Materials and Technologies: Albemarle, BASF, Dupont, Emerson Electric, Schneider Electric, Siemens, Sinopec and Yokogawa
- Safety and Productivity Solutions: 3M, Kion Group, Mine Safety Appliances (MSA), TE Connectivity, and Zebra Technologies

Our businesses compete on a variety of factors such as price, quality, reliability, delivery, customer service, performance, applied technology, product innovation and product recognition. Brand identity, service to customers and quality are important competitive factors for our products and services, and there is considerable price competition. Other competitive factors include breadth of product line, research and development efforts and technical and managerial capability. While our competitive position varies among our products and services, we believe we are a significant competitor in each of our major product and service classes. Many of our competitors have substantial financial resources and significant technological capabilities. In addition, some of our products compete with the captive component divisions of OEMs.

U.S. Government Sales

Sales to the U.S. Government (principally by Aerospace), acting through its various departments and agencies and through prime contractors, amounted to $4,057 million, $3,403 million and $3,203 million in 2019, 2018 and 2017, which included sales to the U.S. Department of Defense, as a prime contractor and subcontractor, of $3,491 million, $2,832 million and $2,546 million in 2019, 2018 and 2017. We do not expect our overall operating results to be significantly affected by any proposed changes in 2020 federal defense spending due principally to the varied mix of the government programs which impact us (OEMs' production, engineering development programs, aftermarket spares and repairs and overhaul programs), as well as our diversified commercial businesses.

International Operations

We engage in manufacturing, sales, service and research and development (R&D) globally. U.S. exports and non-U.S. manufactured products are significant to our operations. U.S. exports comprised 15% of our total sales in 2019, 13% in 2018 and 12% in 2017. Non-U.S. manufactured products and services, mainly in Europe and Asia, were 40% of our total sales in 2019, 43% in 2018 and 44% in 2017.

	Year Ended December 31, 2019			
Manufactured Products and Systems and Performance of Services	**Aerospace**	**Honeywell Building Technologies**	**Performance Materials and Technologies**	**Safety and Productivity Solutions**
	(% of Segment Sales)			
U.S. Exports	25 %	2 %	16 %	2 %
Non-U.S. manufactured/services	19 %	64 %	56 %	41 %

Information related to risks attendant to our foreign operations is included in Item 1A. Risk Factors under the caption “Macroeconomic and Industry Risks.”

Backlog

Our backlog represents the estimated remaining value of work to be performed under firm contracts. Backlog is equal to our remaining performance obligations under the contracts that meet the guidance on revenue from contracts with customers as discussed in Note 7 to the Consolidated Financial Statements. Backlog was $25,612 million and $24,850 million at December 31, 2019 and 2018. We expect to recognize approximately 57% of our remaining performance obligations as revenue in 2020, and the remaining balance thereafter.

Raw Materials

The principal raw materials used in our operations are readily available. Although we occasionally experience disruption in raw materials supply, we experienced no significant problems in the purchase of key raw materials or commodities in 2019. We are not dependent on any one supplier for a material amount of our raw materials.

Prices of certain key raw materials, including copper, fluorspar, tungsten salts, ethylene, aluminum, and molybdenum in Performance Materials and Technologies and nickel, steel, titanium and other metals in Aerospace, are expected to fluctuate. We offset raw material cost increases with formula or long-term supply agreements, price increases and hedging activities where feasible. We do not presently anticipate that a shortage of raw materials will cause any material adverse impacts during 2020.

Patents, Trademarks, Licenses and Distribution Rights

Our segments are not dependent upon any single patent or related group of patents, or any licenses or distribution rights. In our judgment, our intellectual property rights are adequate for the conduct of our business. We believe that, in the aggregate, the rights under our patents, trademarks and licenses are generally important to our operations, but we do not consider any individual patent, trademark or any licensing or distribution rights related to a specific process or product to be of material importance in relation to our total business.

Environment

We are subject to various federal, state, local and foreign government requirements regarding protection of human health and the environment. Our policies, practices and procedures are designed to prevent unreasonable risk of environmental damage, and of resulting financial liability, in connection with our business. Some risk of environmental damage is, however, inherent in some of our operations and products, as it is with other companies engaged in similar businesses.

We engage in the handling, manufacturing, use and disposal of many substances classified as hazardous by one or more regulatory agencies. Our policies, practices and procedures are designed to prevent unreasonable risk of environmental damage and personal injury, and that our handling, manufacture, use and disposal of these substances meet or exceed environmental and safety laws and regulations. It is possible that future knowledge or other developments, such as improved capability to detect substances in the environment or increasingly strict environmental laws and standards and enforcement policies, could bring into question our current or past handling, manufacture, use or disposal of these substances.

Among other environmental requirements, we are subject to the federal Superfund and similar state and foreign laws and regulations, under which we have been designated as a potentially responsible party that may be liable for cleanup costs associated with current and former operating sites and various hazardous waste sites, some of which are on the U.S. Environmental Protection Agency’s National Priority List. While there is a possibility that a responsible party might be unable to obtain appropriate contribution from other responsible parties, we do not anticipate having to bear significantly more than our proportional share in multi-party situations taken as a whole.

We do not believe that Federal, State and local provisions regulating the discharge of materials into the environment, or otherwise relating to the protection of the environment, or any existing or pending climate change legislation, regulation, or international treaties or accords are reasonably likely to have a material effect in the foreseeable future on the Company’s business. We will continue to monitor emerging developments in this area.

Employees

We have approximately 113,000 employees at December 31, 2019, of whom approximately 44,000 are located in the United States.

Information About our Executive Officers

The executive officers of Honeywell, listed as follows, are elected annually by the Board of Directors. There are no family relationships among them.

Name, Age, Date First Elected an Executive Officer	Business Experience
Darius Adamczyk, 54 2017[(a)]	Chairman of the Board and Chief Executive Officer since April 2018. President and Chief Executive Officer from April 2017 to April 2018. Chief Operating Officer from April 2016 to March 2017. President and Chief Executive Officer Performance Materials and Technologies from April 2014 to April 2016. President of Honeywell Process Solutions from April 2012 to April 2014.
Que Thanh Dallara, 46 2018	President and Chief Executive Officer Connected Enterprise since October 2018. Vice President and Chief Commercial Officer from January 2017 to October 2018. From 2007 to 2016, Ms. Dallara served in multiple leadership positions at TE Connectivity Ltd., most recently as Senior Vice President, Corporate Strategy and Analytics.
Rajeev Gautam, 67 2016	President and Chief Executive Officer Performance Materials and Technologies since April 2016. President of Honeywell UOP from January 2009 to April 2016.
Mark R. James, 58 2007	Senior Vice President Human Resources, Security and Communications since November 2007.
Vimal Kapur, 54 2018	President and Chief Executive Officer Honeywell Building Technologies since May 2018. President of Honeywell Process Solutions from 2014 to May 2018.
Gregory P. Lewis, 52 2018	Senior Vice President and Chief Financial Officer since August 2018. Vice President of Enterprise Information Management from October 2016 to April 2018, prior to being named Vice President, Corporate Finance in May 2018. Chief Financial Officer of Automation and Control Solutions from April 2013 to September 2016.
Anne T. Madden, 55 2017	Senior Vice President and General Counsel since October 2017. Corporate Secretary from February 2018 to September 2019. Vice President of Corporate Development and Global Head of M&A from January 2002 to October 2017.
Michael R. Madsen, 56 2019	President and Chief Executive Officer Aerospace since October 2019. Vice President, Integrated Supply Chain of Aerospace from May 2015 to October 2019. President, Aerospace Defense and Space from October 2010 to May 2015
John F. Waldron, 44 2016	President and Chief Executive Officer, Safety and Productivity Solutions since July 2016. President of Sensing and Productivity Solutions from July 2015 to July 2016. President of Scanning and Mobility from April 2012 to July 2015.

(a) Also a Director.

Item 1A. Risk Factors

Cautionary Statement About Forward-Looking Statements

We describe many of the trends and other factors that drive our business and future results in Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations and in other parts of this report (including this Item 1A). Such discussions contain forward-looking statements within the meaning of Section 21E of the Securities Exchange Act of 1934. Forward-looking statements are those that address activities, events or developments that management intends, expects, projects, believes or anticipates will or may occur in the future. They are based on management’s assumptions and assessments in light of past experience and trends, current economic and industry conditions, expected future developments and other relevant factors. They are not guarantees of future performance, and actual results, developments and business decisions may differ significantly from those envisaged by our forward-looking statements. We do not undertake to update or revise any of our forward-looking statements. Our forward-looking statements are also subject to risks and uncertainties that can affect our performance in both the near- and long-term. These forward-looking statements should be considered in light of the information included in this Form 10-K, including, in particular, the factors discussed below. These factors may be revised or supplemented in subsequent reports on Forms 10-Q and 8-K.

Risk Factors

Our business, operating results, cash flows and financial condition are subject to the principal risks and uncertainties set forth below, any one of which could cause our actual results to vary materially from recent results or from our anticipated future results.

Macroeconomic and Industry Risks

Each of our businesses is subject to unique industry and economic conditions that may adversely affect the markets and operating conditions of our customers, which in turn can affect demand for our products and services and our results of operations.

- ***Aerospace***—Our Aerospace business is impacted by customer buying patterns of aftermarket parts, supplier stability, factory transitions and global supply chain capacity constraints that may lead to shortages of crucial components. Operating results may be adversely affected by downturns in the global demand for air travel which impacts new aircraft production or the delay or cancellation of new aircraft orders, delays in launch schedules for new aircraft, the retirement of aircraft and global flying hours, which impact air transport, regional, business and general aviation aircraft utilization rates. Operating results may be adversely affected by the decrease in air travel demand due to regional restrictions or suspension of service for public health, safety, or environmental events. Operating results could also be impacted by changes in overall trends related to end market demand for the product portfolio, as well as, new entrants and non-traditional players entering the market. Operating results in our Defense and Space business unit may be affected by the mix of U.S. and foreign government appropriations for defense and space programs and by compliance risks. Results may also be impacted by the potential introduction of counterfeit parts into our global supply chain.

- ***Honeywell Building Technologies***—Operating results may be adversely impacted by downturns in the level of global commercial construction activity (including retrofits and upgrades), lower capital spending and operating expenditures on building projects, less industrial plant expansion, changes in the competitive landscape including new market entrants and new technologies, and fluctuations in inventory levels in distribution channels.

- ***Performance Materials and Technologies***—Operating results may be adversely impacted by downturns in capacity utilization for chemical, industrial, refining, petrochemical and semiconductor plants, our customers' availability of capital for refinery construction and expansion, raw material demand and supply volatility, product commoditization, continued illegal imports of hydrofluorocarbons into Europe and our ability to maximize our facilities' production capacity and minimize downtime. In particular, the volatility in oil and natural gas prices have and will continue to impact our customers' operating levels and capital spending and thus demand for our products and services.

- ***Safety and Productivity Solutions***—Operating results may be adversely impacted by reduced investments in process automation, safety monitoring, and plant capacity utilization initiatives, fluctuations in retail markets, lower customer demand due to the failure to anticipate and respond to overall trends related to end market demand, changes in the competitive landscape including new market entrants and technology that may lead to product commoditization, and adverse industry economic conditions, all of which could result in lower market share, reduced selling prices and lower margins.

An increasing percentage of our sales and operations is in non-U.S. jurisdictions and is subject to the economic, political, regulatory, foreign exchange and other risks of international operations.

Our international operations, including U.S. exports, represent more than half of the Company's sales. Risks related to international operations include exchange control regulations, wage and price controls, antitrust regulations, employment regulations, foreign investment laws, import, export and other trade restrictions (such as sanctions and embargoes), differing levels of protection of intellectual property, acts of industrial espionage, violations by our employees of anti-corruption laws (despite our efforts to mitigate these risks), changes in regulations regarding transactions with state-owned enterprises, nationalization of private enterprises, acts of terrorism, and our ability to hire and maintain qualified staff and maintain the safety of our employees in these regions. Instability and uncertainties arising from the global geopolitical environment, and the evolving international and domestic political, regulatory and economic landscape, the potential for changes in global trade policies including sanctions and trade barriers, trends such as populism, economic nationalism and negative sentiment toward multinational companies, and the cost of compliance with increasingly complex and often conflicting regulations worldwide can impair our flexibility in modifying product, marketing, pricing or other strategies for growing our businesses, as well as our ability to improve productivity and maintain acceptable operating margins.

While there is uncertainty regarding the final outcome and full terms of the United Kingdom’s future relationship with the European Union, it is possible that there will be greater restrictions on imports and exports between the United Kingdom and other countries, including the United States, increased tariffs on U.K. imports and exports, and increased regulatory complexities. The Company has developed plans to mitigate the potential impact of these possible restrictions, but the implications of these uncertainties could affect the Company's business, financial position and results of operations.

Existing free trade laws and regulations provide certain beneficial duties and tariffs for qualifying imports and exports. Changes in laws or policies governing the terms of foreign trade, and in particular increased trade restrictions, tariffs or taxes on imports from countries where we manufacture products or from where we import products or raw materials, either directly or through our suppliers, could have an impact on our competitive position and financial results.

The United States has commenced certain trade actions, including imposing tariffs on certain goods imported from China and other countries, which has resulted in retaliatory tariffs by China and other countries. Additional tariffs imposed by the United States on a broader range of imports, or further retaliatory trade measures taken by China or other countries in response, could increase the cost of our products.

Operating outside of the United States also exposes us to foreign exchange risk, which we monitor and seek to reduce through hedging activities. However, foreign exchange hedging activities bear a financial cost and may not always be available to us or be successful in eliminating such volatility. Finally, we generate significant amounts of cash outside of the United States that is invested with financial and non-financial counterparties. While we employ comprehensive controls regarding global cash management to guard against cash or investment loss and to ensure our ability to fund our operations and commitments, a material disruption to the counterparties with whom we transact business could expose Honeywell to financial loss.

Operating outside the United States also exposes us to additional intellectual property risk. The laws and enforcement practices of certain jurisdictions in which we operate may not protect our intellectual property rights to the same extent as in the U.S. and may impose joint venture, technology transfer, local service or other foreign investment requirements and restrictions that potentially compromise control over our technology and proprietary information. Failure of foreign jurisdictions to protect our intellectual property rights, an inability to effectively enforce such rights in foreign jurisdictions, or the imposition of foreign jurisdiction investment or sourcing restrictions or requirements could result in loss of valuable proprietary information and could impact our competitive position and financial results.

Risks related to our defined benefit pension plans may adversely impact our results of operations and cash flow.

Significant changes in actual investment return on pension assets, discount rates, and other factors could adversely affect our results of operations and require cash pension contributions in future periods. Changes in discount rates and actual asset returns different than our anticipated asset returns can result in significant non-cash actuarial gains or losses which we record in the fourth quarter of each fiscal year, and, if applicable, in any quarter in which an interim re-measurement is triggered. With regard to cash pension contributions, funding requirements for our pension plans are largely dependent upon interest rates, actual investment returns on pension assets and the impact of legislative or regulatory changes related to pension funding obligations.

We may be required to transition from the use of the LIBOR interest rate index in the future.

We have certain contracts indexed to LIBOR to calculate the interest rate. The continued availability of the LIBOR index is not guaranteed after 2021. We cannot predict whether and to what extent banks will continue to provide LIBOR submissions to the administrator of LIBOR or whether any additional reforms to LIBOR may be enacted. The language in certain of our LIBOR-based contracts identify various events that trigger when a successor rate to the designated rate would be selected. If a trigger is satisfied, such contracts may give the calculation agent discretion over the substitute index or indices for the calculation of interest rates to be selected. The implementation of a substitute index or indices for the calculation of interest rates under our contracts may result in our incurring significant expenses in effecting the transition and may result in disputes or litigation over the appropriateness or comparability to LIBOR of the substitute index or indices, which could have an adverse effect on our results of operations.

Operational Risks

Raw material price fluctuations, the ability of key suppliers to meet quality and delivery requirements, or catastrophic events can increase the cost of our products and services, impact our ability to meet commitments to customers and cause us to incur significant liabilities.

The cost of raw materials is a key element in the cost of our products, particularly in Performance Materials and Technologies (copper, fluorspar, tungsten salts, ethylene, aluminum, and molybdenum) and in Aerospace (nickel, steel, titanium and other metals). Our inability to offset material price inflation through increased prices to customers, formula or long-term fixed price contracts with suppliers, productivity actions or through commodity hedges could adversely affect our results of operations.

Many major components, product equipment items and raw materials, particularly in Aerospace, are procured or subcontracted on a single or sole-source basis. Although we maintain a qualification and performance surveillance process and we believe that sources of supply for raw materials and components are generally adequate, it is difficult to predict what effects shortages or price increases may have in the future. Our ability to manage inventory and meet delivery requirements may be constrained by our suppliers' inability to scale production and adjust delivery of long-lead time products during times of volatile demand. Our inability to fill our supply needs would jeopardize our ability to fulfill obligations under commercial and government contracts, which could, in turn, result in reduced sales and profits, contract penalties or terminations, and damage to customer relationships.

We may be unable to successfully execute or effectively integrate acquisitions, and divestitures may not occur as planned.

We regularly review our portfolio of businesses and pursue growth through acquisitions and seek to divest non-core businesses. We may not be able to complete transactions on favorable terms, on a timely basis, or at all. In addition, our results of operations and cash flows may be adversely impacted by (i) the failure of acquired businesses to meet or exceed expected returns, including risk of impairment; (ii) the failure to integrate multiple acquired businesses into Honeywell simultaneously and on schedule and/or to achieve expected synergies; (iii) the inability to dispose of non-core assets and businesses on satisfactory terms and conditions; and (iv) the discovery of unanticipated liabilities, labor relations difficulties, cybersecurity concerns, compliance issues or other problems in acquired businesses for which we lack contractual protections, insurance or indemnities, or with regard to divested businesses, claims by purchasers to whom we have provided contractual indemnification.

Our future growth is largely dependent upon our ability to develop new technologies and introduce new products that achieve market acceptance in increasingly competitive markets with acceptable margins.

Our future growth rate depends upon a number of factors, including our ability to (i) identify and evolve with emerging technological and broader industry trends in our target end-markets; (ii) develop and maintain competitive products; (iii) defend our market share against an ever-expanding number of competitors including many new and non-traditional competitors; (iv) enhance our products by adding innovative features that differentiate our products from those of our competitors and prevent commoditization of our products; (v) develop, manufacture and bring compelling new products to market quickly and cost-effectively; (vi) monitor disruptive technologies and business models; (vii) achieve sufficient return on investment for new products introduced based on capital expenditures and research and development spending; (viii) respond to changes in overall trends related to end-market demand; and (ix) attract, develop and retain individuals with the requisite technical expertise and understanding of customers' needs to develop new technologies and introduce new products. Competitors may also develop after-market services and parts for our products which attract customers and adversely affect our return on investment for new products. The failure of our technologies or products to gain market acceptance due to more attractive offerings by our competitors or the failure to address any of the above factors could significantly reduce our revenues and adversely affect our competitive standing and prospects.

Failure to increase productivity through sustainable operational improvements, as well as an inability to successfully execute repositioning projects or to effectively manage our workforce, may reduce our profitability or adversely impact our businesses.

Our profitability and margin growth are dependent upon our ability to drive sustainable improvements. In addition, we seek productivity and cost savings benefits through repositioning actions and projects, such as consolidation of manufacturing facilities, transitions to cost-competitive regions and product line rationalizations. Risks associated with these actions include delays in execution, additional unexpected costs, realization of fewer than estimated productivity improvements and adverse effects on employee morale. We may not realize the full operational or financial benefits we expect, the recognition of these benefits may be delayed and these actions may potentially disrupt our operations. In addition, organizational changes, increased attrition, failure to create and implement a succession plan for key Company positions, not retaining key talent, inability to attract new employees with unique skills, labor relations difficulties, or workforce stoppage could have a material adverse effect on our business, reputation, financial position and results of operations.

As a supplier to the U.S. Government, we are subject to unique risks, such as the right of the U.S. Government to terminate contracts for convenience and to conduct audits and investigations of our operations and performance.

U.S. Government contracts are subject to termination by the government, either for the convenience of the government or for our failure to perform consistent with the terms of the applicable contract. Our contracts with the U.S. Government are also subject to government audits that may recommend downward price adjustments and other changes. When appropriate and prudent, we made adjustments and paid voluntary refunds in the past and may do so in the future.

We are also subject to government investigations of business practices and compliance with government procurement regulations. If, as a result of any such investigation or other government investigations (including investigation of violations of certain environmental, employment or export laws), Honeywell or one of its businesses were found to have violated applicable law, then it could be suspended from bidding on or receiving awards of new government contracts, suspended from contract performance pending the completion of legal proceedings and/or have its export privileges suspended.

Our operations and the prior operations of predecessor companies expose us to the risk of material environmental liabilities.

Mainly because of past operations and operations of predecessor companies, we are subject to potentially material liabilities related to the remediation of environmental hazards and to claims of personal injuries or property damages that may be caused by hazardous substance releases and exposures. We continue to incur remedial response and voluntary clean-up costs for site contamination and are a party to lawsuits and claims associated with environmental and safety matters, including past production of products containing hazardous substances. Additional lawsuits, claims and costs involving environmental matters are likely to continue to arise in the future. Various federal, state, local and foreign governments regulate the discharge of materials into the environment, or the use of or communications respecting certain materials in our products, and can impose substantial fines and criminal sanctions for violations, and require injunctive relief measures, including installation of costly equipment or operational changes to limit emissions and/or decrease the likelihood of accidental hazardous substance releases, or limiting access of our products to markets, among others. In addition, changes in laws, regulations and enforcement of policies, the discovery of previously unknown contamination or new technology or information related to individual sites, the establishment of stricter toxicity standards with respect to certain contaminants, or the imposition of new clean-up requirements or remedial techniques could require us to incur additional costs in the future that would have a negative effect on our financial condition or results of operations.

Cybersecurity incidents could disrupt business operations, result in the loss of critical and confidential information, and adversely impact our reputation and results of operations.

Global cybersecurity threats and incidents can range from uncoordinated individual attempts to gain unauthorized access to information technology (IT) systems to sophisticated and targeted measures known as advanced persistent threats, directed at the Company, its products, its customers and/or its third party service providers, including cloud providers. Our customers, including the U.S. government, are increasingly requiring cybersecurity protections and mandating cybersecurity standards in our products, and we may incur additional costs to comply with such demands. While we have experienced, and expect to continue to experience, these types of threats and incidents, none of them to date have been material to the Company. We seek to deploy comprehensive measures to deter, prevent, detect, respond to and mitigate these threats, including identity and access controls, data protection, vulnerability assessments, continuous monitoring of our IT networks and systems and maintenance of backup and protective systems. Despite these efforts, cybersecurity incidents, depending on their nature and scope, could potentially result in the misappropriation, destruction, corruption or unavailability of critical data and confidential or proprietary information (our own or that of third parties) and the disruption of business operations. The potential consequences of a material cybersecurity incident include financial loss, reputational damage, litigation with third parties, theft of intellectual property, fines levied by the Federal Trade Commission, diminution in the value of our investment in research, development and engineering, and increased cybersecurity protection and remediation costs due to the increasing sophistication and proliferation of threats, which in turn could adversely affect our competitiveness and results of operations.

The development of technology products and services presents security and safety risks.

An increasing number of our products, services and technologies are delivered with Internet of Things (IoT) capabilities and the accompanying interconnected device networks which include sensors, data and advanced computing capabilities. We have developed product software designs which we believe are less susceptible to cyber-attacks, but despite these efforts, if our products and services that include IoT solutions do not work as intended or are compromised, the possible consequences include financial loss, reputational damage, exposure to legal claims or enforcement actions, theft of intellectual property, and diminution in the value of our investment in research, development and engineering, which in turn could adversely affect our competitiveness and results of operations.

Data privacy, data protection, and information security may require significant resources and presents certain risks.

We collect, store, have access to and otherwise process certain confidential or sensitive data, including proprietary business information, personal data or other information that is subject to privacy and security laws, regulations and/or customer-imposed controls. Despite our efforts to protect such data, we may be vulnerable to material security breaches, theft, misplaced or lost data, programming errors, or employee errors that could potentially lead to the compromising of such data, improper use of our systems, software solutions or networks, unauthorized access, use, disclosure, modification or destruction of information, defective products, production downtimes and operational disruptions. In addition, we operate in an environment in which there are different and potentially conflicting data privacy laws in effect in the various U.S. states and foreign jurisdictions in which we operate and we must understand and comply with each law and standard in each of these jurisdictions while ensuring the data is secure. For example, the State of California recently passed legislation granting residents certain new data privacy rights and regulating the security of IoT devices, effective in January 2020; European laws require us to have an approved legal mechanism to transfer personal data out of Europe; the European Union General Data Protection Regulation, which became enforceable in May 2018, superseded prior European Union data protection legislation and imposes more stringent requirements in how we collect and process personal data and provides for significantly greater penalties for noncompliance; and several other countries have passed laws that require personal data relating to their citizens to be maintained on local servers and impose additional data transfer restrictions. Government enforcement actions can be costly and interrupt the regular operation of our business, and violations of data privacy laws can result in fines, reputational damage and civil lawsuits, any of which may adversely affect our business, reputation and financial statements.

A material disruption of our operations, particularly at our manufacturing facilities or within our information technology infrastructure, could adversely affect our business.

Our facilities, supply chains, distribution systems and information technology systems are subject to catastrophic loss due to natural disasters, including hurricanes and floods, power outages, fires, explosions, terrorism, equipment failures, sabotage, cyber incidents, adverse weather conditions, labor disputes, critical supply failure, inaccurate downtime forecast, political disruption, and other reasons, which can result in undesirable consequences, including financial losses and damaged relationships with customers. Public health crises, like a regional or global pandemic, could disrupt our supply chain, distribution channels, production facilities, operations and customer demand, which could negatively impact our operations and adversely affect our business. We employ information technology systems and networks to support the business and rely on them to process, transmit and store electronic information, and to manage or support a variety of business processes and activities. Disruptions to our information technology infrastructure from system failures, shutdowns, power outages, telecommunication or utility failures, cybersecurity incidents, and other events, including disruptions at our cloud computing, server, systems and other third party IT service providers, could interfere with our operations, interrupt production and shipments, damage customer and business partner relationships, and negatively impact our reputation.

Concentrations of credit and market risk may adversely affect our results of operations.

We maintain long-term contract relationships with many of our customers, suppliers, and other counterparties. While we monitor the financial health of these counterparties, we are exposed to credit and market risks to the extent that customers, suppliers, and other counterparties are concentrated in similar industries and geographic regions. Changes in economic conditions in these industries or geographic regions could result in the credit deterioration or insolvency of a significant counterparty, which may lead to concerns about the creditworthiness of other counterparties in the same industry or geography, impacting our ability to renew our long-term contract arrangements or collect amounts due under these arrangements.

Legal and Regulatory Risks

Our U.S. and non-U.S. tax liabilities are dependent, in part, upon the distribution of income among various jurisdictions in which we operate.

Our future results of operations could be adversely affected by changes in the effective tax rate as a result of a change in the mix of earnings in countries with differing statutory tax rates, changes in tax laws, regulations and judicial rulings (or changes in the interpretation thereof), potential taxation of digital services, changes in generally accepted accounting principles, changes in the valuation of deferred tax assets and liabilities, changes in the amount of earnings permanently reinvested offshore, the results of audits and examinations of previously filed tax returns and continuing assessments of our tax exposures and various other governmental enforcement initiatives. Our tax expense includes estimates of tax reserves and reflects other estimates and assumptions, including assessments of future earnings of the Company which could impact the valuation of our deferred tax assets. Changes in tax laws or regulations, including further regulatory developments arising from U.S. tax reform legislation as well as multi-jurisdictional changes enacted in response to the action items provided by the Organization for Economic Co-operation and Development (OECD), will increase tax uncertainty and impact our provision for income taxes.

Changes in legislation or government regulations or policies can have a significant impact on our results of operations.

The sales and margins of each of our segments are directly impacted by government regulations including safety, performance and product certification regulations. Within Aerospace, the operating results of Commercial Original Equipment and Commercial Aftermarket may be impacted by, among other things, mandates of the Federal Aviation Administration and other similar international regulatory bodies requiring the installation of equipment on aircraft. Our Defense and Space business unit may be affected by changes in government procurement regulations. Within Honeywell Building Technologies and Safety and Productivity Solutions, the demand for and cost of providing products, services and solutions can be impacted by fire, security, safety, health care, environmental and energy efficiency standards and regulations. Performance Materials and Technologies' results of operations can be impacted by environmental standards, regulations, and judicial determinations. Growth in all our businesses within emerging markets may be adversely impacted by the inability to acquire and retain qualified employees where local employment law mandates may be restrictive. Noncompliance with legislation and regulations can result in fines and penalties.

Increased public awareness and concern regarding global climate change may result in more international, regional and/or federal or other stakeholder requirements or expectations that could mandate more restrictive or expansive standards, such as stricter limits on greenhouse gas emissions or more prescriptive reporting of environmental, social, and governance metrics, than the voluntary commitments, that the Company has adopted or require such changes on a more accelerated time frame. There continues to be a lack of consistent climate legislation, which creates economic and regulatory uncertainty. If environmental laws or regulations are either changed or adopted and impose significant operational restrictions and compliance requirements upon the Company or its products, they could negatively impact the Company's business, capital expenditures, results of operations, financial condition and competitive position.

We cannot predict with certainty the outcome of litigation matters, government proceedings and other contingencies and uncertainties.

We are subject to a number of lawsuits, investigations and disputes (some of which involve substantial amounts claimed) arising out of the conduct of our business, including matters relating to commercial transactions, government contracts, product liability (including asbestos), prior acquisitions and divestitures, employment, employee benefits plans, intellectual property, antitrust, accounting, import and export, and environmental, health and safety matters. Our potential liabilities are subject to change over time due to new developments, changes in settlement strategy or the impact of evidentiary requirements, and we may become subject to or be required to pay damage awards or settlements that could have a material adverse effect on our results of operations, cash flows and financial condition. While we maintain insurance for certain risks, the amount of our insurance coverage may not be adequate to cover the total amount of all insured claims and liabilities. The incurrence of significant liabilities for which there is no or insufficient insurance coverage could adversely affect our results of operations, cash flows, liquidity and financial condition.

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

We have approximately 932 locations, of which 242 are manufacturing sites. Our properties and equipment are in good operating condition and are adequate for our present needs. We do not anticipate difficulty in renewing existing leases as they expire or in finding alternative facilities.

Item 3. Legal Proceedings

We are subject to a number of lawsuits, investigations and claims (some of which involve substantial amounts) arising out of the conduct of our business. See a discussion of environmental, asbestos and other litigation matters in Note 20 Commitments and Contingencies of Notes to Consolidated Financial Statements.

The following matter is disclosed solely pursuant to the requirement to disclose certain environmental matters involving potential monetary sanctions in excess of $100,000: In January 2020, Honeywell reached agreement with the Texas Commission on Environmental Quality (TCEQ) to settle allegations that its Orange, Texas facility had exceeded certain emissions limits in its air permit. When Honeywell discovered these emissions, it took immediate corrective measures to address the issue, and self-reported the emissions to the TCEQ. Under the terms of the settlement, Honeywell will pay a penalty of $152,415 to resolve the matter.

Item 4. Mine Safety Disclosures

One of our wholly-owned subsidiaries has a placer claim for and operates a chabazite ore surface mine in Arizona. Information concerning mine safety and other regulatory matters associated with this mine is required by Section 1503(a) of the Dodd-Frank Wall Street Reform and Consumer Protection Act and Item 104 of Regulation S-K and is included in Exhibit 95 to this annual report.

Part II.

Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities

Our common stock is listed on the New York Stock Exchange under the ticker symbol "HON". Dividend information for Honeywell's common stock is included in Note 25 Unaudited Quarterly Financial Information of Notes to Consolidated Financial Statements.

The number of record holders of our common stock at December 31, 2019 was 43,552.

Information regarding securities authorized for issuance under equity compensation plans is included in Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters under the caption "Equity Compensation Plans."

We purchased 4,325,518 shares of our common stock, par value $1 per share, in the quarter ending December 31, 2019. On April 29, 2019, the Board of Directors authorized the repurchase of up to a total of $10 billion of Honeywell common stock, which included amounts remaining under, and replaced, the previously approved share repurchase program. As of December 31, 2019, $7.0 billion remained available for additional share repurchases. We expect to repurchase outstanding shares from time to time to generally offset the dilutive impact of employee stock based compensation plans, including option exercises, restricted unit vesting and matching contributions under our savings plans. Additionally, we seek to reduce share count via share repurchases as and when attractive opportunities arise. The amount and timing of future repurchases may vary depending on market conditions and the level of our operating, financing and other investing activities.

The following table summarizes our purchases of Honeywell's common stock for the three months ended December 31, 2019:

Issuer Purchases of Equity Securities

Period	Total Number of Shares Purchased	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Approximate Dollar Value of Shares that May Yet be Purchased Under Plans or Programs (Dollars in millions)
October 2019	1,326,831	$ 163.68	1,326,831	$ 7,522
November 2019	1,573,877	$ 179.03	1,573,877	$ 7,240
December 2019	1,424,810	$ 176.15	1,424,810	$ 6,989

Performance Graph

The following graph compares the five-year cumulative total return on our common stock to the total returns on the Standard & Poor's (S&P) 500 Stock Index and a composite of S&P's Industrial Conglomerates and Aerospace and Defense indices, on a 55%/45% weighted basis (the Composite Index). The weighting of the components of the Composite Index are based on our segments' relative contribution to total segment profit. The selection of the Industrial Conglomerates component of the Composite Index reflects the diverse and distinct range of non-aerospace businesses conducted by Honeywell. The annual changes for the five-year period shown in the graph are based on the assumption that $100 had been invested in Honeywell stock and each index on December 31, 2014 and that all dividends were reinvested.

chart-9cfa9e6dd1e05237936.jpg

		Dec 2014	Dec 2015	Dec 2016	Dec 2017	Dec 2018	Dec 2019
Honeywell	jpga13.jpg	100	105.80	121.65	164.35	150.84	206.19
S&P Index	jpga14.jpg	100	101.38	113.51	138.29	132.23	173.86
Composite Index	jpga15.jpg	100	111.71	126.60	144.27	117.70	150.03

HONEYWELL INTERNATIONAL INC.

This selected financial data should be read in conjunction with Honeywell's Consolidated Financial Statements and related Notes included elsewhere in this Annual Report as well as the section of this Annual Report titled Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations.

Item 6. Selected Financial Data

	Years Ended December 31,				
	2019	2018(1)(2)	2017(1)	2016	2015
	(Dollars in millions, except per share amounts)				
Results of Operations					
Net sales	$ 36,709	$ 41,802	$ 40,534	$ 39,302	$ 38,581
Net income attributable to Honeywell	6,143	6,765	1,545	4,812	4,771
Earnings Per Common Share					
Earnings from continuing operations:					
Basic	8.52	9.10	2.03	6.30	6.12
Assuming dilution	8.41	8.98	2.00	6.21	6.04
Dividends per share	3.36	3.06	2.74	2.45	2.15
Balance Sheet Data					
Property, plant and equipment-net	5,325	5,296	5,926	5,793	5,789
Total assets	58,679	57,773	59,470	54,566	49,711
Short-term debt	4,892	6,458	5,309	3,593	6,514
Long-term debt	11,110	9,756	12,573	12,182	5,554
Total debt	16,002	16,214	17,882	15,775	12,068
Redeemable noncontrolling interest	7	7	5	3	290
Shareowners' equity	18,706	18,358	16,665	18,883	17,751

(1) 2018 and 2017 Net Income attributable to Honeywell and Earnings Per Common Share were impacted by U.S. Tax Reform; see Note 5 Income Taxes of Notes to Consolidated Financial Statements for further details.

(2) The results of operations for Transportation Systems business and Homes and Global Distribution business are included in the Consolidated Statement of Operations through the effective dates of the respective spin-offs, which occurred in 2018.

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

(Dollars in millions, except per share amounts)

The following Management's Discussion and Analysis of Financial Condition and Results of Operations is intended to help the reader understand the results of operations and financial condition of Honeywell International Inc. and its consolidated subsidiaries ("Honeywell" or "the Company") for the three years ended December 31, 2019. All references to Notes relate to Notes to Consolidated Financial Statements in Item 8. Financial Statements and Supplementary Data.

On October 1, 2018, we completed the tax-free spin-off to Honeywell shareowners of our Transportation Systems business, previously part of Aerospace, into a standalone publicly-traded company, Garrett Motion Inc. ("Garrett").

On October 29, 2018, we completed the tax-free spin-off to Honeywell shareowners of our Homes and Global Distribution business, previously part of Home and Building Technologies (renamed Honeywell Building Technologies following the spin-off), into a standalone publicly-traded company, Resideo Technologies, Inc. ("Resideo").

We removed the assets and liabilities associated with Garrett and Resideo from our Consolidated Balance Sheet as of the effective dates of the respective spin-offs. We included the results of operations for Garrett and Resideo in our Consolidated Statement of Operations through the effective dates of the respective spin-offs. Total sales and total cost of products and services sold attributable to these spin-offs, impacting segment profit, were $6.6 billion and $4.8 billion for the year ended December 31, 2018.

A detailed discussion of the prior year 2018 to 2017 year-over-year changes are not included herein and can be found in the Management's Discussion and Analysis section in the 2018 Annual Report on Form 10-K filed February 8, 2019.

EXECUTIVE SUMMARY

During 2019, we continued to deliver on our financial commitments and to create long-term shareowner value. Income before taxes grew 1% to $7.6 billion despite the spin-offs. The improvement in year over year Income before taxes was attributable to both sales growth as well as operational improvements that increased operating margins. We believe our ability to drive continuous earnings growth over a long history results from consistently identifying and investing in productivity initiatives. We continue to focus on commercial excellence and improvements in our manufacturing and operational processes, including our Integrated Supply Chain and Honeywell Digital transformations, to drive higher sales at better margins.

We are careful not to allow the attainment of short-term financial results to imperil the creation of long-term, sustainable shareowner value. We are committed to a strategy to become one of the world's leading software industrial companies. Our technology investments allow us to introduce new technology solutions in high growth businesses in broad-based, attractive industrial end markets. Each of these end markets is characterized by favorable global mega-trends including energy efficiency, infrastructure investment, urbanization and safety.

In 2019 we deployed capital of $7.8 billion, including capital expenditures, dividends, share repurchases, mergers and acquisitions, and venture investments.

BUSINESS OBJECTIVES

Our businesses are focused on the following objectives:

- Driving profitable growth through delivering innovative products through research and development and technological excellence, and through continued enhancement of our footprint in high growth regions;
- Continuing to execute on our strategy to become the premier software-industrial, including the ongoing expansion of Honeywell Forge connected solutions for aircraft, buildings, cybersecurity, plants, and workers and driving a recurring revenue model across the Company;

- Expanding margins by optimizing the Company’s cost structure through Supply Chain and Honeywell Digital transformation initiatives, commercial excellence, repositioning, and other manufacturing and operational process improvements;
- Executing disciplined, rigorous M&A and integration processes to deliver growth through acquisitions;
- Controlling corporate costs, including costs incurred for asbestos and environmental matters, pension and other post-retirement benefits; and
- Increasing availability of capital through strong cash flow generation and conversion from effective working capital management and proactively managing debt to enable the Company to smartly deploy capital for strategic acquisitions, dividends, share repurchases and capital expenditures.

CONSOLIDATED RESULTS OF OPERATIONS

Net Sales

	2019	2018	2017
Net sales	$ 36,709	$ 41,802	$ 40,534
% change compared with prior period	(12)%	3%	

Net sales decreased in 2019 compared to 2018 due to the spin-offs. Our 2018 results included $6,550 million of sales related to the Transportation Systems and Homes and Global Distribution businesses. Absent the impact of the spin-offs during 2018, sales grew 4% from $35,252 in 2018 to $36,709 in 2019.

The change in net sales is attributable to the following:

	2019 Versus 2018	2018 Versus 2017
Volume	3 %	4 %
Price	2 %	2 %
Foreign Currency Translation	(1)%	1 %
Acquisitions/Divestitures	(16)%	(4)%
	(12)%	3 %

A discussion of net sales by segment can be found in the Review of Business Segments section of this Management's Discussion and Analysis.

The unfavorable impact of foreign currency translation in 2019 compared with 2018 was principally driven by the strengthening of the U.S. Dollar against the currencies of the majority of our international markets, primarily the Euro, British Pound and Chinese Renminbi.

Cost of Products and Services Sold

	2019	2018	2017
Cost of products and services sold	$ 24,339	$ 29,046	$ 28,144
% change compared with prior period	(16)%	3%	
Gross Margin percentage	33.7 %	30.5%	30.6%

Cost of products and services sold decreased in 2019 compared to 2018 due to lower direct and indirect material costs of approximately $3,920 million, lower labor costs of approximately $160 million (both driven by the spin-offs of the Transportation Systems and Homes and Global Distribution businesses), and lower repositioning and other charges of approximately $530 million, largely due to lower asbestos and environmental related charges net of the reimbursements. Absent the impact of these items during 2018, cost of products and services sold increased approximately 3%.

Gross margin percentage increased in 2019 compared with 2018 primarily due to higher gross margin in the segments (approximately 1.4 percentage points), with higher Aerospace, Honeywell Building Technologies and Performance Materials and Technologies gross margins, including the favorable impact following the spin-offs, partially offset by lower Safety and Productivity Solutions gross margin. Additionally, gross margin percentage increased due to the lower costs within cost of products and services sold for repositioning and other charges (approximately 1.5 percentage point impact) and pension service costs (approximately 0.2 percentage point impact).

Selling, General and Administrative Expenses

	2019	2018	2017
Selling, general and administrative expenses	$ 5,519	$ 6,051	$ 6,087
% of sales	15.0 %	14.5 %	15.0 %

Selling, general and administrative expenses decreased in 2019 compared with 2018 primarily due to the impact of the spin-offs. In addition, selling, general and administrative expenses decreased due to productivity and the favorable impact of foreign currency translation, partially offset by labor inflation.

Other (Income) Expense

	2019	2018	2017
Other (income) expense	$ (1,065)	$ (1,149)	$ (963)

Other (income) expense decreased in 2019 compared with 2018 primarily due to lower pension non-service income, partially offset by lower separation costs.

Tax Expense

	2019	2018	2017
Tax expense	$ 1,329	$ 659	$ 5,362
Effective tax rate	17.6 %	8.8 %	77.2 %

The effective tax rate for 2019 was lower than the U.S. federal statutory rate of 21% primarily resulting from the impacts of revised guidance related to U.S. Tax Reform and internal restructuring initiatives that resulted in a $281 million reduction of accrued withholding taxes related to unremitted foreign earnings.

The effective tax rate for 2018 was lower than the U.S. federal statutory rate of 21% primarily attributable to internal restructuring initiatives that resulted in a reduction of accrued withholding taxes of approximately $1.1 billion related to unremitted foreign earnings. In addition, we recorded a tax benefit of approximately $440 million as a reduction to our 2017 provisional estimate of impacts from what is commonly referred to as the U.S. Tax Cuts and Jobs Act ("U.S. Tax Reform"), which was partially offset by $411 million of tax costs associated with the internal restructuring of the Homes and Global Distribution business and the Transportation Systems business in advance of their spin-offs.

For further discussion of changes in the effective tax rate, see Note 5 Income Taxes of Notes to Consolidated Financial Statements.

Net Income Attributable to Honeywell

	2019	2018	2017
Net income attributable to Honeywell	$ 6,143	$ 6,765	$ 1,545
Earnings per share of common stock–assuming dilution	$ 8.41	$ 8.98	$ 2.00

Earnings per share of common stock–assuming dilution decreased in 2019 compared with 2018 primarily driven by the absence of profit attributable to the spin-offs, higher income tax expense (attributable to a lower income tax benefit related to U.S. Tax Reform and internal restructuring initiatives when compared to the prior year), partially offset by increased operational segment profit and lower repositioning and other charges.

Review of Business Segments

We globally manage our business operations through four segments: Aerospace, Honeywell Building Technologies, Performance Materials and Technologies, and Safety and Productivity Solutions.

	Years Ended December 31,			% Change	
	2019	2018	2017	2019 Versus 2018	2018 Versus 2017
Aerospace Sales					
Commercial Aviation Original Equipment	$ 2,997	$ 2,833	$ 2,475	6 %	14 %
Commercial Aviation Aftermarket	5,731	5,373	5,103	7 %	5 %
Defense and Space	5,326	4,665	4,053	14 %	15 %
Transportation Systems	—	2,622	3,148	(100)%	(17)%
Total Aerospace Sales	14,054	15,493	14,779		
Honeywell Building Technologies Sales					
Homes	—	3,928	4,482	(100)%	(12)%
Buildings	5,717	5,370	5,295	6 %	1 %
Total Honeywell Building Technologies Sales	5,717	9,298	9,777		
Performance Materials and Technologies Sales					
UOP	2,890	2,845	2,753	2 %	3 %
Process Solutions	5,146	4,981	4,795	3 %	4 %
Advanced Materials	2,798	2,848	2,791	(2)%	2 %
Total Performance Materials and Technologies Sales	10,834	10,674	10,339		
Safety and Productivity Solutions Sales					
Safety	2,215	2,278	2,169	(3)%	5 %
Productivity Solutions	3,889	4,059	3,470	(4)%	17 %
Total Safety and Productivity Solutions Sales	6,104	6,337	5,639		
Net Sales	$ 36,709	$ 41,802	$ 40,534		

Aerospace

	2019	2018	Change	2017	Change
Net sales	$ 14,054	$ 15,493	(9)%	$ 14,779	5 %
Cost of products and services sold	9,398	10,837		10,320	
Selling, general and administrative and other expenses	1,049	1,153		1,171	
Segment profit	$ 3,607	$ 3,503	3 %	$ 3,288	7 %

	2019 vs. 2018		2018 vs. 2017	
Factors Contributing to Year-Over-Year Change	Sales	Segment Profit	Sales	Segment Profit
Organic	9 %	21 %	9 %	9 %
Foreign currency translation	— %	— %	1 %	1 %
Acquisitions, divestitures and other, net	(18)%	(18)%	(5)%	(3)%
Total % Change	(9)%	3 %	5 %	7 %

2019 compared with 2018

Aerospace sales decreased due to the impact of the spin-off of the Transportation Systems business. Our 2018 results included $2,622 million of sales related to the spin-off. Absent the impact of the spin-off during 2018, sales grew approximately 9% from $12,871 million to $14,054 million due to growth in organic sales.

- Commercial Aviation Original Equipment sales increased 6% (increased 6% organic) primarily due to increased demand from business aviation original equipment manufacturers (OEM).

- Commercial Aviation Aftermarket sales increased 7% (increased 7% organic) primarily due to growth in air transport and regional and business aviation.

- Defense and Space sales increased 14% (increased 14% organic) primarily driven by growth in U.S. and international defense.

Aerospace segment profit increased primarily due to organic sales volume, price, and productivity, net of inflation, partially offset by the divestiture impacts following the spin-off of the Transportation Systems business. Cost of products and services sold decreased primarily due to the spin-off of the Transportation Systems business and productivity, net of inflation, partially offset by higher sales volume.

Honeywell Building Technologies

	2019	2018	Change	2017	Change
Net sales	$ 5,717	$ 9,298	(39)%	$ 9,777	(5)%
Cost of products and services sold	3,444	6,066		6,430	
Selling, general and administrative and other expenses	1,108	1,624		1,697	
Segment profit	$ 1,165	$ 1,608	(28)%	$ 1,650	(3)%

	2019 vs. 2018		2018 vs. 2017	
Factors Contributing to Year-Over-Year Change	**Sales**	**Segment Profit**	**Sales**	**Segment Profit**
Organic	5 %	8 %	3 %	5 %
Foreign currency translation	(2)%	(2)%	1 %	1 %
Acquisitions, divestitures and other, net	(42)%	(34)%	(9)%	(9)%
Total % Change	(39)%	(28)%	(5)%	(3)%

2019 compared with 2018

Honeywell Building Technologies sales decreased due to the impact of the spin-off of the Homes and Global Distribution business. Our 2018 results included $3,928 million of sales related to the spin-off. Absent the impact of the spin-off during 2018, sales grew approximately 6% from $5,370 million to $5,717 million.

- Sales in Building Technologies increased 6% (increased 5% organic) due to the organic growth in both Products and Building Solutions, partially offset by the unfavorable impact of foreign currency translation.

Honeywell Building Technologies segment profit decreased primarily due to the divestiture impacts following the spin-off of the Homes and Global Distribution business. This was offset by an increase in organic sales volumes and price, partially offset by inflation. Cost of products and services sold decreased due to the spin-off, partially offset by higher sales volumes.

Performance Materials and Technologies

	2019	2018	Change	2017	Change
Net sales	$ 10,834	$ 10,674	1 %	$ 10,339	3 %
Cost of products and services sold	6,989	6,948		6,764	
Selling, general and administrative and other expenses	1,412	1,398		1,369	
Segment profit	$ 2,433	$ 2,328	5 %	$ 2,206	6 %

	2019 vs. 2018		2018 vs. 2017	
Factors Contributing to Year-Over-Year Change	**Sales**	**Segment Profit**	**Sales**	**Segment Profit**
Organic	4 %	6 %	2 %	5 %
Foreign currency translation	(3 %)	(1 %)	1 %	1 %
Acquisitions, divestitures and other, net	—	—	— %	— %
Total % Change	1 %	5 %	3 %	6 %

2019 compared with 2018

Performance Materials and Technologies sales increased primarily due to organic growth, mainly due to volumes, partially offset by the unfavorable impact of foreign currency translation.

- UOP sales increased 2% (increased 3% organic) driven primarily by increases in catalyst sales, project volumes, and licensing, partially offset by lower gas processing volumes and the unfavorable impact of foreign currency translation.
- Process Solutions sales increased 3% (increased 6% organic) driven primarily by increases in maintenance and migration services, project volumes, field products, and software sales, partially offset by the unfavorable impact of foreign currency translation.
- Advanced Materials sales decreased 2% (flat organic) driven primarily by the unfavorable impact of foreign currency translation and decreased volumes in specialty products, partially offset by growth in fluorine products sales.

Performance Materials and Technologies segment profit increased primarily due to productivity, net of inflation, and price, partially offset by higher sales of lower margin products and the impact of foreign currency translation. Cost of products and services sold increased primarily due to higher sales volumes, partially offset by the impact of foreign currency translation and productivity, net of inflation.

Safety and Productivity Solutions

	2019	2018	Change	2017	Change
Net sales	$ 6,104	$ 6,337	(4)%	$ 5,639	12 %
Cost of products and services sold	4,158	4,205		3,714	
Selling, general and administrative and other expenses	1,156	1,100		1,073	
Segment profit	$ 790	$ 1,032	(23)%	$ 852	21 %

	2019 vs. 2018		2018 vs. 2017	
Factors Contributing to Year-Over-Year Change	**Sales**	**Segment Profit**	**Sales**	**Segment Profit**
Organic	(4)%	(23)%	11 %	20 %
Foreign currency translation	(2)%	(2)%	1 %	1 %
Acquisitions, divestitures and other, net	2 %	2 %	— %	— %
Total % Change	(4)%	(23)%	12 %	21 %

2019 compared with 2018

Safety and Productivity Solutions sales decreased primarily due to lower organic sales and the unfavorable impact of foreign currency translation, partially offset by acquisitions.

- Sales in Safety decreased 3% (decreased 1% organic) primarily due to the unfavorable impact of foreign currency translation and lower organic sales in Industrial Safety.
- Sales in Productivity Solutions decreased 4% (decreased 6% organic) primarily due to lower organic sales in Productivity Products and the unfavorable impact of foreign currency translation, partially offset by acquisitions.

Safety and Productivity Solutions segment profit decreased as a result of lower sales volumes in Productivity Products, higher sales of lower margin products and the impact of foreign currency translation, partially offset by higher productivity, net of inflation, favorable pricing and acquisitions. Cost of products and services sold decreased primarily due to higher productivity, net of inflation, and the impact of foreign currency translation, partially offset by acquisitions.

Repositioning Charges

See Note 3 Repositioning and Other Charges of Notes to Consolidated Financial Statements for a discussion of our repositioning actions and related charges incurred in 2019, 2018 and 2017. Cash spending related to our repositioning actions was $249 million, $285 million and $177 million in 2019, 2018 and 2017, and was funded through operating cash flows. In 2020, we expect cash spending for repositioning actions to be approximately $300 million and to be funded through operating cash flows.

LIQUIDITY AND CAPITAL RESOURCES

We continue to manage our businesses to maximize operating cash flows as the primary source of liquidity. In addition to our available cash and operating cash flows, we maintain additional sources of liquidity, including committed credit lines, short-term debt from the commercial paper market, long-term borrowings, access to the public debt and equity markets and the ability to access non-U.S. cash as a result of the U.S. Tax Reform. We use cash generated through operations to invest in our existing core businesses, acquisitions, share repurchases and dividends.

Cash Flow Summary

Our cash flows from operating, investing and financing activities, as reflected in the Consolidated Statement of Cash Flows, are summarized as follows:

	Years Ended December 31,		
	2019	2018	2017
Cash provided by (used for):			
Operating activities	$ 6,897	$ 6,434	$ 5,966
Investing activities	(533)	1,027	(3,574)
Financing activities	(6,600)	(5,032)	(3,516)
Effect of exchange rate changes on cash	16	(201)	340
Net (decrease) increase in cash and cash equivalents	$ (220)	$ 2,228	$ (784)

2019 compared with 2018

Cash provided by operating activities increased by $463 million primarily due to $276 million decrease in net payments for repositioning and other charges, largely due to asbestos and environmental related reimbursement receipts, and a $35 million favorable impact from working capital (favorable inventory and accounts receivable partially offset by accounts payable).

Cash used by investing activities increased by $1,560 million primarily due to a net $1,762 million increase in investments, primarily short-term marketable securities.

Cash used for financing activities increased by $1,568 million primarily due to the prior year pre-spin separation funding of $2,622 million net of spin-off cash, an increase in cash dividends paid of $170 million and an increase in net repurchases of common stock of $169 million, partially offset by a decrease in net debt payments of $1,330 million.

Liquidity

Each of our businesses is focused on increasing operating cash flows through revenue growth, margin expansion and improved working capital turnover. We believe that cash balances and operating cash flow will continue to be our principal source of liquidity. In addition to the available cash and operating cash flows, additional sources of liquidity include committed credit lines, short-term debt from the commercial paper markets, long-term borrowings, and access to the public debt and equity markets. To date, the Company has not experienced any limitations in our ability to access these sources of liquidity.

We monitor the third-party depository institutions that hold our cash and cash equivalents on a daily basis. Our emphasis is primarily safety of principal and secondarily maximizing yield of those funds. We diversify our cash and cash equivalents among counterparties to minimize exposure to any one of these entities.

A source of liquidity is our ability to access the commercial paper market. Commercial paper notes are sold at a discount or premium and have a maturity of not more than 365 days from date of issuance. Borrowings under the commercial paper program are available for general corporate purposes as well as for financing acquisitions. The weighted average interest rate on short-term borrowings and commercial paper outstanding as of December 31, 2019 was (0.37%) and as of December 31, 2018 was (0.31%).

Our ability to access the commercial paper market, and the related cost of these borrowings, is affected by the strength of our credit rating and market conditions. Our credit ratings are periodically reviewed by the major independent debt-rating agencies. As of December 31, 2019, Standard and Poor's (S&P), Fitch, and Moody's have ratings on our long-term debt of A, A and A2 and short-term debt of A-1, F1 and P1. S&P, Fitch and Moody's have Honeywell's rating outlook as "stable."

We also have a current shelf registration statement filed with the Securities and Exchange Commission under which we may issue additional debt securities, common stock and preferred stock that may be offered in one or more offerings on terms to be determined at the time of the offering. Net proceeds of any offering would be used for general corporate purposes, including repayment of existing indebtedness, share repurchases, capital expenditures and acquisitions.

See Note 2 Acquisitions and Divestitures and Note 13 Long-term Debt and Credit Agreements of Notes to Consolidated Financial Statements for additional discussion of items impacting our liquidity.

In 2019, we repurchased $4,400 million of outstanding shares to offset the dilutive impact of employee stock based compensation plans, including option exercises, restricted unit vesting and matching contributions under our savings plans, and to reduce share count when attractive opportunities arise. On April 29, 2019, the Board of Directors authorized the repurchase of up to a total of $10.0 billion of Honeywell common stock, of which $7.0 billion remained available as of December 31, 2019 for additional share repurchases. This authorization included amounts remaining under and replaced the previously approved share repurchase program. We expect to repurchase outstanding shares from time to time to offset the dilutive impact of employee stock based compensation plans, including option exercises, restricted unit vesting and matching contributions under our savings plans. We will continue to seek to reduce share count via share repurchases when attractive opportunities arise.

In addition to our normal operating cash requirements, our principal future cash requirements will be to fund capital expenditures, share repurchases, dividends, strategic acquisitions and debt repayments.

Specifically, we expect our primary cash requirements in 2020 to be as follows:

- Capital expenditures—we expect to spend approximately $900 million for capital expenditures in 2020 primarily for growth, production and capacity expansion, cost reduction, maintenance, and replacement.

- Share repurchases—under our share repurchase program, $7.0 billion is available as of December 31, 2019 for additional share repurchases. We expect to repurchase outstanding shares from time to time to offset the dilutive impact of employee stock-based compensation plans, including option exercises, restricted unit vesting and matching contributions under our savings plans. Additionally, we will seek to reduce share count via share repurchases as and when attractive opportunities arise. The amount and timing of future repurchases may vary depending on market conditions and our level of operating, financing and other investing activities.

- Dividends—we increased our quarterly dividend rate by 10% to $0.90 per share of common stock effective with the fourth quarter 2019 dividend. We intend to continue to pay quarterly dividends in 2020.

We continuously assess the relative strength of each business in our portfolio as to strategic fit, market position, profit and cash flow contribution in order to identify target investment and acquisition opportunities in order to upgrade our combined portfolio. We identify acquisition candidates that will further our strategic plan and strengthen our existing core businesses. We also identify businesses that do not fit into our long-term strategic plan based on their market position, relative profitability or growth potential. These businesses are considered for potential divestiture, restructuring or other repositioning actions subject to regulatory constraints.

Based on past performance and current expectations, we believe that our operating cash flows will be sufficient to meet our future operating cash needs. Our available cash, committed credit lines and access to the public debt and equity markets, provide additional sources of short-term and long-term liquidity to fund current operations, debt maturities, and future investment opportunities.

Contractual Obligations

Following is a summary of our significant contractual obligations and probable liability payments at December 31, 2019:

		Payments by Period			
	Total[(6)(7)]	2020	2021-2022	2023-2024	Thereafter
Long-term debt, including finance leases[(1)]	$ 12,486	$ 1,376	$ 3,617	$ 2,513	$ 4,980
Interest payments on long-term debt, including finance leases	3,100	327	577	434	1,762
Operating lease liabilities	790	195	290	160	145
Purchase obligations[(2)]	1,606	782	586	238	—
Estimated environmental liability payments[(3)]	709	222	257	177	53
Asbestos related liability payments[(4)]	2,357	361	612	438	946
Asbestos insurance recoveries[(5)]	(434)	(42)	(108)	(64)	(220)
	$ 20,614	$ 3,221	$ 5,831	$ 3,896	$ 7,666

(1) Assumes all long-term debt is outstanding until scheduled maturity.

(2) Purchase obligations are entered into with various vendors in the normal course of business and are consistent with our expected requirements.

(3) The payment amounts in the table only reflect the environmental liabilities which are probable and reasonably estimable as of December 31, 2019.

(4) These amounts are estimates of asbestos related cash payments for NARCO and Bendix based on our asbestos related liabilities which are probable and reasonably estimable as of December 31, 2019. See Asbestos Matters in Note 20 Commitments and Contingencies of Notes to Consolidated Financial Statements for additional information.

(5) These amounts represent our insurance recoveries that are deemed probable for asbestos related liabilities as of December 31, 2019. See Asbestos Matters in Note 20 Commitments and Contingencies of Notes to Consolidated Financial Statements for additional information.

(6) The table excludes tax liability payments, including those for unrecognized tax benefits. See Note 5 Income Taxes of Notes to Consolidated Financial Statements for additional information.

(7) The table excludes expected proceeds from the indemnification and reimbursement agreements entered into with Garrett and Resideo. See Note 20 Commitments and Contingencies of Notes to Consolidated Financial Statements for additional information.

Asbestos Matters

Payments, net of insurance recoveries, related to known asbestos matters was $163 million, $216 million and $239 million in 2019, 2018 and 2017 and is estimated to be approximately $320 million in 2020. We expect to pay these asbestos matters from operating cash flows. The timing of these payments depends on several factors, including the timing of litigation and settlements of liability claims.

Reimbursements from Garrett for payments related to asbestos matters, as defined in the indemnification and reimbursement agreement, was $152 million in 2019 and is expected to be approximately $115 million in 2020. We received approximately $36 million in January 2020.

See Note 20 Commitments and Contingencies of Notes to Consolidated Financial Statements for further discussion of our asbestos matters and the indemnification and reimbursement agreement entered into with Garrett.

Environmental Matters

Accruals for environmental matters deemed probable and reasonably estimable were $213 million, $395 million and $287 million in 2019, 2018 and 2017. In addition, in 2019, 2018 and 2017 we incurred operating costs for ongoing businesses of approximately $99 million, $95 million and $82 million relating to compliance with environmental regulations.

Payments related to known environmental matters was $256 million, $218 million and $212 million in 2019, 2018 and 2017 and is estimated to be approximately $220 million in 2020. We expect to pay these environmental matters from operating cash flows. The timing of these payments depends on several factors, including the timing of litigation and settlements of remediation liability, personal injury and property damage claims, regulatory approval of cleanup projects, execution timeframe of projects, remedial techniques to be utilized and agreement with other parties.

Reimbursements from Resideo for payments related to environmental matters at certain sites, as defined in the indemnification and reimbursement agreement, was $140 million in 2019 and is expected to be $140 million in 2020. We received approximately $35 million in January 2020.

See Note 20 Commitments and Contingencies of Notes to Consolidated Financial Statements for further discussion of our environmental matters and the indemnification and reimbursement agreement entered into with Resideo.

Financial Instruments

The following table illustrates the potential change in fair value for interest rate sensitive instruments based on a hypothetical immediate one percentage point increase in interest rates across all maturities and the potential change in fair value for foreign exchange rate sensitive instruments based on a 10% weakening of the U.S. Dollar versus local currency exchange rates across all maturities at December 31, 2019 and 2018.

	Face or Notional Amount	Carrying Value[1]	Fair Value[1]	Estimated Increase (Decrease) in Fair Value[2]
December 31, 2019				
Interest Rate Sensitive Instruments				
Long-term debt (including current maturities)	$ 12,486	$ (12,486)	$ (13,578)	$ (677)
Interest rate swap agreements	3,950	25	25	(72)
Foreign Exchange Rate Sensitive Instruments				
Foreign currency exchange contracts[3]	12,746	270	270	(676)
Cross currency swap agreements	1,200	51	51	(115)
December 31, 2018				
Interest Rate Sensitive Instruments				
Long-term debt (including current maturities)	$ 12,628	$ (12,628)	$ (13,133)	$ (654)
Interest rate swap agreements	2,600	(45)	(45)	(83)
Foreign Exchange Rate Sensitive Instruments				
Foreign currency exchange contracts[3]	14,995	115	115	(742)
Cross currency swap agreements	1,200	32	32	(117)

(1) Asset or (liability)

(2)

A hypothetical immediate one percentage point decrease in interest rates across all maturities and a potential change in fair value of foreign exchange rate sensitive instruments based on a 10% strengthening of the U.S. dollar versus local currency exchange rates across all maturities will result in a change in fair value approximately equal to the inverse of the amount disclosed in the table.

(3) Changes in the fair value of foreign currency exchange contracts are offset by changes in the fair value, cash flows, or net investments of underlying hedged foreign currency transactions or foreign operations.

See Note 15 Financial Instruments and Fair Value Measures of Notes to Consolidated Financial Statements for further discussion on the agreements.

CRITICAL ACCOUNTING ESTIMATES

The preparation of our consolidated financial statements in accordance with generally accepted accounting principles is based on the selection and application of accounting policies that require us to make significant estimates and assumptions about the effects of matters that are inherently uncertain. Many estimates and assumptions involved in the application of accounting principles have a material impact on reported financial condition and operating performance and on the comparability of such reported information over different reporting periods. Critical accounting estimates or assumptions are those where the nature of the estimates or assumptions is material due to the levels of subjectivity and judgment necessary to account for highly uncertain matters or the susceptibility of such matters to change, and the impact of the estimates and assumptions on financial condition or operating performance is material. We consider the estimates and assumptions discussed below to be critical to the understanding of our financial statements. Actual results could differ from our estimates and assumptions, and any such differences could be material to our consolidated financial statements.

Contingent Liabilities—We are subject to a number of lawsuits, investigations and claims (some of which involve substantial dollar amounts) that arise out of the conduct of our global business operations or those of previously owned entities, including matters relating to commercial transactions, government contracts, product liability (including asbestos), prior acquisitions and divestitures, employee benefit plans, intellectual property, legal and environmental, health and safety matters. We continually assess the likelihood of any adverse judgments or outcomes to our contingencies, as well as potential amounts or ranges of probable losses, and recognize a liability, if any, for these contingencies based on a thorough analysis of each matter with the assistance of outside legal counsel and, if applicable, other experts. Such analysis includes making judgments concerning matters such as the costs associated with environmental matters, the outcome of negotiations, the number and cost of pending and future asbestos claims, and the impact of evidentiary requirements. Because most contingencies are resolved over long periods of time, liabilities may change in the future due to new developments (including new discovery of facts, changes in legislation and outcomes of similar cases through the judicial system), changes in assumptions or changes in our settlement strategy. See Note 20 Commitments and Contingencies of Notes to Consolidated Financial Statements for a discussion of management’s judgment applied in the recognition and measurement of our environmental and asbestos liabilities which represent our most significant contingencies.

Asbestos Related Liabilities and Insurance Recoveries—In connection with the recognition of liabilities for asbestos related matters, we record asbestos related insurance recoveries that are deemed probable. In assessing the probability of insurance recovery, we make judgments concerning insurance coverage that we believe are reasonable and consistent with our historical dealings and our knowledge of any pertinent solvency issues surrounding insurers. While the substantial majority of our insurance carriers are solvent, some of our individual carriers are insolvent, which has been considered in our analysis of probable recoveries. Projecting future events is subject to various uncertainties that could cause the insurance recovery on asbestos related liabilities to be higher or lower than that projected and recorded. Given the inherent uncertainty in making future projections, we reevaluate our projections concerning our probable insurance recoveries considering any changes to the projected liability, our recovery experience or other relevant factors that may impact future insurance recoveries.

Our involvement in asbestos related personal injury actions relates to two predecessor companies. Regarding North American Refractories Company (“NARCO”) asbestos related claims, we accrue for pending claims based on terms and conditions in agreements with NARCO, its former parent company, and certain asbestos claimants, and an estimate of the unsettled claims pending as of the time NARCO filed for bankruptcy protection. We also accrue for the estimated value of future NARCO asbestos related claims expected to be asserted against the NARCO Trust. The estimate of future NARCO claims was prepared in 2002, in the same year NARCO filed for bankruptcy protection, using NARCO tort system litigation experience based on a commonly accepted methodology used by numerous bankruptcy courts addressing 524(g) trusts. Accordingly, the estimated value of future NARCO asbestos claims was prepared before there was data on claims filings and payment rates in the NARCO Trust under the Trust Distribution Procedures and prepared when the stay of all NARCO asbestos claims was in effect (which remained in effect until NARCO emerged from Bankruptcy protection). Some critical assumptions underlying this commonly accepted methodology included claims filing rates, disease criteria and payment values contained in the Trust Distribution Procedures, estimated approval rates of claims submitted to the NARCO Trust and epidemiological studies estimating disease instances. This estimate resulted in a range of estimated liability of $743 million to $961 million. We believe that no amount within this range is a better estimate than any other amount and accordingly, we have recorded the minimum amount in the range. Given the Trust's lack of sufficiently reliable claims data since NARCO emerged from bankruptcy protection, it is not yet possible to update our estimated future claim costs based on actual NARCO Trust experience. When sufficiently reliable claims data exists, we will update our estimate of the NARCO Trust Liability and it is possible that a material change may need to be recognized. Regarding Bendix Friction Materials ("Bendix") asbestos related claims, we accrued for the estimated value of pending claims using average resolution values for the previous five years. We also accrued for the estimated value of future claims related to Bendix over the full term of epidemiological projections through 2059 based on historic and anticipated claims filing experience and dismissal rates, disease classifications, and average resolution values in the tort system for the previous five years.

See Note 20 Commitments and Contingencies of Notes to Consolidated Financial Statements for a discussion of management's judgments applied in the recognition and measurement of our asbestos-related liabilities and related insurance recoveries.

Reimbursement Receivables—In conjunction with the Garrett and Resideo spin-offs, the Company entered into reimbursement agreements under which Honeywell receives cash payments as reimbursement primarily for asbestos related liability payments related to the Bendix business in the U.S. (Garrett) and net spending for environmental matters at certain sites as defined in the agreement (Resideo). Accordingly, the Company has recorded a receivable based on estimates in the underlying reimbursable Honeywell spend, and we monitor the recoverability of such receivable, which is subject to terms of applicable credit agreements and general ability to pay.

See Note 20 Commitments and Contingencies of Notes to Consolidated Financial Statements for a discussion of the recognition and measurement of our reimbursement receivables.

Defined Benefit Pension Plans—We sponsor both funded and unfunded U.S. and non-U.S. defined benefit pension plans. For financial reporting purposes, net periodic pension (income) expense is calculated annually based upon a number of actuarial assumptions, including a discount rate for plan obligations and an expected long-term rate of return on plan assets. Changes in the discount rate and expected long-term rate of return on plan assets could materially affect the annual pension (income) expense amount. Annual pension (income) expense is comprised of service and interest cost, assumed return on plan assets, prior service amortization (Pension Ongoing (Income) Expense) and a potential mark-to-market adjustment (MTM Adjustment).

The key assumptions used in developing our 2019, 2018 and 2017 net periodic pension (income) expense for our U.S. plans included the following:

	2019	2018	2017
Discount Rate:			
Projected benefit obligation	4.35 %	3.68 %	4.20 %
Service cost	4.47 %	3.77 %	4.42 %
Interest cost	3.94 %	3.27 %	3.49 %
Assets:			
Expected rate of return	6.75 %	7.75 %	7.75 %
Actual rate of return	21.2 %	(1.8)%	20.5 %
Actual 10 year average annual compounded rate of return	11.1 %	11.0 %	7.4 %

The MTM Adjustment represents the recognition of net actuarial gains or losses in excess of 10% of the greater of the fair value of plan assets or the plans' projected benefit obligation (the corridor). Net actuarial gains and losses occur when the actual experience differs from any of the various assumptions used to value our pension plans or when assumptions change. The primary factors contributing to actuarial gains and losses are changes in the discount rate used to value pension obligations as of the measurement date each year and the difference between expected and actual returns on plan assets. The mark-to-market accounting method results in the potential for volatile and difficult to forecast MTM Adjustments. MTM charges were $123 million, $37 million and $87 million in 2019, 2018 and 2017.

We determine the expected long-term rate of return on plan assets utilizing historical plan asset returns over varying long-term periods combined with our expectations of future market conditions and asset mix considerations (see Note 21 Pension and Other Postretirement Benefits of Notes to Consolidated Financial Statements for details on the actual various asset classes and targeted asset allocation percentages for our pension plans). We plan to use an expected rate of return on plan assets of

6.15% for 2020 down from 6.75% for 2019 reflecting a decline in interest rates and additional re-balancing of assets to more fixed income.

The discount rate reflects the market rate on December 31 (measurement date) for high-quality fixed-income investments with maturities corresponding to our benefit obligations and is subject to change each year. The discount rate can be volatile from year to year as it is determined based upon prevailing interest rates as of the measurement date. We used a 3.22% discount rate to determine benefit obligations as of December 31, 2019, reflecting a decrease in the market interest rate environment since the prior year-end.

In addition to the potential for MTM Adjustments, changes in our expected rate of return on plan assets and discount rate resulting from economic events also affects future pension ongoing (income) expense. The following table highlights the sensitivity of our U.S. pension obligations and ongoing (income) expense to changes in these assumptions, assuming all other assumptions remain constant. These estimates exclude any potential MTM Adjustment:

Change in Assumption	Impact on 2020 Pension Ongoing Expense	Impact on PBO
0.25 percentage point decrease in discount rate	Decrease $26 million	Increase $480 million
0.25 percentage point increase in discount rate	Increase $25 million	Decrease $470 million
0.25 percentage point decrease in expected rate of return on assets	Increase $46 million	—
0.25 percentage point increase in expected rate of return on assets	Decrease $46 million	—

Pension ongoing income for our world-wide pension plans is expected to be approximately $786 million in 2020 compared with pension ongoing income of $592 million in 2019. The expected increase in pension income is primarily due to lower interest cost from a decrease in discount rates in our U.S. and UK plans, and higher expected return on plan assets (lower rate of return on a higher asset base). Also, if required, an MTM Adjustment will be recorded in the fourth quarter of 2020 in accordance with our pension accounting method as previously described. It is difficult to reliably forecast or predict whether there will be a MTM Adjustment in 2020, and if one is required, what the magnitude of such adjustment will be. MTM Adjustments are primarily driven by events and circumstances beyond the control of the Company such as changes in interest rates and the performance of the financial markets.

Finite-Lived Intangible Assets—The determination of useful lives (for depreciation/amortization purposes) and whether or not intangible assets are impaired involves the use of accounting estimates and assumptions, changes in which could materially impact our financial condition or operating performance if actual results differ from such estimates and assumptions. We evaluate the recoverability of the carrying amount of our finite-lived intangible assets whenever events or changes in circumstances indicate that the carrying amount of a finite-lived intangible asset group may not be fully recoverable. The principal factors in considering when to perform an impairment review are as follows:

- Significant under-performance (i.e., declines in sales, earnings or cash flows) of a business or product line in relation to expectations;
- Annual operating plans or strategic plan outlook that indicate an unfavorable trend in operating performance of a business or product line;
- Significant negative industry or economic trends; or
- Significant changes or planned changes in our use of the assets.

Once it is determined that an impairment review is necessary, recoverability of assets is measured by comparing the carrying amount of the asset grouping to the estimated future undiscounted cash flows. If the carrying amount exceeds the estimated future undiscounted cash flows, the asset grouping is considered to be impaired. The impairment is then measured as the difference between the carrying amount of the asset grouping and its fair value. We endeavor to utilize the best information available to measure fair value, which is usually either market prices (if available), level 1 or level 2 of the fair value hierarchy, or an estimate of the future discounted cash flow, level 3 of the fair value hierarchy. The key estimates in our discounted cash flow analysis include assumptions as to expected industry and business growth rates, sales volume, selling prices and costs, cash flows, and the discount rate selected. These estimates are subject to changes in the economic environment, including market interest rates and expected volatility. Management believes the estimates of future cash flows and fair values are reasonable; however, changes in estimates due to variance from assumptions could materially affect the valuations.

Goodwill and Indefinite-Lived Intangible Assets Impairment Testing—Goodwill and intangible assets deemed to have indefinite lives are not amortized, but are subject to annual, or more frequent if necessary, impairment testing. In testing goodwill and indefinite-lived intangible assets, the fair value is estimated utilizing a discounted cash flow approach utilizing cash flow forecasts, including strategic and annual operating plans, adjusted for terminal value assumptions. These impairment tests involve the use of accounting estimates and assumptions, changes in which could materially impact our financial condition or operating performance if actual results differ from such estimates and assumptions. To address this uncertainty, we perform sensitivity analysis on key estimates and assumptions.

Income Taxes—On a recurring basis, we assess the need for a valuation allowance against our deferred tax assets by considering all available positive and negative evidence, such as past operating results, projections of future taxable income, enacted tax law changes and the feasibility and impact of tax planning initiatives. Our projections of future taxable income include a number of estimates and assumptions regarding our volume, pricing and costs, as well as the timing and amount of reversals of taxable temporary differences.

We recognize tax benefits from uncertain tax positions only if it is more likely than not that the tax position will be sustained on examination by the taxing authorities including resolution of any related appeals and litigation. We assess our income tax positions based upon our evaluation of the facts, circumstances and information available at the reporting date. The tax benefits recognized in the financial statements from such positions are then measured based on the largest benefit that has a greater than 50% likelihood of being realized upon ultimate settlement with a taxing authority that has full knowledge of all relevant information. For those income tax positions where it is not more likely than not that a tax benefit will be sustained, no tax benefit has been recognized in the financial statements.

For further discussion of additional income tax policies, see Note 1 Summary of Significant Accounting Policies and Note 5 Income Taxes of Notes to Consolidated Financial Statements.

Sales Recognition on Long-Term Contracts—We recognize sales for long-term contracts with performance obligations satisfied over time using either an input or output method. We recognize revenue over time as we perform on these contracts based on the continuous transfer of control to the customer. With control transferring over time, revenue is recognized based on the extent of progress towards completion of the performance obligation. We generally use the cost-to-cost input method of progress for our contracts because it best depicts the transfer of control to the customer that occurs as we incur costs. Under the cost-to-cost method, the extent of progress towards completion is measured based on the proportion of costs incurred to date to the total estimated costs at completion of the performance obligation. Due to the nature of the work required to be performed on many of our performance obligations, the estimation of total revenue and cost at completion requires judgment. Contract revenues are largely determined by negotiated contract prices and quantities, modified by our assumptions regarding contract options, change orders, incentive and award provisions associated with technical performance and price adjustment clauses (such as inflation or index-based clauses). Cost estimates are largely based on negotiated or estimated purchase contract terms, historical performance trends and other economic projections. Significant factors that influence these estimates include inflationary trends, technical and schedule risk, internal and subcontractor performance trends, business volume assumptions, asset utilization, and anticipated labor agreements. Revenue and cost estimates are regularly monitored and revised based on changes in circumstances. Impacts from changes in estimates of net sales and cost of sales are recognized on a cumulative catch-up basis, which recognizes in the current period the cumulative effect of the changes on current and prior periods based on a performance obligation's percentage of completion. Anticipated losses on long-term contracts are recognized when such losses become evident. We maintain financial controls over the customer qualification, contract pricing and estimation processes to reduce the risk of contract losses.

OTHER MATTERS

Litigation

See Note 20 Commitments and Contingencies of Notes to Consolidated Financial Statements for a discussion of environmental, asbestos and other litigation matters.

Recent Accounting Pronouncements

See Note 1 Summary of Significant Accounting Policies of Notes to Consolidated Financial Statements for a discussion of recent accounting pronouncements.

Item 7A. Quantitative and Qualitative Disclosures About Market Risks

Information relating to market risks is included in Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations under the caption "Financial Instruments".

Item 8. Financial Statements and Supplementary Data

HONEYWELL INTERNATIONAL INC.
CONSOLIDATED STATEMENT OF OPERATIONS

	Years Ended December 31,		
	2019	2018	2017
	(Dollars in millions, except per share amounts)		
Product sales	$ 27,629	$ 32,848	$ 32,317
Service sales	9,080	8,954	8,217
Net sales	36,709	41,802	40,534
Costs, expenses and other			
Cost of products sold	19,269	23,634	23,176
Cost of services sold	5,070	5,412	4,968
	24,339	29,046	28,144
Selling, general and administrative expenses	5,519	6,051	6,087
Other (income) expense	(1,065)	(1,149)	(963)
Interest and other financial charges	357	367	316
	29,150	34,315	33,584
Income before taxes	7,559	7,487	6,950
Tax expense	1,329	659	5,362
Net income	6,230	6,828	1,588
Less: Net income attributable to the noncontrolling interest	87	63	43
Net income attributable to Honeywell	$ 6,143	$ 6,765	$ 1,545
Earnings per share of common stock—basic	$ 8.52	$ 9.10	$ 2.03
Earnings per share of common stock—assuming dilution	$ 8.41	$ 8.98	$ 2.00

The Notes to Consolidated Financial Statements are an integral part of this statement.

HONEYWELL INTERNATIONAL INC.
CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

	Years Ended December 31,		
	2019	2018	2017
	(Dollars in millions)		
Net income	$ 6,230	$ 6,828	$ 1,588
Other comprehensive income (loss), net of tax			
Foreign exchange translation adjustment	143	(685)	(37)
Actuarial gains (losses) recognized	162	(602)	753
Prior service credit (cost) recognized	1	2	(59)
Prior service credit recognized during year	(79)	(74)	(70)
Actuarial (gains) losses recognized during year	16	35	83
Settlements and curtailments	—	2	19
Foreign exchange translation and other	(14)	31	(49)
Pensions and other postretirement benefit adjustments	86	(606)	677
Cash flow hedges recognized in other comprehensive income	103	89	(101)
Less: Reclassification adjustment for gains (losses) included in net income	92	4	60
Changes in fair value of cash flow hedges	11	85	(161)
Other comprehensive income (loss), net of tax	240	(1,206)	479
Comprehensive income	6,470	5,622	2,067
Less: Comprehensive income attributable to the noncontrolling interest	82	53	51
Comprehensive income attributable to Honeywell	$ 6,388	$ 5,569	$ 2,016

The Notes to Consolidated Financial Statements are an integral part of this statement.

HONEYWELL INTERNATIONAL INC.
CONSOLIDATED BALANCE SHEET

	December 31, 2019	December 31, 2018
	(Dollars in millions)	
ASSETS		
Current assets:		
Cash and cash equivalents	$ 9,067	$ 9,287
Short-term investments	1,349	1,623
Accounts receivable—net	7,493	7,508
Inventories	4,421	4,326
Other current assets	1,973	1,618
Total current assets	24,303	24,362
Investments and long-term receivables	588	742
Property, plant and equipment—net	5,325	5,296
Goodwill	15,563	15,546
Other intangible assets—net	3,734	4,139
Insurance recoveries for asbestos related liabilities	392	437
Deferred income taxes	86	382
Other assets	8,688	6,869
Total assets	$ 58,679	$ 57,773
LIABILITIES		
Current liabilities:		
Accounts payable	$ 5,730	$ 5,607
Commercial paper and other short-term borrowings	3,516	3,586
Current maturities of long-term debt	1,376	2,872
Accrued liabilities	7,476	6,859
Total current liabilities	18,098	18,924
Long-term debt	11,110	9,756
Deferred income taxes	1,670	1,713
Postretirement benefit obligations other than pensions	326	344
Asbestos related liabilities	1,996	2,269
Other liabilities	6,766	6,402
Redeemable noncontrolling interest	7	7
SHAREOWNERS' EQUITY		
Capital—common stock issued	958	958
—additional paid-in capital	6,876	6,452
Common stock held in treasury, at cost	(23,836)	(19,771)
Accumulated other comprehensive income (loss)	(3,197)	(3,437)
Retained earnings	37,693	33,978
Total Honeywell shareowners' equity	18,494	18,180
Noncontrolling interest	212	178
Total shareowners' equity	18,706	18,358
Total liabilities, redeemable noncontrolling interest and shareowners' equity	$ 58,679	$ 57,773

The Notes to Consolidated Financial Statements are an integral part of this statement.

HONEYWELL INTERNATIONAL INC.
CONSOLIDATED STATEMENT OF CASH FLOWS

	Years Ended December 31,		
	2019	2018	2017
	(Dollars in millions)		
Cash flows from operating activities:			
Net income	$ 6,230	$ 6,828	$ 1,588
Less: Net income attributable to the noncontrolling interest	87	63	43
Net income attributable to Honeywell	6,143	6,765	1,545
Adjustments to reconcile net income attributable to Honeywell to net cash provided by operating activities:			
Depreciation	673	721	717
Amortization	415	395	398
(Gain) loss on sale of non-strategic businesses and assets	1	—	7
Repositioning and other charges	546	1,091	973
Net payments for repositioning and other charges	(376)	(652)	(628)
Pension and other postretirement income	(516)	(987)	(647)
Pension and other postretirement benefit payments	(78)	(80)	(106)
Stock compensation expense	153	175	176
Deferred income taxes	179	(586)	2,452
Other	(287)	(694)	1,642
Changes in assets and liabilities, net of the effects of acquisitions and divestitures:			
Accounts receivable	11	(236)	(682)
Inventories	(100)	(503)	(259)
Other current assets	(430)	218	(568)
Accounts payable	118	733	924
Accrued liabilities	445	74	22
Net cash provided by (used for) operating activities	6,897	6,434	5,966
Cash flows from investing activities:			
Expenditures for property, plant and equipment	(839)	(828)	(1,031)
Proceeds from disposals of property, plant and equipment	43	15	86
Increase in investments	(4,253)	(4,059)	(6,743)
Decrease in investments	4,464	6,032	4,414
Cash paid for acquisitions, net of cash acquired	(50)	(535)	(82)
Other	102	402	(218)
Net cash provided by (used for) investing activities	(533)	1,027	(3,574)
Cash flows from financing activities:			
Proceeds from issuance of commercial paper and other short-term borrowings	14,199	23,891	13,701
Payments of commercial paper and other short-term borrowings	(14,199)	(24,095)	(13,532)
Proceeds from issuance of common stock	498	267	520
Proceeds from issuance of long-term debt	2,726	27	1,238
Payments of long-term debt	(2,903)	(1,330)	(292)
Repurchases of common stock	(4,400)	(4,000)	(2,889)
Cash dividends paid	(2,442)	(2,272)	(2,119)
Pre-separation funding	—	2,801	—
Spin-off cash	—	(179)	—
Other	(79)	(142)	(143)

Net cash provided by (used for) financing activities	(6,600)	(5,032)	(3,516)
Effect of foreign exchange rate changes on cash and cash equivalents	16	(201)	340
Net increase (decrease) in cash and cash equivalents	(220)	2,228	(784)
Cash and cash equivalents at beginning of period	9,287	7,059	7,843
Cash and cash equivalents at end of period	$ 9,067	$ 9,287	$ 7,059

The Notes to Consolidated Financial Statements are an integral part of this statement.

HONEYWELL INTERNATIONAL INC.
CONSOLIDATED STATEMENT OF SHAREOWNERS' EQUITY

	Years Ended December 31,					
	2019		2018		2017	
	Shares	$	Shares	$	Shares	$
	(in millions)					
Common stock, par value	957.6	958	957.6	958	957.6	958
Additional paid-in capital						
Beginning balance		6,452		6,212		5,781
Issued for employee savings and option plans		271		65		255
Stock-based compensation expense		153		175		176
Ending balance		6,876		6,452		6,212
Treasury stock						
Beginning balance	(228.0)	(19,771)	(206.7)	(15,914)	(196.8)	(13,366)
Reacquired stock or repurchases of common stock	(26.5)	(4,400)	(26.5)	(4,000)	(20.5)	(2,889)
Issued for employee savings and option plans	8.0	335	5.2	143	10.6	341
Ending balance	(246.5)	(23,836)	(228.0)	(19,771)	(206.7)	(15,914)
Retained earnings						
Beginning balance		33,978		27,481		28,046
Adoption of new accounting standards		—		264		—
Net income attributable to Honeywell		6,143		6,765		1,545
Dividends on common stock		(2,428)		(2,279)		(2,101)
Spin-offs		—		1,749		(9)
Redemption value adjustment		—		(2)		—
Ending balance		37,693		33,978		27,481
Accumulated other comprehensive income (loss)						
Beginning balance		(3,437)		(2,235)		(2,714)
Foreign exchange translation adjustment		143		(728)		(37)
Pensions and other postretirement benefit adjustments		86		(559)		677
Changes in fair value of cash flow hedges		11		85		(161)
Ending balance		(3,197)		(3,437)		(2,235)
Noncontrolling interest						
Beginning balance		178		163		178
Acquisitions, divestitures, and other		(3)		(12)		(11)
Net income attributable to noncontrolling interest		87		63		43
Foreign exchange translation adjustment		(5)		(10)		8
Dividends paid		(45)		(26)		(55)
Ending balance		212		178		163
Total shareowners' equity	711.1	18,706	729.6	18,358	750.9	16,665
Cash dividends per share of common stock		$ 3.360		$ 3.055		$ 2.740

The Notes to Consolidated Financial Statements are an integral part of this statement.

Note 1. Summary of Significant Accounting Policies

Accounting Principles—The financial statements and accompanying notes are prepared in accordance with accounting principles generally accepted in the United States of America. The following is a description of Honeywell's significant accounting policies.

Principles of Consolidation—The consolidated financial statements include the accounts of Honeywell International Inc. and all of its subsidiaries and entities in which a controlling interest is maintained. Our consolidation policy requires equity investments that we exercise significant influence over but do not control the investee and are not the primary beneficiary of the investee's activities to be accounted for using the equity method. Investments through which we are not able to exercise significant influence over the investee and which we do not have readily determinable fair values are accounted for under the cost method. All intercompany transactions and balances are eliminated in consolidation.

Property, Plant and Equipment—Property, plant and equipment are recorded at cost, including any asset retirement obligations, less accumulated depreciation. For financial reporting, the straight-line method of depreciation is used over the estimated useful lives of 10 to 50 years for buildings and improvements and 2 to 16 years for machinery and equipment. Recognition of the fair value of obligations associated with the retirement of tangible long-lived assets is required when there is a legal obligation to incur such costs. Upon initial recognition of a liability, the cost is capitalized as part of the related long-lived asset and depreciated over the corresponding asset's useful life.

Goodwill and Indefinite-Lived Intangible Assets—Goodwill and indefinite-lived intangible assets are subject to impairment testing annually as of March 31, and whenever events or changes in circumstances indicate that the carrying amount may not be fully recoverable. This testing compares carrying values to fair values and, when appropriate, the carrying value of these assets is reduced to fair value. We completed our annual goodwill impairment test as of March 31, 2019 and determined that there was no impairment as of that date.

Other Intangible Assets with Determinable Lives—Other intangible assets with determinable lives consist of customer lists, technology, patents and trademarks and other intangibles and are amortized over their estimated useful lives, ranging from 2 to 24 years.

Sales Recognition—Product and service sales are recognized when or as the Company transfers control of the promised products or services to its customers. Revenue is measured as the amount of consideration we expect to receive in exchange for transferring goods or providing services. Service sales, principally representing repair, maintenance and engineering activities are recognized over the contractual period or as services are rendered. Sales under long-term contracts with performance obligations satisfied over time are recognized using either an input or output method. We recognize revenue over time as we perform on these contracts because of the continuous transfer of control to the customer. With control transferring over time, revenue is recognized based on the extent of progress towards completion of the performance obligation. We generally use the cost-to-cost input method of progress for our contracts because it best depicts the transfer of control to the customer that occurs as we incur costs. Under the cost-to-cost method, the extent of progress towards completion is measured based on the proportion of costs incurred to date to the total estimated costs at completion of the performance obligation. We review our cost estimates on significant contracts on a periodic basis, or when circumstances change and warrant a modification to a previous estimate. Cost estimates are largely based on negotiated or estimated purchase contract terms, historical performance trends and other economic projections. Significant factors that influence these estimates include inflationary trends, technical and schedule risk, internal and subcontractor performance trends, business volume assumptions, asset utilization, and anticipated labor agreements. Provisions for anticipated losses on long-term contracts are recorded in full when such losses become evident, to the extent required.

The customer funding for costs incurred for nonrecurring engineering and development activities of our products under agreements with commercial customers is deferred and subsequently recognized as revenue as products are delivered to the customers. Additionally, expenses incurred, up to the customer agreed funded amount, are deferred as an asset and recognized as cost of sales when products are delivered to the customer. The deferred customer funding and costs result in recognition of deferred costs (asset) and deferred revenue (liability) on our Consolidated Balance Sheet. Capitalized contract fulfillment costs were approximately $1 billion as of December 31, 2019 and 2018. The amounts recognized as cost of sales were approximately $0.1 billion for the years ended December 31, 2019 and 2018.

Revenues for our mechanical service programs are recognized as performance obligations are satisfied over time, with recognition reflecting a series of distinct services using the output method.

The terms of a contract or the historical business practice can give rise to variable consideration due to, but not limited to, cash-based incentives, rebates, performance awards, or credits. We estimate variable consideration at the most likely amount we will receive from customers. We include estimated amounts in the transaction price to the extent it is probable that a significant reversal of cumulative revenue recognized for such transaction will not occur, or when the uncertainty associated with the variable consideration is resolved. Our estimates of variable consideration and determination of whether to include estimated amounts in the transaction price are based largely on an assessment of our anticipated performance and all information (historical, current and forecasted) that is reasonably available to us.

For the year ended 2017, prior to the adoption of the revenue recognition standard (see Note 7 Revenue Recognition and Contracts with Customers), product and service sales were recognized when persuasive evidence of an arrangement existed, product delivery had occurred or services had been rendered, pricing was fixed or determinable, and collection was reasonably assured. Service sales, principally representing repair, maintenance and engineering activities were recognized over the contractual period or as services were rendered. Sales under long-term contracts were recorded on a percentage-of-completion method measured on the cost-to-cost basis for engineering-type contracts and the units-of-delivery basis for production-type contracts. Provisions for anticipated losses on long-term contracts were recorded in full when such losses became evident. Revenues from contracts with multiple element arrangements were recognized as each element was earned based on the relative fair value of each element provided the delivered elements had value to customers on a standalone basis. Amounts allocated to each element were based on its objectively determined fair value, such as the sales price for the product or service when it was sold separately or competitor prices for similar products or services.

Environmental—The Company accrues costs related to environmental matters when it is probable that we have incurred a liability related to a contaminated site and the amount can be reasonably estimated. For additional information, see Note 20 Commitments and Contingencies.

Asbestos Related Liabilities and Insurance Recoveries—The Company recognizes a liability for any asbestos related contingency that is probable of occurrence and reasonably estimable. In connection with the recognition of liabilities for asbestos related matters, we record asbestos related insurance recoveries that are deemed probable. For additional information, see Note 20 Commitments and Contingencies.

Reimbursement Receivables—In conjunction with the Garrett Motion Inc. ("Garrett") and Resideo Technologies, Inc. ("Resideo") spin-offs, the Company entered into reimbursement agreements under which Honeywell receives cash payments as reimbursement primarily for asbestos related liability payments related to the Bendix business in the U.S. (Garrett) and net spending for environmental matters at certain sites as defined in the agreement (Resideo). Accordingly, the Company has recorded a receivable based on estimates in the underlying reimbursable Honeywell spend, and we monitor the recoverability of such receivable, which is subject to terms of applicable credit agreements and general ability to pay. For additional information, see Note 20 Commitments and Contingencies.

Aerospace Sales Incentives—The Company provides sales incentives to commercial aircraft manufacturers and airlines in connection with their selection of its aircraft equipment, predominately wheel and braking system hardware, avionics, and auxiliary power units, for installation on commercial aircraft. These incentives consist of free or deeply discounted products, credits for future purchases of product or upfront cash payments. These costs are generally recognized in the period incurred as cost of products sold or as a reduction to relevant sales, as appropriate.

Research and Development—Research and development costs for company-sponsored research and development projects are expensed as incurred. Such costs are included in cost of products and services sold and were $1,556 million, $1,809 million and $1,835 million in 2019, 2018 and 2017. Customer-sponsored research and development activities under contracts with customers are included as a contract cost and included in cost of products and services sold when revenue from such contracts is recognized. Such customer-sponsored research and development activities amounted to an additional $1,079 million, $1,069 million and $876 million in 2019, 2018 and 2017.

Stock-Based Compensation Plans—The principal awards issued under our stock-based compensation plans, which are described in Note 19 Stock-Based Compensation Plans, are non-qualified stock options and restricted stock units. The cost for such awards is measured at the grant date based on the fair value of the award. The value of the portion of the award that is ultimately expected to vest is recognized as expense over the requisite service periods (generally the vesting period of the equity award) and is included in selling, general and administrative expenses. Forfeitures are estimated at the time of grant to recognize expense for those awards that are expected to vest and are based on our historical forfeiture rates.

Pension Benefits—The Company presents net periodic pensions costs by disaggregating the service cost component of net benefit costs and reports those costs in the same line item or items in the Consolidated Statement of Operations as other compensation costs arising from services rendered by the pertinent employees during the period. The other non-service components of net benefit costs are required to be presented separately from the service cost component.

The Company records the service cost component of Pension ongoing (income) expense in Costs of products and services sold and Selling, general and administrative expenses. The remaining components of net benefit costs within Pension ongoing (income) expense, primarily interest costs and assumed return on plan assets, are recorded in Other (income) expense. We recognize net actuarial gains or losses in excess of 10% of the greater of the fair value of plan assets or the plans' projected benefit obligation (the corridor) annually in the fourth quarter each year (MTM Adjustment). The MTM Adjustment is also reported in Other (income) expense.

Foreign Currency Translation—Assets and liabilities of subsidiaries operating outside the United States with a functional currency other than U.S. Dollars are translated into U.S. Dollars using year-end exchange rates. Sales, costs and expenses are translated at the average exchange rates in effect during the year. Foreign currency translation gains and losses are included as a component of Accumulated other comprehensive income (loss). For subsidiaries operating in highly inflationary environments, inventories and property, plant and equipment, including related expenses, are remeasured at the exchange rate in effect on the date the assets were acquired, while monetary assets and liabilities are remeasured at year-end exchange rates. Remeasurement adjustments for these subsidiaries are included in earnings.

Derivative Financial Instruments—The Company reduces our risks from interest and foreign currency exchange rate fluctuations through our normal operating and financing activities and, when deemed appropriate through the use of derivative financial instruments. Derivative financial instruments are used to manage risk and are not used for trading or other speculative purposes. We do not use leveraged derivative financial instruments. Derivative financial instruments that qualify for hedge accounting must be designated and effective as a hedge of the identified risk exposure at the inception of the contract. Accordingly, changes in fair value of the derivative contract must be highly correlated with changes in fair value of the underlying hedged item at inception of the hedge and over the life of the hedge contract.

All derivatives are recorded on the balance sheet as assets or liabilities and measured at fair value. For derivatives designated as hedges of the fair value of assets or liabilities, the changes in fair values of both the derivatives and the hedged items are recorded in current earnings. For derivatives designated as cash flow hedges, the changes in fair value of the derivatives are recorded in Accumulated other comprehensive income (loss) and subsequently recognized in earnings when the hedged items impact earnings. Cash flows of such derivative financial instruments are classified consistent with the underlying hedged item. We have elected to exclude the time value of the derivatives (i.e., the forward points) from the assessment of hedge effectiveness and recognize the initial value of the excluded component in earnings using the amortization approach. For derivative instruments that are designated and qualify as a net investment hedge, the gain or loss is reported as a component of Other comprehensive income (loss) and recorded in Accumulated other comprehensive income (loss). The gain or loss will be subsequently reclassified into net earnings when the hedged net investment is either sold or substantially liquidated.

Income Taxes—Significant judgment is required in evaluating tax positions. We establish reserves for income taxes when, despite the belief that tax positions are fully supportable, there remain certain positions that do not meet the minimum recognition threshold. The approach for evaluating certain and uncertain tax positions is defined by the authoritative guidance which determines when a tax position is more likely than not to be sustained upon examination by the applicable taxing authority. In the normal course of business, the Company and its subsidiaries are examined by various federal, state and foreign tax authorities. We regularly assess the potential outcomes of these examinations and any future examinations for the current or prior years in determining the adequacy of our provision for income taxes. We continually assess the likelihood and amount of potential adjustments and adjust the income tax provision, the current tax liability and deferred taxes in the period in which the facts that give rise to a change in estimate become known. For discussion of the impacts from what is commonly referred to as the U.S. Tax Cuts and Jobs Act ("U.S Tax Reform"), see Note 5 Income Taxes.

Cash and cash equivalents—Cash and cash equivalents include cash on hand and highly liquid investments having an original maturity of three months or less.

Earnings Per Share—Basic earnings per share is based on the weighted average number of common shares outstanding. Diluted earnings per share is based on the weighted average number of common shares outstanding and all dilutive potential common shares outstanding.

Reclassifications—Certain prior year amounts have been reclassified to conform to the current year presentation.

Leases—At the inception of a contract, the Company assesses whether the contract is, or contains, a lease. The assessment is based on (1) whether the contract involves the use of a distinct identified asset, (2) whether the Company obtains the right to substantially all the economic benefit from the use of the asset throughout the period, and (3) whether the Company has the right to direct the use of the asset.

All significant lease arrangements are generally recognized at lease commencement. Operating lease right-of-use ("ROU") assets and lease liabilities are recognized at commencement. An ROU asset and corresponding lease liability are not recorded for leases with an initial term of 12 months or less (short term leases), and we recognize lease expense for these leases as incurred over the lease term.

ROU assets represent our right to use an underlying asset during the reasonably certain lease term, and lease liabilities represent our obligation to make lease payments arising from the lease. Our lease terms may include options to extend or terminate the lease when it is reasonably certain that we will exercise that option.

Operating lease ROU assets and liabilities are recognized at commencement date based on the present value of lease payments over the lease term. Lease payments may be fixed or variable, however, only fixed payments or in-substance fixed payments are included in determining the lease liability. Variable lease payments are recognized in operating expenses in the period in which the obligation for those payments are incurred. The operating lease ROU asset also includes any lease payments related to initial direct cost and prepayments and excludes lease incentives. Lease expense is recognized on a straight-line basis over the lease term. We have lease agreements with lease and non-lease components, which are generally accounted for separately.

The Company primarily uses our incremental borrowing rate, which is based on the information available at the lease commencement date, in determining the present value of the lease payments. In determining the borrowing rate, we consider the lease term, secured incremental borrowing rate, and for leases denominated in a currency different than U.S. dollar, the collateralized borrowing rate in the foreign currency using the U.S. dollar and foreign currency swap spread, when available.

Recent Accounting Pronouncements—The Company considers the applicability and impact of all Accounting Standards Updates (ASUs) issued by the Financial Accounting Standards Board (FASB). ASUs not listed below were assessed and determined to be either not applicable or are expected to have minimal impact on our consolidated results of operations, financial position and cash flows (consolidated financial statements).

In December 2019, the FASB issued accounting standard update to simplify the accounting for income taxes. The standard's amendments include changes in various subtopics of accounting for income taxes including, but not limited to, accounting for "hybrid" tax regimes, tax basis step-up in goodwill obtained in a transaction that is not a business combination, intraperiod tax allocation exception to incremental approach, ownership changes in investments, interim-period accounting for enacted changes in tax law, and year-to date loss limitation in interim-period tax accounting. The guidance is effective for fiscal years beginning after December 15, 2020 with early adoption permitted, including the interim periods within those years. We are currently evaluating impacts of these amendments on our Consolidated financial position, results of operations, cash flows, and related notes to the Financial Statements.

In February 2018, the FASB issued guidance that allows for an entity to elect to reclassify the income tax effects on items resulting from what is commonly referred to as the U.S. Tax Cuts and Jobs Act ("U.S. Tax Reform") from accumulated other comprehensive income to retained earnings. The guidance is effective for fiscal years beginning after December 15, 2018 with early adoption permitted, including interim periods within those years. The Company has elected to not reclassify the stranded income tax effects of U.S. Tax Reform from accumulated other comprehensive income to retained earnings.

In June 2016, the FASB issued accounting standard that requires companies to utilize an impairment model (current expected credit loss, or CECL) for most financial assets measured at amortized cost and certain other financial instruments, which include, but are not limited to, trade and other receivables. This accounting standard will replace the incurred loss model under current GAAP with a model that reflects expected credit losses and requires consideration of a broader range of reasonable and supportable information to estimate those losses. Effective January 1, 2020, the Company adopted this standard. The adoption of this standard does not have a material impact on our Consolidated Financial Statements.

Note 2. Acquisitions and Divestitures

During 2019, there were no significant acquisitions individually or in aggregate.

During 2018, the Company acquired businesses for an aggregate cost (net of cash and debt assumed) of approximately $535 million, mainly due to the November 2018 acquisition of Transnorm, a global leader in high-performance conveyor and warehouse solutions, including approximately $380 million allocated to goodwill. Transnorm is part of Safety and Productivity Solutions. The goodwill is non-deductible for tax purposes.

During 2017, there were no significant acquisitions individually or in the aggregate.

On October 1, 2018, the Company completed the tax-free spin-off to Honeywell shareowners of its Transportation Systems business, part of Aerospace, into a standalone publicly-traded company, Garrett Motion Inc. (“Garrett”). On October 29, 2018, the Company completed the tax-free spin-off to Honeywell shareowners of its Homes and Global Distribution business, part of Home and Building Technologies (renamed Honeywell Building Technologies following the spin-off), into a standalone publicly-traded company, Resideo Technologies, Inc. (“Resideo”). The assets of approximately $5.5 billion, including approximately $2.8 billion of goodwill and net of recorded receivables, and liabilities of approximately $7.2 billion associated with spin-off entities have been removed through Retained Earnings from the Company’s Consolidated Balance Sheet as of the effective date of the spin-off. The results of operations and cash flows are included in the Consolidated Statement of Operations and Consolidated Statement of Cash Flows through the effective date of the spin-off. The Income before taxes attributable to the spin-off businesses were $0.4 billion and $0.5 billion for 2018 and 2017.

Honeywell shareowners of record as of the close of business on October 16, 2018 received one share of Resideo common stock for every 6 shares of Honeywell common stock. Immediately prior to the effective date of the spin-off, Resideo incurred debt of $1.2 billion to make a cash distribution to the Company.

Honeywell shareowners of record as of the close of business on September 18, 2018 received one share of Garrett common stock for every 10 shares of Honeywell common stock. Immediately prior to the effective date of the spin-off, Garrett incurred debt of $1.6 billion to make a cash distribution to the Company.

In 2018 in connection with the spin-off, the Company entered into certain agreements with Resideo and Garrett to affect our legal and structural separation, including transition services agreements to provide certain administrative and other services for a limited time, and tax matters and indemnification and reimbursement agreements. As of the end of 2019, most of those agreements are still in effect.

(Dollars in millions, except per share amounts)

Note 3. Repositioning and Other Charges

A summary of repositioning and other charges follows:

	Years Ended December 31,		
	2019	2018	2017
Severance	$ 260	$ 289	$ 305
Asset impairments	95	162	142
Exit costs	83	79	60
Reserve adjustments	(5)	(10)	(16)
Total net repositioning charge	433	520	491
Asbestos related litigation charges, net of insurance and reimbursements	42	163	159
Probable and reasonably estimable environmental liabilities, net of reimbursements	59	345	287
Other	12	63	36
Total net repositioning and other charges	$ 546	$ 1,091	$ 973

The following table summarizes the pre-tax distribution of total net repositioning and other charges by classification:

	Years Ended December 31,		
	2019	2018	2017
Cost of products and services sold	$ 276	$ 811	$ 736
Selling, general and administrative expenses	270	239	187
Other (income) expense	—	41	50
	$ 546	$ 1,091	$ 973

The following table summarizes the pre-tax impact of total net repositioning and other charges by segment:

	Years Ended December 31,		
	2019	2018	2017
Aerospace	$ 33	$ 154	$ 248
Honeywell Building Technologies	108	111	78
Performance Materials and Technologies	93	191	102
Safety and Productivity Solutions	71	133	51
Corporate	241	502	494
	$ 546	$ 1,091	$ 973

In 2019, the Company recognized repositioning charges totaling $438 million including severance costs of $260 million related to workforce reductions of 5,336 manufacturing and administrative positions across our segments. The workforce reductions related to costs savings actions taken in connection with our productivity and ongoing functional transformation initiatives and to site transitions, mainly in Honeywell Building Technologies, as we transition manufacturing to more cost-effective locations. The repositioning charge included asset impairments of $95 million largely related to a write down in connection with assets held for sale. The repositioning charge included exit costs of $83 million primarily related to current period exit costs incurred for previously approved repositioning projects, termination fees associated with the early cancellation of supply agreements for certain raw materials in Performance Materials and Technologies and Honeywell Building Technologies and for closure obligations associated with site transitions.

In 2018, the Company recognized repositioning charges totaling $530 million including severance costs of $289 million related to workforce reductions of 6,486 manufacturing and administrative positions across our segments. The workforce reductions were primarily related to planned site closures, mainly in Safety and Productivity Solutions, Performance Materials and Technologies and Honeywell Building Technologies, as we transition manufacturing sites to more cost-effective locations. The workforce reductions were also related to our productivity and ongoing functional transformation initiatives. The repositioning charge included asset impairments of $162 million mainly related to manufacturing plant and equipment associated with planned site closures. Asset impairments also included the write-down of a legacy property in Corporate in connection with its planned disposition and the write-off of certain capitalized assets in Corporate. The repositioning charge included exit costs of $79 million primarily related to a termination fee associated with the early cancellation of a supply agreement for certain raw materials in Performance Materials and Technologies and for closure obligations associated with planned site closures.

(Dollars in millions, except per share amounts)

In 2017, the Company recognized repositioning charges totaling $507 million including severance costs of $305 million related to workforce reductions of 7,096 manufacturing and administrative positions across its segments. The workforce reductions were primarily related to cost savings actions taken in connection with our productivity and ongoing functional transformation initiatives and with site transitions, in each of our segments, to more cost-effective locations. The repositioning charge included asset impairments of $142 million principally in our Corporate segment related to the write-down of legacy properties and certain equipment in connection with their planned disposition and the write-down of a research and development facility in connection with a planned exit from such facility. The repositioning charge included exit costs of $60 million principally for closure obligations associated with site transitions in each of our segments and for lease exit obligations in our Corporate segment.

The following table summarizes the status of the Company's total repositioning reserves:

	Severance Costs	Asset Impairments	Exit Costs	Total
Balance at December 31, 2016	$ 298	$ —	$ 33	$ 331
Charges	305	142	60	507
Usage—cash	(163)	—	(14)	(177)
Usage—noncash	—	(142)	—	(142)
Adjustments and reclassifications	(13)	—	(10)	(23)
Foreign currency translation	15	—	2	17
Balance at December 31, 2017	442	—	71	513
Charges	289	162	79	530
Usage—cash	(218)	—	(67)	(285)
Usage—noncash	—	(163)	—	(163)
Divestitures	(11)	—	(3)	(14)
Adjustments	(8)	1	(3)	(10)
Foreign currency translation	(5)	—	—	(5)
Balance at December 31, 2018	489	—	77	566
Charges	260	95	83	438
Usage—cash	(186)	—	(63)	(249)
Usage—noncash	—	(100)	—	(100)
Divestitures	—	—	—	—
Adjustments	(8)	5	(2)	(5)
Foreign currency translation	—	—	1	1
Balance at December 31, 2019	$ 555	$ —	$ 96	$ 651

Certain repositioning projects will recognize exit costs in future periods when the actual liability is incurred. Such exit costs incurred in 2019, 2018 and 2017 were not significant.

In 2018, the other charge of $63 million mainly relates to reserves taken due to the required wind-down of the Company's activities in Iran and the evaluation of potential resolution of a certain legal matter.

(Dollars in millions, except per share amounts)

Note 4. Other (Income) Expense

	Years Ended December 31,		
	2019	2018	2017
Interest income	$ (255)	$ (217)	$ (151)
Pension ongoing income—non-service	(606)	(1,165)	(875)
Other postretirement income—non-service	(47)	(32)	(21)
Equity income of affiliated companies	(52)	(50)	(39)
Loss (gain) on sale of non-strategic business and assets	1	—	7
Foreign exchange	(120)	(63)	18
Separation costs	—	321	16
Other (net)	14	57	82
	$ (1,065)	$ (1,149)	$ (963)

Separation costs are associated with the spin-offs of the Company's Homes and Global Distribution business and Transportation Systems business, and are primarily associated with third party services.

For the year ended December 31, 2018 and 2017, Other (net) includes asset impairments in Corporate related to the write-down of a legacy property in connection with its planned disposition. See Note 3 Repositioning and Other Charges.

Note 5. Income Taxes

Income before taxes

	Years Ended December 31,		
	2019	2018	2017
U.S.	$ 4,178	$ 2,919	$ 2,873
Non-U.S.	3,381	4,568	4,077
	$ 7,559	$ 7,487	$ 6,950

Tax expense (benefit)

	Years Ended December 31,		
	2019	2018	2017
Tax expense (benefit) consists of			
Current:			
U.S. Federal	$ 8	$ (21)	$ 2,061
U.S. State	43	89	62
Non-U.S.	1,099	1,177	787
	$ 1,150	$ 1,245	$ 2,910
Deferred:			
U.S. Federal	$ 332	$ 396	$ 190
U.S. State	63	8	139
Non-U.S.	(216)	(990)	2,123
	179	(586)	2,452

$ 1,329	$ 659	$ 5,362

(Dollars in millions, except per share amounts)

	Years Ended December 31,		
	2019	2018	2017
The U.S. federal statutory income tax rate is reconciled to our effective income tax rate as follows:			
U.S. federal statutory income tax rate	21.0 %	21.0 %	35.0 %
Taxes on non-U.S. earnings(1)(2)	(0.5)	0.2	(12.8)
U.S. state income taxes(1)	1.1	1.6	1.4
Reserves for tax contingencies	2.0	0.3	1.6
Employee share-based payments	(1.2)	(0.7)	(2.9)
U.S. Tax Reform	(3.6)	(5.8)	56.0
Reduction of taxes on unremitted earnings	—	(14.2)	—
Separation tax costs	—	5.5	—
All other items—net	(1.2)	0.9	(1.1)
	17.6 %	8.8 %	77.2 %

(1) Net of changes in valuation allowance

(2) Includes U.S. taxes on non-U.S. earnings

The effective tax rate increased by 8.8 percentage points in 2019 compared to 2018. The increase was primarily attributable to a lower income tax benefit resulting from revised guidance related to U.S. Tax Reform and internal restructuring initiatives that resulted in a $281 million reduction of accrued withholding taxes related to unremitted foreign earnings when compared to the prior year. The Company's non-U.S. effective tax rate was 26.1%, an increase of approximately 22.0 percentage points compared to 2018. The increase in the foreign effective tax rate was primarily attributable to a lower income tax benefit related to the Company's internal restructuring initiatives when compared to the prior year.

The effective tax rate decreased by 68.4 percentage points in 2018 compared to 2017. The decrease was primarily attributable to internal restructuring initiatives that resulted in a reduction of accrued withholding taxes of approximately $1.1 billion related to unremitted foreign earnings. In addition, we recorded a tax benefit of approximately $440 million as a reduction to our 2017 provisional estimate of impacts from U.S. Tax Reform, which was partially offset by $411 million of tax costs associated with the internal restructuring of the Homes and Global Distribution business and Transportation Systems business in advance of their spin-offs. The Company's non-U.S. effective tax rate was 4.1%, a decrease of approximately 67.3 percentage points compared to 2017. The year over year decrease in the foreign effective tax rate was primarily attributable to the impact of the Company's internal restructuring initiatives and the reduction of accrued withholding taxes on unremitted foreign earnings, partially offset by the spin-off transactions.

(Dollars in millions, except per share amounts)

Deferred tax assets (liabilities)

The tax effects of temporary differences and tax carryforwards which give rise to future income tax benefits and payables are as follows:

	December 31,	
Deferred tax assets:	2019	2018
Postretirement benefits other than pensions	$ 111	$ 120
Asbestos and environmental	531	589
Employee compensation and benefits	205	262
Other accruals and reserves	279	336
Net operating and capital losses	652	688
Tax credit carryforwards	246	154
Gross deferred tax assets	2,024	2,149
Valuation allowance	(656)	(689)
Total deferred tax assets	$ 1,368	$ 1,460
Deferred tax liabilities:		
Pension	$ (469)	$ (40)
Property, plant and equipment	(469)	(422)
Intangibles	(1,296)	(1,553)
Unremitted earnings of foreign subsidiaries	(419)	(616)
Other asset basis differences	(136)	(110)
Other	(163)	(50)
Total deferred tax liabilities	(2,952)	(2,791)
Net deferred tax liability	$ (1,584)	$ (1,331)

The Company's gross deferred tax assets include $767 million related to non-U.S. operations comprised principally of net operating losses, capital loss and tax credit carryforwards (mainly in Canada, France, Germany, Luxembourg and the United Kingdom) and deductible temporary differences. We maintain a valuation allowance of $653 million against a portion of the non-U.S. gross deferred tax assets. The change in the valuation allowance resulted in a decrease of $23 million and increases of $57 million and $4 million to income tax expense in 2019, 2018 and 2017. In the event we determine that we will not be able to realize our net deferred tax assets in the future, we will reduce such amounts through an increase to income tax expense in the period such determination is made. Conversely, if we determine that we will be able to realize net deferred tax assets in excess of the carrying amounts, we will decrease the recorded valuation allowance through a reduction to income tax expense in the period that such determination is made.

As of December 31, 2019, the Company recorded a $419 million deferred tax liability on all of our unremitted foreign earnings based on estimated earnings and profits of approximately $16.7 billion as of the balance sheet date.

As of December 31, 2019, the Company's net operating loss, capital loss and tax credit carryforwards were as follows:

Jurisdiction	Expiration Period	Net Operating and Capital Loss Carryforwards	Tax Credit Carryforwards
U.S. Federal	2039	$ 16	$ 89
U.S. State	2039	389	20
Non-U.S.	2039	277	142

Non-U.S.	Indefinite	2,324	—
		$ 3,006	$ 251

(Dollars in millions, except per share amounts)

Many jurisdictions impose limitations on the timing and utilization of net operating loss and tax credit carryforwards. In those instances, whereby there is an expected permanent limitation on the utilization of the net operating loss or tax credit carryforward, the deferred tax asset and amount of the carryforward have been reduced.

	2019	2018	2017
Change in unrecognized tax benefits:			
Balance at beginning of year	$ 1,089	$ 947	$ 877
Gross increases related to current period tax positions	51	370	94
Gross increases related to prior periods tax positions	83	82	153
Gross decreases related to prior periods tax positions	(34)	(201)	(91)
Decrease related to resolutions of audits with tax authorities	(3)	(40)	(76)
Expiration of the statute of limitations for the assessment of taxes	(13)	(50)	(54)
Foreign currency translation	(9)	(19)	44
Balance at end of year	$ 1,164	$ 1,089	$ 947

As of December 31, 2019, 2018, and 2017 there were $1,164 million, $1,089 million, and $947 million of unrecognized tax benefits that if recognized would be recorded as a component of Tax expense.

The following table summarizes tax years that remain subject to examination by major tax jurisdictions as of December 31, 2019:

	Open Tax Years Based on Originally Filed Returns	
Jurisdiction	Examination in progress	Examination not yet initiated
U.S. Federal	2015 - 2016	2017-2019
U.S. State	2011 - 2017	2012-2018
Australia	N/A	2016-2019
Canada(1)	2015-2017	2018-2019
China	2009-2018	2019
France	N/A	2017-2019
Germany(1)	2008-2017	2018-2019
India	1999-2017	2018-2019
Italy	2012-2017	2018-2019
Netherlands	2016-2017	2018-2019
Switzerland(1)	2012-2018	2019
United Kingdom	2013-2017	2018-2019

(1) Includes provincial or similar local jurisdictions, as applicable.

Based on the outcome of these examinations, or as a result of the expiration of statute of limitations for specific jurisdictions, it is reasonably possible that certain unrecognized tax benefits for tax positions taken on previously filed tax returns will materially change from those recorded as liabilities in our financial statements. In addition, the outcome of these examinations may impact the valuation of certain deferred tax assets (such as net operating losses) in future periods.

Unrecognized tax benefits for examinations in progress were $413 million, $304 million and $487 million, as of December 31, 2019, 2018, and 2017. Estimated interest and penalties related to the underpayment of income taxes are classified as a component of Tax expense in the Consolidated Statement of Operations and totaled $73 million, $45 million and $28 million for the years ended December 31, 2019, 2018, and 2017. Accrued interest and penalties were $487 million, $426 million and $423 million, as of December 31, 2019, 2018, and 2017.

U.S. Tax Reform

During the quarter ending December 31, 2018, the Company completed the accounting for the tax effects of U.S. Tax Reform which amounted to a total tax charge of approximately $3.5 billion, most of which was recorded as a provisional estimate at the end of 2017. During 2018, we reduced our provisional estimate by approximately $440 million as a reduction to Tax expense.

Corporate Tax Rate Change—During the years 2018 and 2017, the Company recorded a total tax benefit of approximately $190 million due to the decrease in the corporate statutory tax rate from 35% to 21%. This includes a measurement period adjustment of approximately $90 million recorded during 2018 as a reduction to Tax expense. The change in the provisional estimate primarily relates to information contained in tax returns that were filed during the quarter ending December 31, 2018, some of which require approval from U.S. tax authorities. The tax benefit from the change in tax rates results from the Company's deferred tax liability position for the excess of its net book value over its tax basis of its U.S. assets and liabilities that will generate future taxable income in excess of book income. This additional taxable income will be subject to tax at a lower corporate tax rate, consequently reducing the Company's deferred tax liability.

Mandatory Transition Tax—During the years 2018 and 2017, the Company recorded a total tax charge of approximately $1,950 million due to the imposition of the mandatory transition tax ("MTT") on the deemed repatriation of undistributed foreign earnings. This includes a measurement period adjustment of approximately $50 million recorded during 2018 as an increase to Tax expense. The change in the provisional estimate primarily relates to updated amounts from tax returns that were finalized during 2018, computations based on 2018 testing dates and guidance from the taxing authorities that was received during the year. The Company has elected to pay the MTT liability over a period of eight years.

Undistributed Foreign Earnings—During the years 2018 and 2017, the Company recorded a total tax charge of approximately $1,700 million due to the Company's intent to no longer permanently reinvest the historical unremitted earnings of its foreign affiliates that existed as of December 31, 2017. This includes a measurement period adjustment of approximately $400 million recorded during 2018 as a reduction to Tax expense. The change in the provisional estimate primarily relates to updated amounts from tax returns that were finalized during 2018, the application of foreign tax credits based on guidance issued during the year and changes to the applicable withholding tax rates in local jurisdictions. The Company also reduced these taxes on unremitted foreign earnings by $281 million and $1.1 billion in 2019 and 2018, respectively, that were recorded as reductions to Tax expense.

Global Intangible Low Taxed Income—U.S. Tax Reform imposes a U.S. tax on global intangible low taxed income ("GILTI") that is earned by certain foreign affiliates owned by a U.S. shareholder. GILTI is generally intended to impose tax on the earnings of a foreign corporation that are deemed to exceed a certain threshold return relative to the underlying business investment. The Company has made a policy election to treat future taxes related to GILTI as a current period expense in the reporting period in which the tax is incurred.

(Dollars in millions, except per share amounts)

Note 6. Earnings Per Share

The details of the earnings per share calculations for the years ended December 31, 2019, 2018 and 2017 are as follows:

	Years Ended December 31,		
Basic	**2019**	**2018**	**2017**
Net income attributable to Honeywell	$ 6,143	$ 6,765	$ 1,545
Weighted average shares outstanding	721.0	743.0	762.1
Earnings per share of common stock	$ 8.52	$ 9.10	$ 2.03

	Years Ended December 31,		
Assuming Dilution	**2019**	**2018**	**2017**
Net income attributable to Honeywell	$ 6,143	$ 6,765	$ 1,545
Average Shares			
Weighted average shares outstanding	721.0	743.0	762.1
Dilutive securities issuable—stock plans	9.3	10.0	10.0
Total weighted average diluted shares outstanding	730.3	753.0	772.1
Earnings per share of common stock—assuming dilution	$ 8.41	$ 8.98	$ 2.00

The diluted earnings per share calculations exclude the effect of stock options when the options' assumed proceeds exceed the average market price of the common shares during the period. In 2019, 2018, and 2017 the weighted number of stock options excluded from the computations were 2.5 million, 2.5 million, and 2.8 million. These stock options were outstanding at the end of each of the respective periods.

(Dollars in millions, except per share amounts)

Note 7. Revenue Recognition and Contracts with Customers

The Company has a comprehensive offering of products and services, including software and technologies, that are sold to a variety of customers in multiple end markets. See the following disaggregated revenue table and related discussions by operating segment for details.

	Year Ended December 31,	
	2019	2018
Aerospace		
Commercial Aviation Original Equipment	$ 2,997	$ 2,833
Commercial Aviation Aftermarket	5,731	5,373
Defense and Space	5,326	4,665
Transportation Systems	—	2,622
	14,054	15,493
Honeywell Building Technologies		
Homes Products and Software	—	1,732
Distribution (ADI)	—	2,196
Products	3,314	2,953
Building Solutions	2,403	2,417
	5,717	9,298
Performance Materials and Technologies		
UOP	2,890	2,845
Process Solutions	5,146	4,981
Specialty Products	1,062	1,134
Fluorine Products	1,736	1,714
	10,834	10,674
Safety and Productivity Solutions		
Safety and Retail	2,215	2,278
Productivity Products	1,110	1,373
Warehouse and Workflow Solutions	1,931	1,829
Sensing & Internet-of-Things (IoT)	848	857
	6,104	6,337
Net sales	$ 36,709	$ 41,802

Aerospace – A global supplier of products, software and services for aircraft. Products include aircraft propulsion engines, auxiliary power units, environmental control systems, integrated avionics, electric power systems, hardware for engine controls, flight safety, communications and navigation, satellite and space components, aircraft wheels and brakes, and thermal systems. Software includes engine controls, flight safety, communications, navigation, radar and surveillance systems, internet connectivity and aircraft instrumentation. Services are provided to customers for the repair, overhaul, retrofit and modification of propulsion engines, auxiliary power units, avionics and mechanical systems and aircraft wheels and brakes. Additionally, Aerospace provides Honeywell Forge for aircraft connected solutions, software and data services designed to improve customers' efficiency and enable improved operations.

Honeywell Building Technologies – A global provider of products, software, solutions and technologies for buildings. Products include controls and displays for heating, cooling, indoor air quality, ventilation, humidification, combustion, and lighting; sensors, switches, control systems and instruments for measuring pressure, air flow, temperature and electrical current; access control; video surveillance; fire detection; and installation, maintenance and upgrades of systems that keep buildings safe, comfortable and productive. Software includes monitoring and managing heating, cooling, indoor air quality, ventilation, humidification, combustion, and lighting; advanced applications for building control and optimization; video surveillance; and remote patient monitoring systems. Installation, maintenance and upgrade services of products used in commercial building applications for heating, cooling, maintaining indoor air quality, ventilation, humidification, combustion, lighting, video surveillance and fire safety. These offerings, including Honeywell Forge for buildings connected solutions, address key energy challenges, keep people and places safe, enhance the building occupant experience, and improve critical infrastructure.

(Dollars in millions, except per share amounts)

Performance Materials and Technologies – A global provider of products, software, solutions and technologies. Products include catalysts, adsorbents, equipment and high-performance materials, devices for measurement, regulation, control and metering of gases and electricity, and metering and communications systems for water utilities and industries, including Honeywell Forge connected solutions. Honeywell Forge for plant provides seamless integration and connectivity within plants and facilities to provide a holistic view of operations, turning data into clear actions, and Honeywell Forge for cybersecurity helps identify risks and act on cyber-related incidents, together enabling the best operations and protecting process, people and assets. Software is provided to support process technologies supporting automation and to monitor a variety of industrial processes used in industries such as oil and gas, chemicals, petrochemicals, metals, minerals and mining industries. Services are provided for installation and maintenance of products.

Safety and Productivity Solutions – A global provider of products, software and Honeywell Forge for workers connected solutions. Products include personal protection equipment and footwear, gas detection devices, mobile computing, data collection and thermal printing devices, automation equipment for supply chain and warehouse automation and custom-engineered sensors, switches and controls. Software and solutions are provided to customers for supply chain and warehouse automation, to manage data and assets to drive productivity and for computing, data collection and thermal printing.

For a summary by disaggregated product and services sales for each segment, refer to Note 22 Segment Financial Data.

The Company recognizes revenue arising from performance obligations outlined in contracts with its customers that are satisfied at a point in time and over time. The disaggregation of our revenue based off timing of recognition is as follows:

	Year Ended December 31,	
	2019	2018
Products, transferred point in time	61 %	67 %
Products, transferred over time	14	12
Net product sales	75	79
Services, transferred point in time	9	7
Services, transferred over time	16	14
Net service sales	25	21
Net sales	100 %	100 %

Contract Balances

Progress on satisfying performance obligations under contracts with customers and the related billings and cash collections are recorded on the Consolidated Balance Sheet in Accounts receivable - net and Other assets (unbilled receivables (contract assets) and billed receivables) and Accrued liabilities and Other liabilities (customer advances and deposits (contract liabilities)). Unbilled receivables (contract assets) arise when the timing of cash collected from customers differs from the timing of revenue recognition, such as when contract provisions require specific milestones to be met before a customer can be billed. Those assets are recognized when the revenue associated with the contract is recognized prior to billing and derecognized when billed in accordance with the terms of the contract. Contract liabilities are recorded when customers remit contractual cash payments in advance of us satisfying performance obligations under contractual arrangements, including those with performance obligations to be satisfied over a period of time. Contract liabilities are derecognized when revenue is recorded, either when a milestone is met triggering the contractual right to bill or when the performance obligation is satisfied.

(Dollars in millions, except per share amounts)

Contract balances are classified as assets or liabilities on a contract-by-contract basis at the end of each reporting period.

The following table summarizes the Company's contract assets and liabilities balances:

	2019	2018
Contract assets—January 1	$ 1,548	$ 1,721
Contract assets—December 31	1,602	1,548
Change in contract assets—increase (decrease)	$ 54	$ (173)
Contract liabilities—January 1	$ (3,378)	$ (2,973)
Contract liabilities—December 31	(3,501)	(3,378)
Change in contract liabilities—(increase) decrease	$ (123)	$ (405)
Net change	$ (69)	$ (578)

The net change in 2019 was primarily driven by the receipt of advance payments from customers exceeding recognition of revenue as performance obligations were satisfied prior to billing. The net change in 2018 was primarily driven by the receipt of advance payments from customers exceeding reductions from recognition of revenue as performance obligations were satisfied and related billings. For the year ended December 31, 2019 and 2018, we recognized revenue of $1,543 million and $1,166 million that was previously included in the beginning balance of contract liabilities.

When contracts are modified to account for changes in contract specifications and requirements, the Company considers whether the modification either creates new or changes the existing enforceable rights and obligations. Contract modifications for goods or services and not distinct from the existing contract, due to the significant integration with the original good or service provided, are accounted for as if they were part of that existing contract. The effect of a contract modification on the transaction price and our measure of progress for the performance obligation to which it relates, is recognized as an adjustment to revenue (either as an increase in or a reduction of revenue) on a cumulative catch-up basis. When the modifications include additional performance obligations that are distinct and at relative stand-alone selling price, they are accounted for as a new contract and performance obligation, which are recognized prospectively.

Performance Obligations

A performance obligation is a promise in a contract to transfer a distinct good or service to the customer, and is defined as the unit of account. A contract's transaction price is allocated to each distinct performance obligation and recognized as revenue when, or as, the performance obligation is satisfied. When our contracts with customers require highly complex integration or manufacturing services that are not separately identifiable from other promises in the contracts and, therefore, not distinct, then the entire contract is accounted for as a single performance obligation. In situations when our contract includes distinct goods or services that are substantially the same and have the same pattern of transfer to the customer over time, they are recognized as a series of distinct goods or services. For any contracts with multiple performance obligations, we allocate the contract's transaction price to each performance obligation based on the estimated relative standalone selling price of each distinct good or service in the contract. For product sales, each product sold to a customer typically represents a distinct performance obligation. In such cases, the observable standalone sales are used to determine the stand alone selling price.

Performance obligations are satisfied as of a point in time or over time. Performance obligations are supported by contracts with customers, providing a framework for the nature of the distinct goods, services or bundle of goods and services. The timing of satisfying the performance obligation is typically indicated by the terms of the contract.

(Dollars in millions, except per share amounts)

The following table outlines the Company's remaining performance obligations disaggregated by segment:

	December 31, 2019
Aerospace	$ 11,315
Honeywell Building Technologies	5,515
Performance Materials and Technologies	6,527
Safety and Productivity Solutions	2,255
	$ 25,612

Performance obligations recognized as of December 31, 2019 will be satisfied over the course of future periods. Our disclosure of the timing for satisfying the performance obligation is based on the requirements of contracts with customers. However, from time to time, these contracts may be subject to modifications, impacting the timing of satisfying the performance obligations. Performance obligations expected to be satisfied within one year and greater than one year are 57% and 43%.

The timing of satisfaction of the Company's performance obligations does not significantly vary from the typical timing of payment. Typical payment terms of our fixed-price over time contracts include progress payments based on specified events or milestones, or based on project progress. For some contracts we may be entitled to receive an advance payment.

The Company has applied the practical expedient for certain revenue streams to exclude the value of remaining performance obligations for (i) contracts with an original expected term of one year or less or (ii) contracts for which we recognize revenue in proportion to the amount we have the right to invoice for services performed.

Note 8. Accounts Receivable

	December 31,	
	2019	2018
Trade	$ 7,639	$ 7,705
Less—Allowance for doubtful accounts	(146)	(197)
	$ 7,493	$ 7,508

Trade Receivables includes $1,586 million and $1,543 million of unbilled balances under long-term contracts as of December 31, 2019 and 2018. These amounts are billed in accordance with the terms of customer contracts to which they relate.

Note 9. Inventories

	December 31,	
	2019	2018
Raw materials	$ 1,056	$ 1,109
Work in process	817	811
Finished products	2,593	2,445
	4,466	4,365
Reduction to LIFO cost basis	(45)	(39)
	$ 4,421	$ 4,326

Inventories valued at LIFO amounted to $292 million and $294 million at December 31, 2019 and 2018. Had such LIFO inventories been valued at current costs, the carrying values would have been approximately $45 million and $39 million higher at December 31, 2019 and 2018.

(Dollars in millions, except per share amounts)

Note 10. Property, Plant and Equipment—Net

	December 31, 2019	December 31, 2018
Land and improvements	$ 251	$ 262
Machinery and equipment	9,586	9,435
Buildings and improvements	3,152	3,125
Construction in progress	724	588
	13,713	13,410
Less—Accumulated depreciation	(8,388)	(8,114)
	$ 5,325	$ 5,296

Depreciation expense was $673 million, $721 million and $717 million in 2019, 2018 and 2017.

Note 11. Goodwill and Other Intangible Assets—Net

The following table summarizes the change in the carrying amount of goodwill for the years ended December 31, 2019 and 2018 by segment.

	December 31, 2018	Acquisitions/ Divestitures	Currency Translation Adjustment	December 31, 2019
Aerospace	$ 2,258	$ —	$ 8	$ 2,266
Honeywell Building Technologies	3,238	(1)	(22)	3,215
Performance Materials and Technologies	5,147	—	(42)	5,105
Safety and Productivity Solutions	4,903	75	(1)	4,977
	$ 15,546	$ 74	$ (57)	$ 15,563

Other intangible assets are comprised of:

	December 31, 2019			December 31, 2018		
	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
Determinable life intangibles:						
Patents and technology	$ 2,060	$ (1,481)	$ 579	$ 1,996	$ (1,332)	$ 664
Customer relationships	3,769	(1,766)	2,003	3,785	(1,510)	2,275
Trademarks	317	(228)	89	326	(206)	120
Other	297	(262)	35	349	(299)	50
	6,443	(3,737)	2,706	6,456	(3,347)	3,109
Indefinite life intangibles:						
Trademarks	1,028	—	1,028	1,030	—	1,030
	$ 7,471	$ (3,737)	$ 3,734	$ 7,486	$ (3,347)	$ 4,139

Intangible assets amortization expense was $415 million, $395 million, and $398 million in 2019, 2018, 2017. Estimated intangible asset amortization expense for each of the next five years approximates $355 million in 2020, $317 million in 2021, $293 million in 2022, $256 million in 2023, and $234 million in 2024.

(Dollars in millions, except per share amounts)

Note 12. Accrued Liabilities

	December 31, 2019	December 31, 2018
Customer advances and deferred income	$ 2,490	$ 2,403
Compensation, benefit and other employee related	1,551	1,469
Repositioning	640	566
Asbestos related liabilities	361	245
Income taxes	253	166
Other taxes	239	234
Environmental costs	222	175
Product warranties and performance guarantees	213	243
Operating lease liabilities	171	—
Insurance	143	170
Accrued interest	91	94
Other (primarily operating expenses)	1,102	1,094
	$ 7,476	$ 6,859

(Dollars in millions, except per share amounts)

Note 13. Long-term Debt and Credit Agreements

	December 31, 2019	December 31, 2018
1.40% notes due 2019	$ —	$ 1,250
Three year floating rate notes due 2019	—	250
Two year floating rate notes due 2019	—	450
1.80% notes due 2019	—	750
0.65% Euro notes due 2020	1,123	1,145
4.25% notes due 2021	800	800
1.85% notes due 2021	1,500	1,500
2.15% notes due 2022	600	—
Floating rate notes due 2022	600	—
1.30% Euro notes due 2023	1,404	1,432
3.35% notes due 2023	300	300
2.30% notes due 2024	750	—
2.50% notes due 2026	1,500	1,500
2.25% Euro notes due 2028	842	859
2.70% notes due 2029	750	—
5.70% notes due 2036	441	441
5.70% notes due 2037	462	462
5.375% notes due 2041	417	417
3.812% notes due 2047	445	445
Industrial development bond obligations, floating rate maturing at various dates through 2037	22	22
6.625% debentures due 2028	201	201
9.065% debentures due 2033	51	51
Other (including finance leases and debt issuance costs), 6.6% weighted average maturing at various dates through 2025	278	353
	12,486	12,628
Less: current portion	(1,376)	(2,872)
	$ 11,110	$ 9,756

The schedule of principal payments on long-term debt is as follows:

	December 31, 2019
2020	$ 1,376
2021	2,375
2022	1,242
2023	1,733
2024	780
Thereafter	4,980
	12,486
Less-current portion	(1,376)
	$ 11,110

On August 8, 2019, the Company issued $600 million 2.15% Senior Notes due 2022, $600 million Floating Rate Senior Notes due 2022, $750 million 2.30% Senior Notes due 2024 and $750 million 2.70% Senior Notes due 2029 (collectively the "2019 Notes"). The 2019 Notes are senior unsecured and unsubordinated obligations of Honeywell and rank equally with all of Honeywell's existing and future senior unsecured debt and senior to all of Honeywell's subordinated debt. The offering resulted in gross proceeds of $2,700 million, offset by $18 million in discount and closing costs related to the offering.

For the issuances described above, unless otherwise noted, all debt issuance costs are deferred and recognized as a direct deduction to the related debt liability and are amortized to interest expense over the debt term.

On October 30, 2019, the Company paid its 1.40% notes due 2019, Three year floating rate notes due 2019, Two year floating rate notes due 2019 and 1.80% notes due 2019.

In connection with the Garrett spin-off, wholly owned subsidiaries of Garrett issued notes and entered new credit facilities, which obligations were retained by Garrett in the spin-off. On September 27, 2018 the Company received net proceeds of $1,604 million from such borrowings.

In connection with the Resideo spin-off, wholly owned subsidiaries of Resideo issued notes and entered new credit facilities, which obligations were retained by Resideo in the spin-off. On October 25, 2018 the Company received net proceeds of $1,197 million from such borrowings.

On April 26, 2019, the Company entered into a $4.0 billion Amended and Restated Five Year Credit Agreement (the “5-Year Credit Agreement”), with a syndicate of banks. The 5-Year Credit Agreement is maintained for general corporate purposes. Commitments under the 5-Year Credit Agreement can be increased pursuant to the terms of the 5-Year Credit Agreement to an aggregate amount not to exceed $4.5 billion. The 5-Year Credit Agreement amends and restates the previously reported $4.0 billion amended and restated five-year credit agreement dated as of April 27, 2018 (the "Prior Agreement"). The 5-Year Credit Agreement has substantially the same material terms and conditions as the Prior Agreement.

On April 26, 2019, the Company entered into a $1.5 billion 364-Day Credit Agreement with a syndicate of banks. This 364-Day Credit Agreement is maintained for general corporate purposes.

There have been no borrowings under any of the credit agreements previously described.

Note 14. Leases

Adoption

Effective January 1, 2019, the Company adopted the new lease accounting standard using the modified retrospective method of applying the new standard at the adoption date. In addition, we elected the package of practical expedients permitted under the transition guidance within the new standard. This allowed us to carry forward the historical lease classification. Adoption of this standard resulted in the recording of net operating lease right-of-use (ROU) assets and corresponding operating lease liabilities of $0.7 billion. Financial position for reporting periods beginning on or after January 1, 2019 are presented under the new guidance, while prior periods amounts are not adjusted and continue to be reported in accordance with previous guidance.

A significant portion of the Company's operating and finance lease portfolio includes corporate offices, research and development facilities, manufacturing sites, information technology (IT) equipment, and automobiles. The majority of our leases have remaining lease terms of 1 year to 20 years, some of which include options to extend the leases for 5 years or more. Operating lease ROU assets are presented within Other assets. The current portion of operating lease liabilities are presented within Accrued liabilities, and the non-current portion of operating lease liabilities are presented within Other liabilities on the Consolidated Balance Sheet. Finance lease assets are included in Property, plant and equipment -

net, and the finance lease obligations are included in Current maturities of long-term debt, and in Long-term debt on the Consolidated Balance Sheet.

(Dollars in millions, except per share amounts)

A portion of the Company's real estate leases is generally subject to annual changes in the Consumer Price Index (CPI). The changes to the CPI are treated as variable lease payments and recognized in the period in which the obligation for those payments was incurred. In addition, a subset of our automobile leases is considered variable. The variable lease payments for such automobiles leases are based on actual mileage incurred at the stated contractual rate and recognized in the period in which the obligation for those payments was incurred.

	Year Ended December 31, 2019
Operating lease cost	$ 222
Variable lease cost	27
Short-term lease cost	12
Finance lease cost:	
Amortization of right-of-use assets	65
Interest on lease liability	30
Total finance lease cost	95
Total lease cost	$ 356

Supplemental cash flow information related to leases was as follows:

	Year Ended December 31, 2019
Cash paid for amounts included in the measurement of lease liabilities:	
Operating cash flows from operating leases	$ 224
Operating cash flows from finance leases	32
Financing cash flows from finance leases	61
Right-of-use assets obtained in exchange for lease obligations:	
Operating leases	$ 179
Finance leases	34

(Dollars in millions, except per share amounts)

Supplemental balance sheet information related to leases was as follows:

	December 31, 2019
Operating leases	
Other assets	$ 673
Accrued liabilities	171
Other liabilities	534
Total operating lease liabilities	$ 705
Finance leases	
Property, plant and equipment	$ 361
Accumulated depreciation	(152)
Property, plant and equipment - net	$ 209
Current maturities of long-term debt	59
Long-term debt	156
Total finance lease liabilities	$ 215
Weighted-average remaining lease term	
Operating leases	6 years
Finance leases	4 years
Weighted-average discount rate	
Operating leases	3.3 %
Finance leases	16.2 %

As of December 31, 2019, maturities of lease liabilities were as follows:

	Operating Leases	Finance Leases
2020	$ 195	$ 86
2021	162	73
2022	128	53
2023	97	41
2024	63	37
Thereafter	145	12
Total lease payments	790	302
Less: interest	(85)	(87)
Total	$ 705	$ 215

As previously disclosed in our 2018 Annual Report on Form 10-K and under the previous lease accounting standard, future minimum lease payments for operating leases having initial or remaining noncancellable lease terms in excess of one year would have been as follows:

	At December 31, 2018
2019	$ 210
2020	168
2021	142
2022	109

2023	80
Thereafter	147
	$ 856

Note 15. Financial Instruments and Fair Value Measures

Credit and Market Risk—Financial instruments, including derivatives, expose the Company to counterparty credit risk for nonperformance and to market risk related to changes in interest and currency exchange rates. Our counterparties in derivative transactions are substantial investment and commercial banks with significant experience using such derivative instruments.

The Company continually monitors the creditworthiness of its customers to which it grants credit terms in the normal course of business. The terms and conditions of our credit sales are designed to mitigate or eliminate concentrations of credit risk with any single customer. Our sales are not materially dependent on a single customer or a small group of customers.

Foreign Currency Risk Management—The Company conducts business on a multinational basis in a wide variety of foreign currencies. Our exposure to market risk for changes in foreign currency exchange rates arises from international financing activities between subsidiaries, foreign currency denominated monetary assets and liabilities and transactions arising from international trade. Our primary objective is to preserve the U.S. Dollar value of foreign currency denominated cash flows and earnings. We monitor our collective foreign currency exposure and enter into foreign currency exchange forward and option contracts (foreign currency exchange contracts) with third parties, when necessary, to minimize the impact of changes in foreign currency exchange rates.

The Company has monetary assets and liabilities denominated in non-functional currencies. Prior to conversion into U.S. dollars, these assets and liabilities are remeasured at spot exchange rates in effect on the balance sheet date. The effects of changes in spot rates are recognized in earnings and included in other (income) expense. We may purchase or enter into derivative instruments to hedge our foreign currency exposure. We hedge forecasted sales and purchases, which are denominated in non-functional currencies, with foreign currency exchange contracts. Changes in the forecasted non-functional currency cash flows due to movements in exchange rates are substantially offset by changes in the fair value of these foreign currency exchange contracts designated as hedges. Market value gains and losses on these contracts are recognized in earnings when the hedged transaction is recognized. As of December 31, 2019 and 2018, we had contracts with notional amounts of $12,746 million and $14,995 million to exchange foreign currencies, principally the U.S. Dollar, Euro, Canadian Dollar, British Pound, Mexican Peso, Chinese Renminbi, Indian Rupee, Malaysian Ringgit, and Swiss Franc. As of December 31, 2019, we estimate that approximately $52 million of net derivative gains related to our cash flow hedges included in Accumulated other comprehensive income (loss) will be reclassified into earnings within the next 12 months.

The Company has also designated foreign currency debt and certain derivative contracts as hedges against portions of its net investment in foreign operations during the year ended December 31, 2019. Gains or losses of the foreign currency debt and derivative contracts designated as a net investment hedge are recorded in the same manner as foreign currency translation adjustments.

Interest Rate Risk Management—Financial instruments, including derivatives, expose the Company to market risk related to changes in interest rates. The Company uses a combination of financial instruments, including long-term, medium-term and short-term financing, variable-rate commercial paper, and interest rate swaps to manage the interest rate mix of our total debt portfolio and related overall cost of borrowing. At December 31, 2019 and 2018, interest rate swap agreements designated as fair value hedges effectively changed $3,950 million and $2,600 million of fixed rate debt at 2.87% and 2.93% to LIBOR based floating rate debt. Our interest rate swaps mature at various dates through 2029.

(Dollars in millions, except per share amounts)

Fair Value of Financial Instruments—The accounting guidance for fair value measurements and disclosures establishes a three-level fair value hierarchy.

- Level 1-Inputs are based on quoted prices in active markets for identical assets and liabilities.
- Level 2-Inputs are based on observable inputs other than quoted prices in active markets for identical or similar assets and liabilities.
- Level 3-One or more inputs are unobservable and significant.

Financial and nonfinancial assets and liabilities are classified in their entirety based on the lowest level of input that is significant to the fair value measurement.

The following table sets forth the Company's financial assets and liabilities that were accounted for at fair value on a recurring basis as of December 31, 2019 and 2018:

	December 31, 2019	December 31, 2018
Assets:		
Foreign currency exchange contracts	$ 291	$ 119
Available for sale investments	1,523	1,784
Interest rate swap agreements	38	20
Cross currency swap agreements	51	32
Liabilities:		
Foreign currency exchange contracts	$ 21	$ 4
Interest rate swap agreements	13	65

The foreign currency exchange contracts, interest rate swap agreements, and cross currency swap agreements are valued using broker quotations, or market transactions in either the listed or over-the-counter markets. As such, these derivative instruments are classified within level 2. The Company also holds investments in commercial paper, certificates of deposits, and time deposits that are designated as available for sale and are valued using published prices based off observable market data. As such, these investments are classified within level 2. The Company also holds available for sale investments in U.S. government and corporate debt securities valued utilizing published prices based on quoted market pricing, which are classified within level 1.

The carrying value of cash and cash equivalents, trade accounts and notes receivables, payables, commercial paper (of which $3,513 million and $3,583 million was Euro denominated as of December 31, 2019 and 2018) and short-term borrowings contained in the Consolidated Balance Sheet approximates fair value.

The following table sets forth the Company's financial assets and liabilities that were not carried at fair value:

	December 31, 2019		December 31, 2018	
	Carrying Value	Fair Value	Carrying Value	Fair Value
Assets				
Long-term receivables	$ 129	$ 127	$ 333	$ 329
Liabilities				
Long-term debt and related current maturities	$ 12,486	$ 13,578	$ 12,628	$ 13,133

The following table sets forth the amounts recorded on the Consolidated Balance Sheet related to cumulative basis adjustments for fair value hedges:

Line in the Consolidated Balance Sheet of Hedged Item	Carrying Amount of the Hedged Item		Cumulative Amount of Fair Value Hedging Adjustment Included in the Carrying Amount of the Hedged Item	
	December 31, 2019	December 31, 2018	December 31, 2019	December 31, 2018
Long-term debt	$ 3,975	$ 2,555	$ 25	$ (45)

(Dollars in millions, except per share amounts)

The Company determined the fair value of the long-term receivables by utilizing transactions in the listed markets for identical or similar assets. As such, the fair value of these receivables is considered level 2. The Company determined the fair value of the long-term debt and related current maturities utilizing transactions in the listed markets for identical or similar liabilities. As such, the fair value of the long-term debt and related current maturities is considered level 2.

Interest rate swap agreements are designated as hedge relationships with gains or losses on the derivative recognized in interest and other financial charges offsetting the gains and losses on the underlying debt being hedged. Gains and losses on interest rate swap agreements recognized in earnings were $70 million of income, $37 million of expense and $29 million of expense in the years ended December 31, 2019, 2018 and 2017. Gains and losses are fully offset by losses and gains on the underlying debt being hedged.

The Company economically hedges its exposure to changes in foreign exchange rates principally with forward contracts. These contracts are marked-to-market with the resulting gains and losses recognized in earnings offsetting the gains and losses on the non-functional currency denominated monetary assets and liabilities being hedged. We recognized $106 million of income, $394 million of income, and $207 million of expense in Other (income) expense in the years ended December 31, 2019, 2018 and 2017.

The following tables summarize the location and impact to the Consolidated Statement of Operations related to fair value and cash flow hedging relationships:

	Year Ended December 31, 2019				
	Revenue	Cost of Products Sold	SG&A	Other (Income) Expense	Interest and Other Financial Charges
	$ 36,709	$ 19,269	$ 5,519	$ (1,065)	$ 357
Gain or (loss) on cash flow hedges:					
Foreign Currency Exchange Contracts:					
Amount reclassified from accumulated other comprehensive income into income	3	44	1	73	—
Amount excluded from effectiveness testing recognized in earnings using an amortization approach	—	22	—	35	—
Gain or (loss) on fair value hedges:					
Interest Rate Swap Agreements:					
Hedged Items	—	—	—	—	(70)
Derivatives designated as hedges	—	—	—	—	70

	Year Ended December 31, 2018				
	Revenue	Cost of Products Sold	SG&A	Other (Income) Expense	Interest and Other Financial Charges
	$ 41,802	$ 23,634	$ 6,051	$ (1,149)	$ 367
Gain or (loss) on cash flow hedges:					

Foreign Currency Exchange Contracts:					
Amount reclassified from accumulated other comprehensive income into income	(9)	(35)	(2)	47	—
Amount excluded from effectiveness testing recognized in earnings using an amortization approach	—	6	—	9	—
Gain or (loss) on fair value hedges:					
Interest Rate Swap Agreements:					
Hedged Items	—	—	—	—	37
Derivatives designated as hedges	—	—	—	—	(37)

(Dollars in millions, except per share amounts)

The following table summarizes the amounts of gain or (loss) on net investment hedges recognized in Accumulated other comprehensive income (loss):

	Years Ended December 31,	
Derivatives Net Investment Hedging Relationships	**2019**	**2018**
Euro-denominated long-term debt	$ 68	$ 177
Euro-denominated commercial paper	71	168
Cross currency swap	32	44
Foreign currency exchange contracts	23	—

Note 16. Other Liabilities

	December 31,	
	2019	**2018**
Income taxes	$ 2,115	$ 2,236
Pension and other employee related	1,873	1,795
Deferred income	1,310	1,264
Operating lease liabilities	534	—
Environmental	487	580
Insurance	247	236
Asset retirement obligations	61	74
Product warranties and performance guarantees	56	67
Other	83	150
	$ 6,766	$ 6,402

Note 17. Capital Stock

Honeywell is authorized to issue up to 2,000,000,000 shares of common stock, with a par value of $1. Common shareowners are entitled to receive such dividends as may be declared by the Board of Directors, are entitled to one vote per share, and are entitled, in the event of liquidation, to share ratably in all the assets of Honeywell which are available for distribution to the common shareowners. Common shareowners do not have preemptive or conversion rights. Shares of common stock issued and outstanding or held in the treasury are not liable to further calls or assessments. There are no restrictions on us relative to dividends or the repurchase or redemption of common stock.

On April 29, 2019, the Board of Directors authorized the repurchase of up to a total of $10.0 billion of Honeywell common stock, which included amounts remaining under, and replaced, the previously approved share repurchase program. Approximately $7.0 billion and $3.7 billion remained available as of December 31, 2019, and December 31, 2018 for additional share repurchases.

Honeywell repurchased approximately 26.5 million shares of its common stock in both 2019 and 2018, for $4,400 million and $4,000 million.

Honeywell is authorized to issue up to 40,000,000 shares of preferred stock, without par value, and can determine the number of shares of each series, and the rights, preferences and limitations of each series. At December 31, 2019, there was no preferred stock outstanding.

(Dollars in millions, except per share amounts)

Note 18. Accumulated Other Comprehensive Income (Loss)

The changes in Accumulated other comprehensive income (loss) are provided in the tables below. Comprehensive income (loss) attributable to noncontrolling interest consists predominantly of net income.

	Pre-tax	Tax	After-Tax
Year Ended December 31, 2019			
Foreign exchange translation adjustment	$ 143	$ —	$ 143
Pensions and other postretirement benefit adjustments	115	(29)	86
Changes in fair value of designated cash flow hedges	20	(9)	11
	$ 278	$ (38)	$ 240
Year Ended December 31, 2018			
Foreign exchange translation adjustment	$ (728)	$ —	$ (728)
Pensions and other postretirement benefit adjustments	(727)	168	(559)
Changes in fair value of designated cash flow hedges	102	(17)	85
	$ (1,353)	$ 151	$ (1,202)
Year Ended December 31, 2017			
Foreign exchange translation adjustment	$ (37)	$ —	$ (37)
Pensions and other postretirement benefit adjustments	847	(170)	677
Changes in fair value of designated cash flow hedges	(194)	33	(161)
	$ 616	$ (137)	$ 479

Components of Accumulated Other Comprehensive Income (Loss)

	December 31,	
	2019	2018
Cumulative foreign exchange translation adjustment	$ (2,566)	$ (2,709)
Pensions and other postretirement benefit adjustments	(675)	(761)
Fair value of designated cash flow hedges	44	33
	$ (3,197)	$ (3,437)

(Dollars in millions, except per share amounts)

Changes in Accumulated Other Comprehensive Income (Loss) by Component

	Foreign Exchange Translation Adjustment	Pension and Other Postretirement Adjustments	Changes in Fair Value of Cash Flow Hedges	Total
Balance at December 31, 2017	$ (1,981)	$ (202)	$ (52)	$ (2,235)
Other comprehensive income (loss) before reclassifications	(685)	(569)	89	(1,165)
Amounts reclassified from accumulated other comprehensive income	—	(37)	(4)	(41)
Spin-off	(43)	47	—	4
Net current period other comprehensive income (loss)	(728)	(559)	85	(1,202)
Balance at December 31, 2018	$ (2,709)	$ (761)	$ 33	$ (3,437)
Other comprehensive income (loss) before reclassifications	156	149	103	408
Amounts reclassified from accumulated other comprehensive income	(13)	(63)	(92)	(168)
Net current period other comprehensive income (loss)	143	86	11	240
Balance at December 31, 2019	$ (2,566)	$ (675)	$ 44	$ (3,197)

Reclassifications Out of Accumulated Other Comprehensive Income (Loss)

	Year Ended December 31, 2019 Affected Line in the Consolidated Statement of Operations					
	Product Sales	Cost of Products Sold	Cost of Services Sold	Selling, General and Admin. Expenses	Other (Income) Expense	Total
Amortization of Pension and Other Postretirement Items:						
Actuarial losses recognized	$ —	$ —	$ —	$ —	$ 135	$ 135
Prior service (credit) recognized	—	—	—	—	(104)	(104)
Settlements and curtailments	—	—	—	—	—	—
Losses (gains) on cash flow hedges	(3)	(35)	(9)	(1)	(73)	(121)
Losses (gains) on net investment hedges	—	—	—	—	(19)	(19)
Total before tax	$ (3)	$ (35)	$ (9)	$ (1)	$ (61)	$ (109)
Tax expense (benefit)						(59)
Total reclassifications for the period, net of tax						$ (168)

(Dollars in millions, except per share amounts)

	Year Ended December 31, 2018 Affected Line in the Consolidated Statement of Operations					
	Product Sales	Cost of Products Sold	Cost of Services Sold	Selling, General and Admin. Expenses	Other (Income) Expense	Total
Amortization of Pension and Other Postretirement Items:						
Actuarial losses recognized	$ —	$ —	$ —	$ —	$ 45	$ 45
Prior service (credit) recognized	—	—	—	—	(99)	(99)
Settlements and curtailments	—	—	—	—	2	2
Losses (gains) on cash flow hedges	10	30	6	2	(47)	1
Total before tax	$ 10	$ 30	$ 6	$ 2	$ (99)	$ (51)
Tax expense (benefit)						10
Total reclassifications for the period, net of tax						$ (41)

Note 19. Stock-Based Compensation Plans

The 2016 Stock Incentive Plan of Honeywell International Inc. and its Affiliates (2016 Plan) and 2016 Stock Plan for Non-Employee Directors of Honeywell International Inc. (2016 Directors Plan) were both approved by the shareowners at the Annual Meeting of Shareowners effective on April 25, 2016. Following approval of both plans, we have not and will not grant any new awards under any previously existing stock-based compensation plans. At December 31, 2019, there were 37,364,854, and 866,273 shares of Honeywell common stock available for future grants under terms of the 2016 Plan and 2016 Directors Plan, respectively.

Stock Options—The exercise price, term and other conditions applicable to each option granted under the Company's stock plans are generally determined by the Management Development and Compensation Committee of the Board. The exercise price of stock options is set on the grant date and may not be less than the fair market value per share of our stock on that date. The fair value is recognized as an expense over the employee's requisite service period (generally the vesting period of the award). Options generally vest over a four-year period and expire after ten years.

The fair value of each option award is estimated on the date of grant using the Black-Scholes option-pricing model. Expected volatility is based on implied volatilities from traded options on our common stock and historical volatility of our common stock. We used a Monte Carlo simulation model to derive an expected term which represents an estimate of the time options are expected to remain outstanding. Such model uses historical data to estimate option exercise activity and post-vest termination behavior. The risk-free rate for periods within the contractual life of the option is based on the U.S. treasury yield curve in effect at the time of grant.

The following table summarizes the impact to the Consolidated Statement of Operations from stock options:

	Years Ended December 31,		
	2019	2018	2017
Compensation expense	$ 47	$ 64	$ 79
Future income tax benefit recognized	10	13	17

(Dollars in millions, except per share amounts)

The following table sets forth fair value per share information, including related weighted-average assumptions, used to determine compensation cost.

	Years Ended December 31,		
	2019	2018	2017
Weighted average fair value per share of options granted during the year[(1)]	$ 21.57	$ 23.63	$ 16.68
Assumptions:			
Expected annual dividend yield	2.65 %	2.49 %	2.81 %
Expected volatility	18.40 %	18.93 %	18.96 %
Risk-free rate of return	2.46 %	2.71 %	2.02 %
Expected option term (years)	4.87	4.95	5.04

(1) Estimated on date of grant using Black-Scholes option-pricing model.

The following table summarizes information about stock option activity for the three years ended December 31, 2019:

	Number of Options	Weighted Average Exercise Price
Outstanding at December 31, 2016	28,667,300	$ 79.57
Granted	5,098,569	125.16
Exercised	(8,840,019)	62.34
Lapsed or canceled	(1,516,557)	109.04
Outstanding at December 31, 2017	23,409,293	94.16
Spin related adjustment[(1)]	989,158	
Granted	3,303,722	148.48
Exercised	(3,399,375)	78.29
Lapsed or canceled	(1,824,217)	123.01
Outstanding at December 31, 2018	22,478,581	97.83
Granted	3,136,058	155.43
Exercised	(5,897,060)	84.31
Lapsed or canceled	(986,017)	136.15
Outstanding at December 31, 2019	18,731,562	$ 109.87
Vested and expected to vest at December 31, 2019[(2)]	17,636,444	$ 107.39
Exercisable at December 31, 2019	11,620,992	$ 92.19

(1) Additional options granted to offset the dilutive impact of the spin-offs on outstanding options.

(2) Represents the sum of vested options of 11.6 million and expected to vest options of 6.0 million. Expected to vest options are derived by applying the pre-vesting forfeiture rate assumption to total outstanding unvested options of 7.1 million.

(Dollars in millions, except per share amounts)

The following table summarizes information about stock options outstanding and exercisable at December 31, 2019:

	Options Outstanding				Options Exercisable		
Range of Exercise Prices	Number Outstanding	Weighted Average Life(1)	Weighted Average Exercise Price	Aggregate Intrinsic Value	Number Exercisable	Weighted Average Exercise Price	Aggregate Intrinsic Value
$27.00–$64.99	1,621,042	1.87	$ 55.38	$ 197	1,621,042	$ 55.38	$ 197
$65.00–$89.99	3,388,800	3.74	79.79	329	3,388,800	79.79	329
$90.00–$99.99	5,266,409	5.70	98.80	412	4,461,659	98.81	349
$100.00–$134.99	3,344,472	7.11	119.07	194	1,636,518	118.65	95
$135.00–$180.99	5,110,839	8.76	152.49	125	512,973	148.52	15
	18,731,562	6.10	$ 109.87	$ 1,257	11,620,992	$ 92.19	$ 985

(1) Average remaining contractual life in years.

There were 14,073,120 and 12,288,854 options exercisable at weighted average exercise prices of $83.42 and $78.35 at December 31, 2018 and 2017.

The following table summarizes the financial statement impact from stock options exercised:

	Years Ended December 31,		
Options Exercised	2019	2018	2017
Intrinsic value(1)	$ 483	$ 238	$ 620
Tax benefit realized	117	47	221

(1) Represents the amount by which the stock price exceeded the exercise price of the options on the date of exercise.

At December 31, 2019 there was $88 million of total unrecognized compensation cost related to non-vested stock option awards which is expected to be recognized over a weighted-average period of 2.47 years. The total fair value of options vested during 2019, 2018 and 2017 was $61 million, $73 million and $87 million.

Restricted Stock Units—Restricted stock unit (RSU) awards entitle the holder to receive one share of common stock for each unit when the units vest. RSUs are issued to certain key employees and directors as compensation at fair market value at the date of grant. RSUs typically become fully vested over periods ranging from three to six years and are payable in Honeywell common stock upon vesting.

(Dollars in millions, except per share amounts)

The following table summarizes information about RSU activity for the three years ended December 31, 2019:

	Number of Restricted Stock Units	Weighted Average Grant Date Fair Value Per Share
Non-vested at December 31, 2016	4,467,343	$ 94.17
Granted	1,274,791	129.71
Vested	(1,289,892)	81.37
Forfeited	(505,415)	103.06
Non-vested at December 31, 2017	3,946,827	108.60
Spin related adjustment(1)	154,346	
Granted	1,360,338	153.46
Vested	(988,787)	91.68
Forfeited	(814,851)	117.40
Non-vested at December 31, 2018	3,657,873	125.35
Granted	1,200,202	162.43
Vested	(1,160,333)	104.32
Forfeited	(457,677)	134.50
Non-vested at December 31, 2019	3,240,065	$ 143.07

(1) Additional RSU grants to offset the dilutive impact of the spin-offs on non-vested RSUs.

As of December 31, 2019, there was approximately $217 million of total unrecognized compensation cost related to non-vested RSUs granted under our stock plans which is expected to be recognized over a weighted-average period of 2.86 years.

The following table summarizes the impact to the Consolidated Statement of Operations from RSUs:

	Years Ended December 31,		
	2019	2018	2017
Compensation expense	$ 106	$ 111	$ 97
Future income tax benefit recognized	21	21	19

Note 20. Commitments and Contingencies

Environmental Matters

The Company is subject to various federal, state, local and foreign government requirements relating to the protection of the environment. We believe that, as a general matter, our policies, practices and procedures are properly designed to prevent unreasonable risk of environmental damage and personal injury and that our handling, manufacture, use and disposal of hazardous substances are in accordance with environmental and safety laws and regulations. However, mainly because of past operations and operations of predecessor companies, we, like other companies engaged in similar businesses, have incurred remedial response and voluntary cleanup costs for site contamination and are a party to lawsuits and claims associated with environmental and safety matters, including past production of products containing hazardous substances. Additional lawsuits, claims and costs involving environmental matters are likely to continue to arise in the future.

With respect to environmental matters involving site contamination, the Company continually conducts studies, individually or jointly with other potentially responsible parties, to determine the feasibility of various remedial techniques. It is our policy to record appropriate liabilities for environmental matters when remedial efforts or damage claim payments are probable and the costs can be reasonably estimated. Such liabilities are based on our best estimate of the undiscounted future costs required to complete the remedial work. The recorded liabilities are adjusted periodically as remediation efforts progress or as additional technical, regulatory or legal information becomes available. Given the uncertainties regarding the status of laws, regulations, enforcement policies, the impact of other potentially responsible parties, technology and information related to individual sites, we do not believe it is possible to develop an estimate of the range of reasonably possible environmental loss in excess of our recorded liabilities. We expect to fund expenditures for these matters from operating cash flow. The timing of cash expenditures depends on a number of factors, including the timing of remedial investigations and feasibility studies, the timing of litigation and settlements of remediation liability, personal injury and property damage claims, regulatory approval of cleanup projects, remedial techniques to be utilized and agreements with other parties.

(Dollars in millions, except per share amounts)

The following table summarizes information concerning the Company's recorded liabilities for environmental costs:

	Years Ended December 31,		
	2019	2018	2017
Beginning of year	$ 755	$ 595	$ 511
Accruals for environmental matters deemed probable and reasonably estimable	213	395	287
Environmental liability payments	(256)	(218)	(212)
Other	(3)	(17)	9
End of year	$ 709	$ 755	$ 595

Environmental liabilities are included in the following balance sheet accounts:

	December 31,	
	2019	2018
Accrued liabilities	$ 222	$ 175
Other liabilities	487	580
	$ 709	$ 755

The Company does not currently possess sufficient information to reasonably estimate the amounts of environmental liabilities to be recorded upon future completion of studies, litigation or settlements, and neither the timing nor the amount of the ultimate costs associated with environmental matters can be determined although they could be material to our consolidated results of operations and operating cash flows in the periods recognized or paid. However, considering our past experience and existing reserves, we do not expect that environmental matters will have a material adverse effect on our consolidated financial position.

In conjunction with the Resideo spin-off, the Company entered into an indemnification and reimbursement agreement with a Resideo subsidiary, pursuant to which Resideo's subsidiary has an ongoing obligation to make cash payments to Honeywell in amounts equal to 90 percent of Honeywell's annual net spending for environmental matters at certain sites as defined in the agreement. The amount payable to Honeywell in any given year is subject to a cap of $140 million, and the obligation will continue until the earlier of December 31, 2043, or December 31 of the third consecutive year during which the annual payment obligation has been less than $25 million. Reimbursements associated with this agreement were $140 million and $25 million in 2019 and 2018, respectively and offset operating cash outflows incurred by the Company. As the Company records the accruals for environmental matters deemed probable and reasonably estimable related to the sites covered by the indemnification and reimbursement agreement, a corresponding receivable from Resideo for 90 percent of that accrual is also recorded. This receivable amount recorded in 2019 and 2018, subsequent to the spin-off, was $109 million and $50 million. As of December 31, 2019, Other Current Assets and Other Assets includes $140 million and $445 million representing the short-term and long-term portion of the receivable amount due from Resideo under the indemnification and reimbursement agreement. As of December 31, 2018, Other Current Assets and Other Assets includes $140 million and $476 million representing the short-term and long-term portion of the receivable amount due from Resideo under the indemnification and reimbursement agreement.

Asbestos Matters

Honeywell is named in asbestos related personal injury claims related to North American Refractories Company ("NARCO"), which was sold in 1986, and Bendix Friction Materials ("Bendix") business, which was sold in 2014.

(Dollars in millions, except per share amounts)

The following tables summarize information concerning NARCO and Bendix asbestos related balances:

Asbestos Related Liabilities

	Year Ended December 31, 2019			Year Ended December 31, 2018			Year Ended December 31, 2017		
	Bendix	NARCO	Total	Bendix	NARCO	Total	Bendix	NARCO	Total
Beginning of year	$ 1,623	$ 891	$ 2,514	$ 1,703	$ 907	$ 2,610	$ 1,789	$ 919	$ 2,708
Accrual for update to estimated liability	78	22	100	197	32	229	199	31	230
Change in estimated cost of future claims	(22)	—	(22)	(72)	—	(72)	(65)	—	(65)
Update of expected resolution values for pending claims	(4)	—	(4)	1	—	1	3	—	3
Asbestos related liability payments	(176)	(55)	(231)	(206)	(48)	(254)	(223)	(43)	(266)
End of year	$ 1,499	$ 858	$ 2,357	$ 1,623	$ 891	$ 2,514	$ 1,703	$ 907	$ 2,610

Insurance Recoveries for Asbestos Related Liabilities

	Year Ended December 31, 2019			Year Ended December 31, 2018			Year Ended December 31, 2017		
	Bendix	NARCO	Total	Bendix	NARCO	Total	Bendix	NARCO	Total
Beginning of year	$ 170	$ 307	$ 477	$ 191	$ 312	$ 503	$ 201	$ 319	$ 520
Probable insurance recoveries related to estimated liability	3	—	3	11	—	11	10	—	10
Insurance receipts for asbestos related liabilities	(39)	(29)	(68)	(33)	(5)	(38)	(20)	(7)	(27)
Insurance receivables settlements and write offs	19	3	22	1	—	1	—	—	—
Other	—	—	—	—	—	—	—	—	—
End of year	$ 153	$ 281	$ 434	$ 170	$ 307	$ 477	$ 191	$ 312	$ 503

NARCO and Bendix asbestos related balances are included in the following balance sheet accounts:

	December 31,	
	2019	2018
Other current assets	$ 42	$ 40

Insurance recoveries for asbestos related liabilities	392	437
	$ 434	$ 477
Accrued liabilities	$ 361	$ 245
Asbestos related liabilities	1,996	2,269
	$ 2,357	$ 2,514

NARCO Products—Honeywell's predecessor, Allied Corporation owned NARCO from 1979 to 1986. When the NARCO business was sold, Honeywell's predecessor entered into a cross-indemnity agreement with NARCO which included an obligation to indemnify the purchaser for asbestos claims. Such claims arise primarily from alleged occupational exposure to asbestos-containing refractory brick and mortar for high-temperature applications. NARCO ceased manufacturing these products in 1980, and the first asbestos claims were filed in the tort system against NARCO in 1983. Claims filings and related costs increased dramatically in the late 1990s through 2001, which led to NARCO filing for bankruptcy in January 2002. Once NARCO filed for bankruptcy, all then current and future NARCO asbestos claims were stayed against both NARCO and Honeywell pending the reorganization of NARCO.

Following the bankruptcy filing, in December 2002 Honeywell recorded a total NARCO asbestos liability of $3.2 billion, which was comprised of three components: (i) the estimated liability to settle pre-bankruptcy petition NARCO claims and certain post-petition settlements ($2.2 billion, referred to as "Pre-bankruptcy NARCO Liability"), (ii) the estimated liability related to then unasserted NARCO claims for the period 2004 through 2018 ($950 million, referred to as "NARCO Trust Liability"), and (iii) other NARCO bankruptcy-related obligations totaling $73 million.

When the NARCO Trust Liability of $950 million was established in 2002, the methodology for estimating the potential liability was based primarily on: (a) epidemiological projections of the future incidence of disease for the period 2004 through 2018, a fifteen-year period; (b) historical claims rates in the tort system for the five-year period prior to the bankruptcy filing date; and (c) anticipated NARCO Trust payment values set forth in the then current draft of the NARCO Trust Distribution Procedures. The methodology required estimating, by disease, three critical inputs: (i) likely number of claims to be asserted against the NARCO Trust in the future, (ii) percentage of those claims likely to receive payment, and (iii) payment values. The Company utilized outside asbestos liability valuation specialists to support our preparation of the NARCO Trust Liability estimate, which was based on a commonly accepted methodology used by numerous bankruptcy courts addressing 524(g) trusts.

In 2002, when the Company first established its initial liability, NARCO asbestos claims resolution shifted from the tort system to an anticipated NARCO Trust framework, where claims would be processed in accordance with established NARCO Trust Distribution Procedures, including strict medical and exposure criteria for a plaintiff to receive compensation. We believed at the time that the NARCO Trust's claims filing and resolution experience after the NARCO Trust became operational would be significantly different from pre-bankruptcy tort system experience in light of these more rigorous claims processing requirements in the NARCO Trust Distribution Procedures and Honeywell's active oversight of claims processing and approval. Given these anticipated differences, we believed that a 15-year time period was the appropriate horizon for establishing a probable and reasonably estimable liability for then unasserted NARCO claims as it represented our best estimate of the time period it would take for the NARCO Trust to be approved by the Bankruptcy Court, become fully operational and generate sufficiently reliable claims data (i.e., a data set which is statistically representative) to enable us to update our NARCO Trust Liability.

The NARCO Trust Distribution Procedures were finalized in 2006, and the Company updated its NARCO Trust Liability to reflect the final terms and payment values. The original 15-year period (from 2004 through 2018) for unasserted claims did not change as asbestos claims filings continued to be stayed against both Honeywell and NARCO. The 2006 update resulted in a range of the estimated liability for unasserted claims of $743 million to $961 million, and we believed that no amount within this range was a better estimate than any other amount. In accordance with ASC 450–Contingencies ("ASC 450"), we recorded the low end of the range of $743 million (the "2006 NARCO Trust Liability Estimate") which resulted in a reduction of $207 million in our NARCO Trust Liability.

NARCO emerged from bankruptcy on April 30, 2013, at which time a federally authorized 524(g) trust was established for the evaluation and resolution of all existing and future NARCO asbestos claims. Both Honeywell and NARCO are protected by a permanent channeling injunction barring all present and future individual actions in state or federal courts and requiring all asbestos related claims based on exposure to NARCO asbestos-containing products to be made against the NARCO Trust.

The NARCO Trust Agreement and the NARCO Trust Distribution Procedures are the principal documents setting forth the structure of the NARCO Trust. These documents establish Honeywell's evergreen funding obligations. Honeywell is obligated to fund NARCO asbestos claims submitted to the NARCO Trust which qualify for payment under the Trust Distribution Procedures (Annual Contribution Claims), subject to an annual cap of $145 million. However, the initial $100 million of claims processed through the NARCO Trust (the Initial Claims Amount) will not count against the annual cap and any unused portion of the Initial Claims Amount will roll over to subsequent years until fully utilized. These documents also establish the material operating rules for the NARCO Trust, including Honeywell audit rights and the criteria claimants must meet to have a valid claim paid. These claims payment criteria include providing the NARCO Trust with adequate medical evidence of the claimant's asbestos-related condition and credible evidence of exposure to a specific NARCO asbestos-containing product. Further, the NARCO Trust is eligible to receive cash dividends from Harbison-Walker International Inc ("HWI"), the reorganized and renamed entity that emerged, fully operational, from the NARCO bankruptcy. The NARCO Trust is required to use any funding received from HWI to pay Annual Contribution Claims until those funds are exhausted. It is only at this point that Honeywell's funding obligation to the Trust is triggered. Thus, there is an unrelated primary source for funding that affects Honeywell's funding of the NARCO Trust Liability.

Once operational, the NARCO Trust began to receive, process and pay claims that had been previously stayed pending the Trust becoming operational. As the NARCO Trust began to pay claims in 2014, we began to assert our on-going audit rights to review and monitor the claims processor's adherence to the established requirements of the NARCO Trust Distribution Procedures. While doing so, we identified several issues with the way the Trust was implementing the NARCO Trust Distribution Procedures. In 2015, Honeywell filed suit against the NARCO Trust in Bankruptcy Court alleging breach of certain provisions of the NARCO Trust Agreement and NARCO Trust Distribution Procedures. The parties agreed to dismiss the proceeding without prejudice pursuant to an 18-month Standstill Agreement, which expired in October 2017. Notwithstanding its expiration, claims processing continues, and Honeywell continues to negotiate and attempt to resolve remaining disputed issues (that is, instances where Honeywell believes the NARCO Trust is not processing claims in accordance with established NARCO Trust Distribution Procedures). Honeywell reserves the right to seek judicial intervention should negotiations fail.

After the NARCO Trust became effective in 2013, the $743 million NARCO Trust Liability was then comprised of:

(i) liability for unasserted claims; and

(ii) liability for claims asserted after the NARCO Trust became operational but not yet paid.

Although the Company knows the number of claims filed with the NARCO Trust each year, it is not able to determine at this time the portion of the NARCO Trust Liability which represents asserted versus unasserted claims due to the lack of sufficiently reliable claims data because of the claims processing issues described previously.

Honeywell continues to maintain the 2006 NARCO Trust Liability (the $743 million accrual less payments made to the NARCO Trust for Annual Contribution Claims), as there has not been sufficiently reliable claims data history to enable the Company to update that liability.

As of December 31, 2019, all cash dividends paid to the NARCO Trust by HWI has been used to pay Annual Contribution Claims. In the fourth quarter of 2019, Honeywell funded $29 million to the NARCO Trust for the payment of Annual Contribution Claims.

As of December 31, 2019, the Company's total NARCO asbestos liability of $858 million reflects Pre-bankruptcy NARCO liability of $144 million and NARCO Trust Liability of $714 million (the $743 million accrual for NARCO Trust Liability was reduced by the $29 million payment to the NARCO Trust in the fourth quarter of 2019 for Annual Contribution Claims). Through December 31, 2019, Pre-bankruptcy NARCO Liability has been reduced by approximately $2 billion since first established in 2002, largely related to settlement payments. The remaining Pre-bankruptcy NARCO liability principally represents estimated amounts owed pursuant to settlement agreements reached during the pendency of the NARCO bankruptcy proceedings that provide for the right to submit claims to the NARCO Trust subject to qualification under the terms of the settlement agreements and Trust Distribution Procedures. The other NARCO bankruptcy obligations were paid in 2013 and no further liability is recorded.

Honeywell continues to evaluate the appropriateness of the 2006 NARCO Trust Liability Estimate. Despite becoming effective in 2013, the NARCO Trust has experienced delays in becoming fully operational. Violations of the Trust Distribution Procedures and the resulting disputes and challenges, a standstill pending dispute resolution, and limited claims payments, have all contributed to the lack of sufficient normalized data based on actual claims processing experience in the Trust since it became operational. As a result, we have not been able to further update the NARCO Trust Liability aside from deducting payments to the NARCO Trust for Annual Contribution Claims. The 2006 million NARCO Trust Liability Estimate continues to be appropriate because of the unresolved pending claims in the Trust, some portion of which will result in payouts in the future, and because new claims continue to be filed with the NARCO Trust. When sufficiently reliable claims data exists, we will update our estimate of the NARCO Trust Liability and it is possible that a material change may need to be recognized.

The Company's insurance receivable of $281 million as of December 31, 2019, corresponding to the estimated liability for asserted and unasserted NARCO asbestos claims, reflects coverage which reimburses Honeywell for portions of NARCO-related indemnity and defense costs and is provided by a large number of insurance policies written by dozens of insurance companies in both the domestic insurance market and the London excess market. We conduct analyses to estimate the probable amount of insurance that is recoverable for asbestos claims. While the substantial majority of our insurance carriers are solvent, some of our individual carriers are insolvent, which has been considered in our analysis of probable recoveries. We made judgments concerning insurance coverage that we believe are reasonable and consistent with our historical dealings and our knowledge of any pertinent solvency issues surrounding insurers.

(Dollars in millions, except per share amounts)

Bendix Products—Bendix manufactured automotive brake linings that contained chrysotile asbestos in an encapsulated form. Claimants consist largely of individuals who allege exposure to asbestos from brakes from either performing or being in the vicinity of individuals who performed brake replacements. The following tables present information regarding Bendix related asbestos claims activity:

	Years Ended December 31,	
Claims Activity	**2019**	**2018**
Claims Unresolved at the beginning of year	6,209	6,280
Claims Filed	2,659	2,430
Claims Resolved	(2,388)	(2,501)
Claims Unresolved at the end of year	6,480	6,209

	December 31,	
Disease Distribution of Unresolved Claims	**2019**	**2018**
Mesothelioma and Other Cancer Claims	3,399	2,949
Nonmalignant Claims	3,081	3,260
Total Claims	6,480	6,209

Honeywell has experienced average resolution values per claim excluding legal costs as follows:

	Years Ended December 31,				
	2019	**2018**	**2017**	**2016**	**2015**
			(in whole dollars)		
Malignant claims	$ 50,200	$ 55,300	$ 56,000	$ 44,000	$ 44,000
Nonmalignant claims	$ 3,900	$ 4,700	$ 2,800	$ 4,485	$ 100

It is not possible to predict whether resolution values for Bendix-related asbestos claims will increase, decrease or stabilize in the future.

The Company's consolidated financial statements reflect an estimated liability for resolution of asserted (claims filed as of the financial statement date) and unasserted Bendix-related asbestos claims and excludes the Company’s legal fees to defend such asbestos claims which will continue to be expensed by the Company as they are incurred. We have valued Bendix asserted and unasserted claims using average resolution values for the previous five years. We update the resolution values used to estimate the cost of Bendix asserted and unasserted claims during the fourth quarter each year.

Honeywell reflects the inclusion of all years of epidemiological disease projection through 2059 when estimating the liability for unasserted Bendix-related asbestos claims. Such liability for unasserted Bendix-related asbestos claims is based on historic and anticipated claims filing experience and dismissal rates, disease classifications, and resolution values in the tort system for the previous five years.

Our insurance receivable corresponding to the liability for settlement of asserted and unasserted Bendix asbestos claims reflects coverage which is provided by a large number of insurance policies written by dozens of insurance companies in both the domestic insurance market and the London excess market. Based on our ongoing analysis of the probable insurance recovery, insurance receivables are recorded in the financial statements simultaneous with the recording of the estimated liability for the underlying asbestos claims. This determination is based on our analysis of the underlying insurance policies, our historical experience with our insurers, our ongoing review of the solvency of our insurers, judicial determinations relevant to our insurance programs, and our consideration of the impacts of any settlements reached with our insurers.

In conjunction with the Garrett spin-off, the Company entered into an indemnification and reimbursement agreement with a Garrett subsidiary, pursuant to which Garrett's subsidiary will have an obligation to make cash payments to Honeywell in amounts equal to (i) 90% of Honeywell's asbestos-related liability payments primarily related to the Bendix business in the United States, as well as certain environmental-related liability payments and accounts payable and non-United States asbestos-related liability payments, in each case related to legacy elements of the Garrett business, including the legal costs of defending and resolving such liabilities, less (ii) 90% of Honeywell's net insurance receipts and, as may be applicable, certain other recoveries associated with such liabilities. The amount payable to Honeywell in respect of such liabilities arising in any given year will be subject to a cap of approximately Euro 150 million (equivalent to $175 million at the time the indemnification and reimbursement agreement was entered into). The obligation will continue until the earlier of December 31, 2048, or December 31 of the third consecutive year during which the annual obligation has been less than the Euro equivalent, at the fixed exchange rate at time of the indemnification and reimbursement agreement was entered into, of $25 million. Reimbursements associated with this agreement were $152 million and $42 million in 2019 and 2018, respectively, and offset operating cash outflows incurred by the Company. As the Company records the accruals for matters covered by the agreement, a corresponding receivable from Garrett is recorded for 90 percent of that accrual as determined by the terms of the agreement. This receivable amount recorded in 2019 was $16 million. In 2018, subsequent to the spin-off, the Company recorded a reversal to the receivable for $17 million in the fourth quarter of 2018. As of December 31, 2019, Other Current Assets and Other Assets includes $115 million and $947 million representing the short-term and long-term portion of the receivable amount due from Garrett under the indemnification and reimbursement agreement. As of December 31, 2018, Other Current Assets and Other Assets includes $171 million and $1,058 million representing the short-term and long-term portion of the receivable amount due from Garrett under the indemnification and reimbursement agreement.

On December 2, 2019, Garrett Motion Inc. and Garrett ASASCO Inc. filed a Summons with Notice and commenced a lawsuit in the Commercial Division of the Supreme Court of the State of New York, County of New York seeking to invalidate the indemnification and reimbursement agreement between Garrett and Honeywell. Garrett seeks damages and a declaratory judgment based on various claims set forth in the Summons with Notice. On January 15, 2020, Garrett filed its complaint in the action, which asserted the same claims. We strongly believe that Garrett's allegations have no merit, nor are they material to Honeywell. We believe we have fully complied with our obligations under the Agreement and that the Agreement is enforceable.

On September 13, 2018, following completion of the Securities and Exchange Commission (SEC) Division of Corporation Finance’s review of our prior accounting for liabilities for unasserted Bendix-related asbestos claims, the SEC Division of Enforcement advised that it had opened an investigation related to this matter. On August 28, 2019, the SEC informed the Company that it had concluded its investigation and that it does not intend to recommend any enforcement action against Honeywell.

On October 31, 2018, David Kanefsky, a Honeywell shareholder, filed a putative class action complaint in the U.S. District Court for the District of New Jersey alleging violations of the Securities Exchange Act of 1934 and Rule 10b-5 related to the prior accounting for Bendix asbestos claims. On May 15, 2019, Wayne County Employees’ Retirement System, another Honeywell shareholder, filed a putative class action asserting the same claims relating to substantially the same alleged conduct in the same jurisdiction. On December 16, 2019, the court denied Wayne County Employees' Retirement System's motion to be appointed as substitute lead plaintiff in the Kanefsky action. On December 30, 2019, the lead plaintiff filed an amended complaint in the Kanefsky action. We believe the claims related to the prior accounting for Bendix asbestos claims have no merit.

Other Matters

The Company is subject to a number of other lawsuits, investigations and disputes (some of which involve substantial amounts claimed) arising out of the conduct of our business, including matters relating to commercial transactions, government contracts, product liability, prior acquisitions and divestitures, employee benefit plans, intellectual property, and environmental, health and safety matters. We recognize a liability for any contingency that is probable of occurrence and reasonably estimable. We continually assess the likelihood of adverse judgments of outcomes in these matters, as well as potential ranges of possible losses (taking into consideration any insurance recoveries), based on a careful analysis of each matter with the assistance of outside legal counsel and, if applicable, other experts. Included in these other matters are the following:

Honeywell v. United Auto Workers (UAW) et. al—In September 2011, the UAW and certain Honeywell retirees (Plaintiffs) filed a suit in the Eastern District of Michigan (the District Court) alleging that a series of Master Collective Bargaining Agreements (MCBAs) between Honeywell and the UAW provided the retirees with rights to lifetime, vested healthcare benefits that could never be changed or reduced. Plaintiffs alleged that Honeywell had violated those vested rights by implementing express limitations (CAPS) on the amount Honeywell contributed toward healthcare coverage for the retirees. Honeywell subsequently answered the UAW's complaint and asserted counterclaims, including for breach of implied warranty.

Between 2014 and 2015, Honeywell began enforcing the CAPS against former employees. In response, the UAW and certain of the Plaintiffs filed a motion seeking a ruling that the MCBAs do not limit Honeywell's obligation to contribute to healthcare coverage for those retirees.

On March 29, 2018, the District Court issued its opinion resolving all pending summary judgment motions, except for Honeywell's counterclaim for breach of implied warranty, which has since been dismissed without prejudice.

In the opinion, the District Court held that the MCBAs do not promise retirees vested, lifetime benefits that survive expiration of the MCBAs. Based on this ruling, Honeywell terminated the retirees healthcare coverage benefits altogether as of July 31, 2018. In response, the UAW filed a motion to enjoin Honeywell from completely terminating coverage as of July 31, 2018, arguing that the CAPS themselves are vested and that Honeywell must continue to provide retiree medical benefits at the capped level. On July 28, 2018, the District Court denied the UAW's motion and entered a final judgment consistent with its March 2018 ruling. The UAW has appealed this decision to the Sixth Circuit Court of Appeals. Honeywell believes the District Court's ruling will be upheld.

In the March 2018 opinion, the District Court also held that Honeywell is obligated under the MCBAs to pay the "full premium" for retiree healthcare rather than the capped amount. Based on this ruling, Honeywell would be required to pay monetary damages to retirees for any past years in which Honeywell paid less than the "full premium" of their healthcare coverage. Such damages would be limited, depending on the retiree group, to a two to three-year period ending when the 2017 MCBA expired, and Honeywell would have no ongoing obligation to continue funding healthcare coverage for subsequent periods. Honeywell has appealed the District Court's ruling on this "full premium" damages issue, and believes that the Sixth Circuit Court of Appeals will reverse the District Court on that issue. In the event the Sixth Circuit were to sustain the District Court's ruling on this issue, Honeywell would be liable for damages of at least $12 million.

Petrobras and Unaoil—We are cooperating with certain investigations by the U.S. Department of Justice (DOJ), the SEC and Brazilian authorities relating to our use of third parties who previously worked for our UOP business in Brazil in relation to Petróleo Brasileiro S.A. (Petrobras). The investigations are focused on compliance with the U.S. Foreign Corrupt Practices Act and similar Brazilian laws, and involve, among other things, document production and interviews with former and current management and employees. The DOJ and the SEC are also examining a matter involving a foreign subsidiary's prior engagement of Unaoil S.A.M. in Algeria. We are cooperating with the authorities in each of the above matters. While we cannot predict the outcome of these matters, based on the facts currently known to us, we do not anticipate that these matters will have a material adverse effect on our financial condition, results of operations, or cash flows.

In re Resideo Technologies, Inc. Securities Litigation—On January 7, 2020, The Gabelli Asset Fund and certain related parties filed a putative class action complaint against Resideo and Honeywell in the U.S. District Court for the District of Minnesota alleging violations of the Securities Exchange Act of 1934 and Rule 10b-5 related to Resideo's spinoff from Honeywell in October 2018. On January 27, 2020, this putative class action was consolidated with certain previously-filed actions asserting claims relating to substantially the same matters into a single class action under the title In re Resideo Technologies, Inc. Securities Litigation. We believe the allegations against Honeywell regarding the Resideo spinoff have no merit.

Given the uncertainty inherent in litigation and investigations (including the specific matters referenced above), we do not believe it is possible to develop estimates of reasonably possible loss in excess of current accruals for these matters (other than as specifically set forth above). Considering our past experience and existing accruals, we do not expect the outcome of these matters, either individually or in the aggregate, to have a material adverse effect on our consolidated financial position. Because most contingencies are resolved over long periods of time, potential liabilities are subject to change due to new developments, changes in settlement strategy or the impact of evidentiary requirements, which could cause us to pay damage awards or settlements (or become subject to equitable remedies) that could have a material adverse effect on our results of operations or operating cash flows in the periods recognized or paid.

(Dollars in millions, except per share amounts)

Warranties and Guarantees

In the normal course of business, the Company issues product warranties and product performance guarantees. We accrue for the estimated cost of product warranties and performance guarantees based on contract terms and historical experience at the time of sale. Adjustments to initial obligations for warranties and guarantees are made as changes to the obligations become reasonably estimable. The following table summarizes information concerning our recorded obligations for product warranties and product performance guarantees.

	Years Ended December 31,		
	2019	2018	2017
Beginning of year	$ 310	$ 408	$ 487
Accruals for warranties/guarantees issued during the year	173	208	215
Adjustment of pre-existing warranties/guarantees	(34)	(78)	(27)
Settlement of warranty/guarantee claims	(180)	(228)	(267)
End of year	$ 269	$ 310	$ 408

Product warranties and product performance guarantees are included in the following balance sheet accounts:

	December 31,	
	2019	2018
Accrued liabilities	$ 213	$ 243
Other liabilities	56	67
	$ 269	$ 310

Note 21. Pension and Other Postretirement Benefits

The Company sponsors a number of both funded and unfunded U.S. and non-U.S. defined benefit pension plans. Pension benefits for many of our U.S. employees are provided through non-contributory, qualified and non-qualified defined benefit plans. All non-union hourly and salaried employees joining Honeywell for the first time after December 31, 2012, are not eligible to participate in Honeywell's U.S. defined benefit pension plans. We also sponsor defined benefit pension plans which cover non-U.S. employees who are not U.S. citizens, in certain jurisdictions, principally the UK, Netherlands, Germany, and Canada. Other pension plans outside of the U.S. are not material to the Company either individually or in the aggregate.

The Company also sponsors postretirement benefit plans that provide health care benefits and life insurance coverage mainly to U.S. eligible retirees. None of Honeywell's U.S. employees are eligible for a retiree medical subsidy from the Company. In addition, the vast majority of Honeywell's U.S. retirees either have no Company subsidy or have a fixed-dollar subsidy amount. This significantly limits our exposure to the impact of future health care cost increases. The retiree medical and life insurance plans are not funded. Claims and expenses are paid from our operating cash flow.

(Dollars in millions, except per share amounts)

The following tables summarize the balance sheet impact, including the benefit obligations, assets and funded status associated with the Company's significant pension and other postretirement benefit plans.

	Pension Benefits			
	U.S. Plans		Non-U.S. Plans	
	2019	2018	2019	2018
Change in benefit obligation:				
Benefit obligation at beginning of year	$ 16,141	$ 18,151	$ 6,182	$ 7,019
Service cost	82	140	22	26
Interest cost	613	573	142	143
Plan amendments	—	—	—	30
Actuarial (gains) losses	2,064	(1,111)	708	(356)
Benefits paid	(1,111)	(1,137)	(269)	(264)
Settlements and curtailments	(507)	—	—	(9)
Foreign currency translation	—	—	107	(342)
Other	1	(475)	5	(65)
Benefit obligation at end of year	17,283	16,141	6,897	6,182
Change in plan assets:				
Fair value of plan assets at beginning of year	17,109	18,985	6,481	7,151
Actual return on plan assets	3,458	(303)	863	(173)
Company contributions	45	34	62	137
Benefits paid	(1,111)	(1,137)	(269)	(264)
Settlements and curtailments	(507)	—	—	—
Foreign currency translation	—	—	165	(378)
Other	1	(470)	5	8
Fair value of plan assets at end of year	18,995	17,109	7,307	6,481
Funded status of plans	$ 1,712	$ 968	$ 410	$ 299
Amounts recognized in Consolidated Balance Sheet consist of:				
Prepaid pension benefit cost(1)	$ 2,069	$ 1,295	$ 1,196	$ 1,094
Accrued pension liabilities—current(2)	(32)	(27)	(13)	(12)
Accrued pension liabilities—noncurrent(3)	(325)	(300)	(773)	(783)
Net amount recognized	$ 1,712	$ 968	$ 410	$ 299

(1) Included in Other assets on Consolidated Balance Sheet

(2) Included in Accrued liabilities on Consolidated Balance Sheet

(3) Included in Other liabilities on Consolidated Balance Sheet

(Dollars in millions, except per share amounts)

	Other Postretirement Benefits	
	2019	2018
Change in benefit obligation:		
Benefit obligation at beginning of year	$ 364	$ 530
Service cost	—	—
Interest cost	14	15
Plan amendments	(2)	(34)
Actuarial (gains) losses	(16)	(110)
Benefits paid	(35)	(37)
Benefit obligation at end of year	325	364
Change in plan assets:		
Fair value of plan assets at beginning of year	—	—
Actual return on plan assets	—	—
Company contributions	—	—
Benefits paid	—	—
Fair value of plan assets at end of year	—	—
Funded status of plans	$ (325)	$ (364)
Amounts recognized in Consolidated Balance Sheet consist of:		
Accrued liabilities	$ (40)	$ (62)
Postretirement benefit obligations other than pensions[1]	(285)	(302)
Net amount recognized	$ (325)	$ (364)

(1) Excludes non-U.S. plans of $41 million and $42 million in 2019 and 2018.

Amounts recognized in Accumulated other comprehensive (income) loss associated with the Company's significant pension and other postretirement benefit plans at December 31, 2019 and 2018 are as follows:

	Pension Benefits			
	U.S. Plans		Non-U.S. Plans	
	2019	2018	2019	2018
Prior service (credit) cost	$ (176)	$ (218)	$ 21	$ 20
Net actuarial loss	544	860	701	600
Net amount recognized	$ 368	$ 642	$ 722	$ 620

	Other Postretirement Benefits	
	2019	2018
Prior service (credit)	$ (166)	$ (226)
Net actuarial (gain) loss	(20)	(4)
Net amount recognized	$ (186)	$ (230)

(Dollars in millions, except per share amounts)

The components of net periodic benefit (income) cost and other amounts recognized in Other comprehensive (income) loss for the Company's significant pension and other postretirement benefit plans include the following components:

	Pension Benefits					
	U.S. Plans			Non-U.S. Plans		
Net Periodic Benefit Cost	**2019**	**2018**	**2017**	**2019**	**2018**	**2017**
Service cost	$ 82	$ 140	$ 172	$ 22	$ 26	$ 40
Interest cost	613	573	586	142	143	147
Expected return on plan assets	(1,117)	(1,426)	(1,262)	(331)	(443)	(411)
Amortization of prior service (credit) cost	(42)	(43)	(43)	—	(1)	(1)
Recognition of actuarial losses	35	—	41	88	37	46
Settlements and curtailments	4	—	18	—	(3)	—
Net periodic benefit (income) cost	$ (425)	$ (756)	$ (488)	$ (79)	$ (241)	$ (179)

Other Changes in Plan Assets and Benefits Obligations Recognized in Other Comprehensive (Income) Loss	U.S. Plans			Non-U.S. Plans		
	2019	**2018**	**2017**	**2019**	**2018**	**2017**
Actuarial (gains) losses	$ (277)	$ 619	$ (792)	$ 176	$ 250	$ (153)
Prior service cost (credit)	—	—	—	—	30	(1)
Prior service credit recognized during year	42	43	43	—	4	1
Actuarial losses recognized during year	(39)	—	(59)	(88)	(37)	(46)
Foreign currency translation	—	—	—	14	(34)	43
Total recognized in other comprehensive (income) loss	$ (274)	$ 662	$ (808)	$ 102	$ 213	$ (156)
Total recognized in net periodic benefit (income) cost and other comprehensive (income) loss	$ (699)	$ (94)	$ (1,296)	$ 23	$ (28)	$ (335)

(Dollars in millions, except per share amounts)

The estimated prior service (credit) for pension benefits that will be amortized from Accumulated other comprehensive (income) loss into net periodic benefit (income) cost in 2020 are expected to be $(42) million and $0 million for U.S. and non-U.S. pension plans.

	Other Postretirement Benefits		
	Years Ended December 31,		
Net Periodic Benefit Cost	**2019**	**2018**	**2017**
Service cost	$ —	$ —	$ —
Interest cost	14	15	19
Amortization of prior service (credit)	(62)	(52)	(58)
Recognition of actuarial losses	—	3	13
Net periodic benefit (income) cost	$ (48)	$ (34)	$ (26)

Other Changes in Plan Assets and Benefits Obligations Recognized in Other Comprehensive (Income) Loss	Years Ended December 31,		
	2019	**2018**	**2017**
Actuarial (gains) losses	$ (16)	$ (110)	$ (14)
Prior service cost (credit)	(2)	(34)	91
Prior service credit recognized during year	62	52	58
Actuarial losses recognized during year	—	(3)	(13)
Total recognized in other comprehensive (income) loss	$ 44	$ (95)	$ 122
Total recognized in net periodic benefit (income) cost and other comprehensive (income) loss	$ (4)	$ (129)	$ 96

The estimated net (gain) and prior service (credit) for other postretirement benefits that will be amortized from Accumulated other comprehensive (income) loss into net periodic benefit (income) cost in 2020 are expected to be $0 and $(63) million.

(Dollars in millions, except per share amounts)

Major actuarial assumptions used in determining the benefit obligations and net periodic benefit (income) cost for our significant benefit plans are presented in the following table as weighted averages.

	Pension Benefits					
	U.S. Plans			Non-U.S. Plans		
	2019	2018	2017	2019	2018	2017
Actuarial assumptions used to determine benefit obligations as of December 31:						
Discount rate	3.22 %	4.35 %	3.68 %	1.81 %	2.63 %	2.36 %
Expected annual rate of compensation increase	3.25 %	3.25 %	4.50 %	2.47 %	2.46 %	0.73 %
Actuarial assumptions used to determine net periodic benefit (income) cost for years ended December 31:						
Discount rate—benefit obligation	4.35 %	3.68 %	4.20 %	2.63 %	2.36 %	2.51 %
Discount rate—service cost	4.47 %	3.77 %	4.42 %	2.26 %	2.20 %	2.14 %
Discount rate—interest cost	3.94 %	3.27 %	3.49 %	2.34 %	2.08 %	2.19 %
Expected rate of return on plan assets	6.75 %	7.75 %	7.75 %	5.14 %	6.23 %	6.43 %
Expected annual rate of compensation increase	3.25 %	4.50 %	4.50 %	2.46 %	2.49 %	2.17 %

	Other Postretirement Benefits		
	2019	2018	2017
Actuarial assumptions used to determine benefit obligations as of December 31:			
Discount rate	3.03 %	4.07 %	3.39 %
Actuarial assumptions used to determine net periodic benefit cost for years ended December 31:			
Discount rate(1)	4.07 %	3.39 %	3.60 %

(1) Discount rate was 3.65% for 1/1/2017 through 2/28/2017. Rate was changed to 3.60% for the remainder of 2017 due to a Plan remeasurement as of 3/1/2017.

The discount rate for the Company's U.S. pension and other postretirement benefits plans reflects the current rate at which the associated liabilities could be settled at the measurement date of December 31. To determine discount rates for our U.S. pension and other postretirement benefit plans, we use a modeling process that involves matching the expected cash outflows of our benefit plans to a yield curve constructed from a portfolio of high quality, fixed-income debt instruments. We use the single weighted-average yield of this hypothetical portfolio as a discount rate benchmark. We utilize a full yield curve approach in the estimation of the service and interest cost components of net periodic pension benefit (income) for our significant pension plans. This approach applies the specific spot rates along the yield curve used in the determination of the pension benefit obligation to their underlying projected cash flows and provides a more precise measurement of service and interest costs by improving the correlation between projected cash flows and their corresponding spot rates. For our U.S. pension plans, the single weighted average spot rates used to determine service and interest costs for 2020 are 3.33% and 2.76%. The discount rate used to determine the other postretirement benefit obligation is lower principally due to a shorter expected duration of other postretirement plan obligations as compared to pension plan obligations.

(Dollars in millions, except per share amounts)

The Company plans to use an expected rate of return on U.S. plan assets of 6.15% for 2020 down from 6.75% for 2019 reflecting a decline in interest rates and additional re-balancing of assets to more fixed income. Our asset return assumption is based on historical plan asset returns over varying long-term periods combined with current market conditions and broad asset mix considerations with a focus on long-term trends rather than short-term market conditions. We review the expected rate of return on an annual basis and revise it as appropriate.

For non-U.S. benefit plans actuarial assumptions reflect economic and market factors relevant to each country.

Pension Benefits

The following amounts relate to the Company's significant pension plans with accumulated benefit obligations exceeding the fair value of plan assets:

	December 31,			
	U.S. Plans		Non-U.S. Plans	
	2019	2018	2019	2018
Projected benefit obligation	$ 357	$ 327	$ 1,018	$ 1,668
Accumulated benefit obligation	$ 347	$ 321	$ 973	$ 1,604
Fair value of plan assets	$ —	$ —	$ 233	$ 873

The accumulated benefit obligation for the Company's U.S. defined benefit pension plans was $17.2 billion and $16.1 billion and for our Non-U.S. defined benefit pension plans was $6.8 billion and $6.1 billion at December 31, 2019 and 2018.

The Company's asset investment strategy for our U.S. pension plans focuses on maintaining a diversified portfolio using various asset classes in order to achieve our long-term investment objectives on a risk adjusted basis. During 2019, we continued to employ a de-risking strategy which increases the matching characteristics of our assets relative to our obligation. Our long-term target allocations are as follows: 55%-70% fixed income securities and cash, 25%-40% equity securities, 5%-10% real estate investments, and 10%-20% other types of investments. Equity securities include publicly-traded stock of companies located both inside and outside the United States. Fixed income securities include corporate bonds of companies from diversified industries, mortgage-backed securities, and U.S. Treasuries. Real estate investments include direct investments in commercial properties and investments in real estate funds. Other types of investments include investments in private equity and hedge funds that follow several different strategies. We review our assets on a regular basis to ensure that we are within the targeted asset allocation ranges and, if necessary, asset balances are adjusted back within target allocations.

The Company's non-U.S. pension assets are typically managed by decentralized fiduciary committees with the Honeywell Corporate Investments group providing funding and investment guidance. Our non-U.S. investment policies are different for each country as local regulations, funding requirements, and financial and tax considerations are part of the funding and investment allocation process in each country.

In accordance with ASU 2015-07, “Fair Value Measurement (Topic 820)”, certain investments that are measured at fair value using the net asset value (NAV) per share (or its equivalent) practical expedient have not been classified in the fair value hierarchy. The fair value amounts presented in the following tables are intended to permit reconciliation of the fair value hierarchy to the amounts presented for the total pension benefits plan assets.

(Dollars in millions, except per share amounts)

The fair values of both the Company's U.S. and non-U.S. pension plans assets by asset category are as follows:

	U.S. Plans			
	December 31, 2019			
	Total	Level 1	Level 2	Level 3
Equities:				
Honeywell common stock	$ 2,857	$ 2,857	$ —	$ —
U.S. equities	1,227	1,227	—	—
Non-U.S. equities	—	—	—	—
Real estate investment trusts	—	—	—	—
Fixed income:				
Short term investments	1,395	1,395	—	—
Government securities	1,146	—	1,146	—
Corporate bonds	8,603	—	8,603	—
Mortgage/Asset-backed securities	1,023	—	1,023	—
Insurance contracts	8	—	8	—
Direct investments:				
Direct private investments	950	—	—	950
Real estate properties	619	—	—	619
Total	$ 17,828	$ 5,479	$ 10,780	$ 1,569
Investments measured at NAV:				
Private funds	1,019			
Real estate funds	42			
Hedge funds	—			
Commingled Funds	106			
Total assets at fair value	$ 18,995			

(Dollars in millions, except per share amounts)

	U.S. Plans			
	December 31, 2018			
	Total	Level 1	Level 2	Level 3
Equities:				
Honeywell common stock	$ 2,438	$ 2,438	$ —	$ —
U.S. equities	1,365	1,365	—	—
Non-U.S. equities	753	753	—	—
Real estate investment trusts	244	244	—	—
Fixed income:				
Short term investments	877	877	—	—
Government securities	993	—	993	—
Corporate bonds	6,824	—	6,824	—
Mortgage/Asset-backed securities	1,032	—	1,032	—
Insurance contracts	8	—	8	—
Direct investments:				
Direct private investments	829	—	—	829
Real estate properties	657	—	—	657
Total	$ 16,020	$ 5,677	$ 8,857	$ 1,486
Investments measured at NAV:				
Private funds	931			
Real estate funds	56			
Hedge funds	1			
Commingled funds	101			
Total assets at fair value	$ 17,109			

	Non-U.S. Plans			
	December 31, 2019			
	Total	Level 1	Level 2	Level 3
Equities:				
U.S. equities	$ 149	$ —	$ 149	$ —
Non-U.S. equities	1,384	54	1,330	—
Fixed income:				
Short-term investments	522	522	—	—
Government securities	3,006	—	3,006	—
Corporate bonds	1,746	—	1,746	—
Mortgage/Asset-backed securities	84	—	84	—
Insurance contracts	120	—	120	—
Investments in private funds:				
Private funds	69	—	35	34
Real estate funds	150	—	—	150
Total	$ 7,230	$ 576	$ 6,470	$ 184
Investments measured at NAV:				
Private funds	21			
Real estate funds	56			
Total assets at fair value	$ 7,307			

(Dollars in millions, except per share amounts)

	Non-U.S. Plans			
	December 31, 2018			
	Total	Level 1	Level 2	Level 3
Equities:				
U.S. equities	$ 429	$ 297	$ 132	$ —
Non-U.S. equities	1,356	44	1,312	—
Fixed income:				
Short-term investments	189	189	—	—
Government securities	2,572	—	2,572	—
Corporate bonds	1,468	—	1,468	—
Mortgage/Asset-backed securities	60	—	60	—
Insurance contracts	137	—	137	—
Investments in private funds:				
Private funds	46	—	12	34
Real estate funds	144	—	—	144
Total	$ 6,401	$ 530	$ 5,693	$ 178
Investments measured at NAV:				
Private funds	26			
Real estate funds	54			
Total assets at fair value	$ 6,481			

The following table summarizes changes in the fair value of Level 3 assets for both U.S. and Non-U.S. plans:

	U.S. Plans		Non-U.S. Plans	
	Direct Private Investments	Real Estate Properties	Private Funds	Real Estate Funds
Balance at December 31, 2017	$ 752	$ 597	$ 31	$ 149
Actual return on plan assets:				
Relating to assets still held at year-end	36	33	1	(4)
Relating to assets sold during the year	65	2	—	—
Purchases	95	47	2	—
Sales and settlements	(119)	(22)	—	(1)
Balance at December 31, 2018	$ 829	$ 657	$ 34	$ 144
Actual return on plan assets:				
Relating to assets still held at year-end	15	40	—	7
Relating to assets sold during the year	89	(23)	—	1
Purchases	216	48	—	—
Sales and settlements	(199)	(103)	—	(2)
Balance at December 31, 2019	$ 950	$ 619	$ 34	$ 150

The Company enters into futures contracts to gain exposure to certain markets. Sufficient cash or cash equivalents are held by our pension plans to cover the notional value of the futures contracts. At December 31, 2019 and 2018, our U.S. plans had contracts with notional amounts of $4,463 million and $2,808 million. At December 31, 2019 and 2018, our non-U.S. plans had contracts with notional amounts of $479 million and $111 million. In both our U.S. and non-U.S. pension plans, the notional derivative exposure is related to outstanding equity and fixed income futures contracts.

Common stocks, preferred stocks, real estate investment trusts, and short-term investments are valued at the closing price reported in the active market in which the individual securities are traded. Corporate bonds, mortgages, asset-backed securities, and government securities are valued either by using pricing models, bids provided by brokers or dealers, quoted prices of securities with similar characteristics or discounted cash flows and as such include adjustments for certain risks that may not be observable such as credit and liquidity risks. Certain securities are held in collective trust funds which are valued using net asset values provided by the administrators of the funds. Investments in private equity, debt, real estate and hedge funds and direct private investments are valued at estimated fair value based on quarterly financial information received from the investment advisor and/or general partner. Investments in real estate properties are valued on a quarterly basis using the income approach. Valuation estimates are periodically supplemented by third party appraisals.

(Dollars in millions, except per share amounts)

The Company's funding policy for qualified defined benefit pension plans is to contribute amounts at least sufficient to satisfy regulatory funding standards. In 2019, 2018, and 2017, we were not required to make contributions to our U.S. pension plans and no contributions were made. We are not required to make any contributions to our U.S. pension plans in 2020. In 2019, contributions of $43 million were made to our non-U.S. pension plans to satisfy regulatory funding requirements. In 2020, we expect to make contributions of cash and/or marketable securities of approximately $112 million to our non-U.S. pension plans to satisfy regulatory funding standards. Contributions for both our U.S. and non-U.S. pension plans do not reflect benefits paid directly from Company assets.

Benefit payments, including amounts to be paid from Company assets, and reflecting expected future service, as appropriate, are expected to be paid as follows:

	U.S. Plans	Non-U.S. Plans
2020	$ 1,159	$ 282
2021	1,151	288
2022	1,145	296
2023	1,138	303
2024	1,128	311
2025-2029	5,353	1,690

Other Postretirement Benefits

	December 31,	
	2019	2018
Assumed health care cost trend rate:		
Health care cost trend rate assumed for next year	7.00 %	7.00 %
Rate that the cost trend rate gradually declines to	5.00 %	5.00 %
Year that the rate reaches the rate it is assumed to remain at	2029	2029

The assumed health care cost trend rate has a significant effect on the amounts reported. A one-percentage-point change in the assumed health care cost trend rate would have the following effects:

	1 percentage point	
	Increase	Decrease
Effect on total of service and interest cost components	$ 1	$ (1)
Effect on postretirement benefit obligation	$ 14	$ (12)

Benefit payments reflecting expected future service, as appropriate, are expected to be paid as follows:

	Without Impact of Medicare Subsidy	Net of Medicare Subsidy

2020	$ 46	$ 41
2021	42	38
2022	39	35
2023	36	32
2024	22	20
2025-2029	95	84

(Dollars in millions, except per share amounts)

Note 22. Segment Financial Data

Honeywell globally manages its business operations through four reportable operating segments. Segment information is consistent with how management reviews the businesses, makes investing and resource allocation decisions and assesses operating performance.

Honeywell's senior management evaluates segment performance based on segment profit. Each segment's profit is measured as segment income (loss) before taxes excluding general corporate unallocated expense, interest and other financial charges, stock compensation expense, pension and other postretirement income (expense), repositioning and other charges, and other items within Other (income) expense.

	Years Ended December 31,		
	2019	2018	2017
Net Sales			
Aerospace			
Product	$ 8,766	$ 10,415	$ 10,067
Service	5,288	5,078	4,712
Total	14,054	15,493	14,779
Honeywell Building Technologies			
Product	4,395	7,868	8,396
Service	1,322	1,430	1,381
Total	5,717	9,298	9,777
Performance Materials and Technologies			
Product	8,732	8,589	8,521
Service	2,102	2,085	1,818
Total	10,834	10,674	10,339
Safety and Productivity Solutions			
Product	5,736	5,976	5,333
Service	368	361	306
Total	6,104	6,337	5,639
	$ 36,709	$ 41,802	$ 40,534
Depreciation and amortization			
Aerospace	$ 234	$ 281	$ 279
Honeywell Building Technologies	63	112	118
Performance Materials and Technologies	493	452	441
Safety and Productivity Solutions	222	216	219
Corporate	76	55	58
	$ 1,088	$ 1,116	$ 1,115
Segment Profit			
Aerospace	$ 3,607	$ 3,503	$ 3,288
Honeywell Building Technologies	1,165	1,608	1,650
Performance Materials and Technologies	2,433	2,328	2,206
Safety and Productivity Solutions	790	1,032	852
Corporate	(256)	(281)	(306)
	$ 7,739	$ 8,190	$ 7,690

(Dollars in millions, except per share amounts)

	December 31,		
	2019	2018	2017
Capital expenditures			
Aerospace	$ 272	$ 308	$ 380
Honeywell Building Technologies	43	125	88
Performance Materials and Technologies	314	254	303
Safety and Productivity Solutions	82	78	79
Corporate	128	63	181
	$ 839	$ 828	$ 1,031
Total Assets			
Aerospace	$ 11,378	$ 11,234	$ 11,769
Honeywell Building Technologies	5,968	6,010	10,592
Performance Materials and Technologies	16,888	17,827	17,203
Safety and Productivity Solutions	9,888	9,886	9,456
Corporate	14,557	12,816	10,450
	$ 58,679	$ 57,773	$ 59,470

A reconciliation of segment profit to consolidated income from continuing operations before taxes are as follows:

	Years Ended December 31,		
	2019	2018	2017
Segment Profit	$ 7,739	$ 8,190	$ 7,690
Interest and other financial charges	(357)	(367)	(316)
Stock compensation expense(1)	(153)	(175)	(176)
Pension ongoing income (expense)(2)	592	992	713
Pension mark-to-market expense(2)	(123)	(37)	(87)
Other postretirement income(2)	47	32	21
Repositioning and other charges(3)	(546)	(1,091)	(973)
Other(4)	360	(57)	78
Income before taxes	$ 7,559	$ 7,487	$ 6,950

(1) Amounts included in Selling, general and administrative expenses.

(2) Amounts included in Cost of products and services sold and Selling, general and administrative expenses (service costs) and Other income/expense (non-service cost components).

(3) Amounts included in Cost of products and services sold, Selling, general and administrative expenses, and Other income/expense.

(4) Amounts include the other components of Other income/expense not included within other categories in this reconciliation. Equity income/loss of affiliated companies is included in segment profit.

(Dollars in millions, except per share amounts)

Note 23. Geographic Areas—Financial Data

	Net Sales[1]			Long-lived Assets[2]		
	Years Ended December 31,			December 31,		
	2019	2018	2017	2019	2018	2017
United States	$ 21,910	$ 23,841	$ 22,722	$ 3,649	$ 3,601	$ 3,604
Europe	7,424	10,066	10,400	579	571	927
Other International	7,375	7,895	7,412	1,097	1,124	1,395
	$ 36,709	$ 41,802	$ 40,534	$ 5,325	$ 5,296	$ 5,926

(1) Sales between geographic areas approximate market and are not significant. Net sales are classified according to their country of origin. Included in United States net sales are export sales of $5,415 million, $5,293 million and $4,974 million in 2019, 2018 and 2017.

(2) Long-lived assets are comprised of property, plant and equipment - net.

Note 24. Supplemental Cash Flow Information

	Years Ended December 31,		
	2019	2018	2017
Net payments for repositioning and other charges:			
Severance and exit cost payments	$ (249)	$ (285)	$ (177)
Environmental payments	(256)	(218)	(212)
Reimbursement receipts	292	67	—
Insurance receipts for asbestos related liabilities	68	38	27
Asbestos related liability payments	(231)	(254)	(266)
	$ (376)	$ (652)	$ (628)
Interest paid, net of amounts capitalized	$ 344	$ 353	$ 306
Income taxes paid, net of refunds	1,564	1,566	1,751
Non-cash investing and financing activities:			
Common stock contributed to savings plans	159	52	172
Marketable securities contributed to non-U.S. pension plans	—	99	89

(Dollars in millions, except per share amounts)

Note 25. Unaudited Quarterly Financial Information

	2019				
	Mar. 31	June 30	Sept. 30	Dec. 31	Year
Net sales	$ 8,884	$ 9,243	$ 9,086	$ 9,496	$ 36,709
Gross profit	3,005	3,149	3,048	3,168	12,370
Net income attributable to Honeywell	1,416	1,541	1,624	1,562	6,143
Earnings per common share—basic(1)	1.94	2.13	2.26	2.19	8.52
Earnings per common share—assuming dilution(1)	1.92	2.10	2.23	2.16	8.41
Cash dividends per common share	0.820	0.820	0.820	0.900	3.360

	2018(2)				
	Mar. 31	June 30	Sept. 30	Dec. 31	Year
Net sales	$ 10,392	$ 10,919	$ 10,762	$ 9,729	$ 41,802
Gross profit	3,201	3,305	3,206	3,044	12,756
Net income attributable to Honeywell	1,439	1,267	2,338	1,721	6,765
Earnings per common share—basic(1)	1.92	1.70	3.15	2.34	9.10
Earnings per common share—assuming dilution(1)	1.89	1.68	3.11	2.31	8.98
Cash dividends per common share	0.745	0.745	0.745	0.820	3.055

(1) Total for the full year may differ from the sum of the individual quarters due to the requirement to use weighted average shares each quarter, which may fluctuate with share repurchases and share issuances, and due to the impact of losses in a quarter.

(2) The results of operations for Transportation Systems business and Homes and Global Distribution business are included in the Consolidated Statement of Operations through the effective dates of the respective spin-offs.

Report of Independent Registered Public Accounting Firm

To the shareowners and the Board of Directors of Honeywell International Inc.

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated balance sheets of Honeywell International Inc. and subsidiaries (the "Company") as of December 31, 2019 and 2018, and the related consolidated statements of operations, comprehensive income, shareowners' equity, and cash flows, for each of the three years in the period ended December 31, 2019, and the related notes (collectively referred to as the "financial statements"). We also have audited the Company's internal control over financial reporting as of December 31, 2019, based on criteria established in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2019 and 2018, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2019, in conformity with accounting principles generally accepted in the United States of America ("generally accepted accounting principles"). Also, in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2019, based on criteria established in *Internal Control - Integrated Framework (2013)* issued by COSO.

Basis for Opinions

The Company's management is responsible for these financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Report on Internal Control Over Financial Reporting. Our responsibility is to express an opinion on these financial statements and an opinion on the Company's internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the financial statements included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures to respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

Definition and Limitations of Internal Control over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Critical Audit Matters

The critical audit matters communicated below are matters arising from the current-period audit of the financial statements that were communicated or required to be communicated to the audit committee and that (1) relate to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the financial statements, taken as a whole, and we are not, by communicating the critical audit matters below, providing separate opinions on the critical audit matters or on the accounts or disclosures to which they relate.

Asbestos Related Liabilities - North American Refractories Company (NARCO) Trust Liability - Refer to Note 20 to the financial statements

Critical Audit Matter Description

The Company is named in asbestos related personal injury claims related to a predecessor company, NARCO. Such claims arise primarily from alleged occupational exposure to asbestos-containing refractory brick and mortar for high-temperature applications.

Since becoming effective in 2013, the NARCO Trust has experienced delays in becoming fully operational. Disputes and challenges regarding violations of the Trust Distribution Procedures, an expired 18-month standstill agreement and limited claims payments, have all contributed to a lack of sufficient normalized data based on actual claims processing experience in the NARCO Trust.

Although the Company knows the number of claims filed with the NARCO Trust each year, it is not able at this time to determine the portion of the NARCO Trust Liability which represents asserted versus unasserted claims due to the lack of sufficiently reliable claims data.

Maintaining the NARCO Trust Liability is inherently subjective as it requires management to make significant assumptions and judgements regarding the sufficiency and reliability of historical claims filing data and experience and expected future claims filing rates.

Given the subjectivity in maintaining the NARCO Trust Liability the auditing of the NARCO Trust Liability required a high degree of auditor judgment.

How the Critical Audit Matter Was Addressed in the Audit

Our audit procedures related to the NARCO Trust Liability included the following, among others:

- We tested the effectiveness of internal controls over the annual third-party assessment of the sufficiency and reliability of the NARCO Trust claims data including controls over the review of management's assumptions and claims data used to estimate the NARCO Trust Liability.
- We made inquiries of internal and external legal counsel regarding the regulatory and litigation environments related to the NARCO Trust Liability.
- With the assistance of our internal actuarial specialists, we evaluated NARCO Trust claims data to assess the reasonableness of management's conclusion that such data is not sufficiently reliable to enable the Company to update the estimate of the recorded NARCO Trust Liability.

Revenue Recognition and Contracts with Customers - Long-Term Fixed Price Contracts (Performance Materials and Technologies (PMT)) - Refer to Note 1 and Note 7 to the financial statements

Critical Audit Matter Description

The Company's PMT segment develops and manufactures advanced materials, process technologies, and automation solutions. A portion of PMT's revenue is generated from long-term fixed price contracts whereby revenue is recognized over the contract term ("over time") as the work progresses and control of the goods and services is transferred to the customer. Revenue for these contracts is recognized based on the extent of progress toward completion, generally measured by using a cost-to-cost basis input method.

Accounting for PMT's long-term fixed price contracts requires management's judgment in estimating total contract costs. Contract costs, which can be incurred over several years, are largely determined based on negotiated or estimated purchase contract terms and consider factors such as historical performance, technical and schedule risk, internal and subcontractor performance trends, and anticipated labor agreements.

Given the significant judgments necessary to estimate costs associated with these long-term contracts, auditing PMT's long-term fixed price contracts requires a high degree of auditor judgment.

How the Critical Audit Matter Was Addressed in the Audit

Our audit procedures related to PMT's long-term fixed price contracts included the following, among others:

- We tested the effectiveness of internal controls over the recognition of revenue and the determination of estimated contract costs including controls over the review of management's assumptions and key inputs used to recognize revenue and costs on long-term fixed price contracts using the cost-to-cost input method.

- We evaluated the appropriateness and consistency of management's methods and assumptions used to recognize revenue and costs on long-term fixed price contracts using the cost-to-cost input method to recognize revenue over time.

- We selected a sample of long-term fixed price contracts and evaluated the estimates of total cost for each of the long-term fixed price contracts by:

    - Comparing costs incurred to date to the costs management estimated to be incurred to date.

    - Evaluating management's ability to achieve the estimates of total cost by performing corroborating inquiries with Company personnel, including project managers, and comparing the estimates to documentation such as management's work plans, contract terms and requirements, and purchase orders with suppliers. Our evaluation of management's assumptions included consideration of historical and current project performance such as consistency of gross margin, identified risks related to project timing including technical and schedule matters, and the status of internal and third-party activities such as hardware, software, and labor.

    - Performing a substantive analytical procedure, in which we compared the estimated costs to complete to an independent estimate of costs to complete that factored in information obtained from the corroborating inquiries and documentation obtained such as management's work plans, contract terms and requirements, and purchase orders with suppliers.

/s/ Deloitte & Touche LLP

Charlotte, North Carolina
February 14, 2020

We have served as the Company's auditor since 2014.

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure

Not Applicable.

Item 9A. Controls and Procedures

Honeywell management maintains disclosure controls and procedures designed to provide reasonable assurance that information required to be disclosed in reports filed under the Securities Exchange Act of 1934, as amended (Exchange Act) is recorded, processed, summarized and reported within the specified time periods and accumulated and communicated to our management, including our principal executive officer and principal financial officer, as appropriate to allow timely decisions regarding required disclosure. There have been no changes that have materially affected, or are reasonably likely to materially affect, Honeywell's internal control over financial reporting that have occurred during the quarter ended December 31, 2019.

Our management, with the participation of our CEO and CFO, evaluated the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15(e) or 15d-15(e) promulgated under the Exchange Act) at December 31, 2019. Based on these evaluations, our CEO and CFO concluded that our disclosure controls and procedures required by paragraph (b) of Rules 13a-15 or 15d-15 were effective as of December 31, 2019.

Management's Report on Internal Control Over Financial Reporting

Honeywell management is responsible for establishing and maintaining adequate internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting as defined in Rules 13a-15(f) and 15d-15(f) under the Securities Exchange Act of 1934. Honeywell's internal control over financial reporting is a process designed to provide reasonable assurance to our management and board of directors regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements.

Management assessed the effectiveness of Honeywell's internal control over financial reporting as of December 31, 2019. In making this assessment, management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in *Internal Control—Integrated Framework (2013)*.

Based on this assessment, management determined that Honeywell maintained effective internal control over financial reporting as of December 31, 2019.

The effectiveness of Honeywell's internal control over financial reporting as of December 31, 2019 has been audited by Deloitte & Touche LLP, an independent registered public accounting firm, as stated in their report which is included in Item 8. Financial Statements and Supplementary Data.

Item 9B. Other Information

Not Applicable.

PART III.

Item 10. Directors and Executive Officers of the Registrant

Information relating to the Directors of Honeywell, as well as information relating to compliance with Section 16(a) of the Securities Exchange Act of 1934, will be contained in our definitive Proxy Statement involving the election of the Directors, which will be filed with the SEC pursuant to Regulation 14A not later than 120 days after December 31, 2019, and such information is incorporated herein by reference. Certain other information relating to the Executive Officers of Honeywell appears in Part I of this Annual Report on Form 10-K under the heading Executive Officers of the Registrant.

The members of the Audit Committee of our Board of Directors are: George Paz (Chair), Kevin Burke, Jaime Chico Pardo (*ex officio* member), D. Scott Davis, Linnet Deily, Judd Gregg and Robin L. Washington. The Board has determined that Mr. Paz, Mr. Davis and Ms. Washington are audit committee financial experts as defined by applicable SEC rules and that Mr. Paz, Mr. Burke, Mr. Davis, Ms. Deily and Ms. Washington satisfy the accounting or related financial management expertise criteria established by the NYSE. All members of the Audit Committee are independent as that term is defined in applicable SEC rules and NYSE listing standards.

Honeywell's corporate governance policies and procedures, including the Code of Business Conduct, Corporate Governance Guidelines and Charters of the Committees of the Board of Directors are available, free of charge, on our website under the heading Investor Relations (see Corporate Governance), or by writing to Honeywell, 300 South Tryon Street, Charlotte, North Carolina 28202, c/o Vice President and Corporate Secretary. Honeywell's Code of Business Conduct applies to all Honeywell directors, officers (including the Chief Executive Officer, Chief Financial Officer and Controller) and employees. Amendments to or waivers of the Code of Business Conduct granted to any of Honeywell's directors or executive officers will be published on our website within five business days of such amendment or waiver.

Item 11. Executive Compensation

Information relating to executive compensation is contained in the Proxy Statement referred to above in Item 10. Directors and Executive Officers of the Registrant, and such information is incorporated herein by reference.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters

Information relating to security ownership of certain beneficial owners and management and related stockholder matters is contained in the Proxy Statement referred to above in Item 10. Directors and Executive Officers of the Registrant, and such information is incorporated herein by reference.

EQUITY COMPENSATION PLANS

As of December 31, 2019, information about our equity compensation plans is as follows:

Plan category	Number of Shares to be Issued Upon Exercise of Outstanding Options, Warrants and Rights (a)	Weighted-Average Exercise Price of Outstanding Options, Warrants and Rights (b)	Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans (Excluding Securities Reflected in Column (a)) (c)
Equity compensation plans approved by security holders	22,496,879 (1)	109.87 (2)	40,001,939 (3)
	293,763 (4)	N/A (5)	N/A (6)

Equity compensation plans not approved by security holders			
Total	22,790,642	109.87	40,001,939

(1) Equity compensation plans approved by shareowners which are included in column (a) of the table are the 2016 Stock Incentive Plan, the 2011 Stock Incentive Plan, and the 2006 Stock Incentive Plan (including 18,473,640

shares of Common Stock to be issued for options; 2,820,462 RSUs subject to continued employment; 402,054 RSUs at target level and subject to company performance metrics and continued employment, and 525,252 deferred RSUs); and the 2016 Stock Plan for Non-Employee Directors and the 2006 Stock Plan for Non-Employee Directors (including 257,922 shares of Common Stock to be issued for options; and 17,549 RSUs subject to continued services). RSUs included in column (a) of the table represent the full number of RSUs awarded and outstanding whereas the number of shares of Common Stock to be issued upon vesting will be lower than what is reflected on the table because the value of shares required to meet employee tax withholding requirements are not issued.

Because the number of future shares that may be distributed to employees participating in the Honeywell Global Stock Plan is unknown, no shares attributable to that plan are included in column (a) of the table above.

(2) Column (b) relates to stock options and does not include any exercise price for RSUs because an RSU's value is dependent upon attainment of certain performance goals or continued employment or service and they are settled for shares of Common Stock on a one-for-one basis.

(3) The number of shares that may be issued under the 2016 Stock Incentive Plan as of December 31, 2019 is 37,364,854 which includes the following additional shares that may again be available for issuance: shares that are settled for cash, expire, are canceled, or under similar prior plans, are tendered as option exercise price or tax withholding obligations, are reacquired with cash option exercise price or with monies attributable to any tax deduction to Honeywell upon the exercise of an option, or are under any outstanding awards assumed under any equity compensation plan of an entity acquired by Honeywell. No securities are available for future issuance under the 2011 Stock Incentive Plan or the 2006 Stock Incentive Plan.

The number of shares that may be issued under the Honeywell Global Stock Plan as of December 31, 2019 is 1,770,812. This plan is an umbrella plan for three plans described below maintained solely for eligible employees of participating non-U.S. countries.

- The UK Sharebuilder Plan allows an eligible UK employee to invest taxable earnings in Common Stock. The Company matches those shares and dividends paid are used to purchase additional shares of Common Stock. For the year ending December 31, 2019, 34,787 shares were credited to participants' accounts under the UK Sharebuilder Plan.
- The Honeywell Aerospace Ireland Share Participation Plan and the Honeywell Measurex (Ireland) Limited Group Employee Profit Sharing Plan allow eligible Irish employees to contribute a percentage of base pay and/or bonus that is invested in Common Stock. For the year ending December 31, 2019, 2,083 shares of Common Stock were credited to participants' accounts under these plans.

The remaining 866,273 shares included in column (c) are shares remaining under the 2016 Stock Plan for Non-Employee Directors.

(4) Equity compensation plans not approved by shareowners included in the table refers to the Honeywell Excess Benefit Plan and Supplemental Savings Plan.

The Honeywell Excess Benefit Plan and Supplemental Savings Plan for highly compensated employees is an unfunded, non-tax qualified plan that provides benefits equal to the employee deferrals and company matching allocations that would have been provided under Honeywell's U.S. tax-qualified savings plan if the Internal Revenue Code limitations on compensation and contributions did not apply. The Company matching contribution is credited to participants' accounts in the form of notional shares of Common Stock. The notional shares are distributed in the form of actual shares of Common Stock. The number of shares to be issued under this plan based on the value of the notional shares as of December 31, 2019 is 293,763.

(5) Column (b) does not include any exercise price for notional shares allocated to employees under Honeywell's equity compensation plans not approved by shareowners because all of these shares are only settled for shares of Common Stock on a one-for-one basis.

(6) The amount of securities available for future issuance under the Honeywell Excess Benefit Plan and Supplemental Savings Plan is not determinable because the number of securities that may be issued under this plan depends upon the amount deferred to the plan by participants in future years.

Item 13. Certain Relationships and Related Transactions

Information relating to certain relationships and related transactions is contained in the Proxy Statement referred to above in Item 10. Directors and Executive Officers of the Registrant, and such information is incorporated herein by reference.

Item 14. Principal Accounting Fees and Services

Information relating to fees paid to and services performed by Deloitte & Touche LLP and our Audit Committee’s pre-approval policies and procedures with respect to non-audit services are contained in the Proxy Statement referred to above in Item 10. Directors and Executive Officers of the Registrant, and such information is incorporated herein by reference.

PART IV.

Item 15. Exhibits and Financial Statement Schedules

Item 16. Form 10-K Summary

None.

EXHIBIT INDEX

Exhibit No.	Description
3(i)	Amended and Restated Certificate of Incorporation of Honeywell International Inc., as amended April 23, 2018 (incorporated by reference to Exhibit 3(i) to Honeywell's Form 10-Q for the quarter ended June 30, 2018)
3(ii)	By-laws of Honeywell International Inc., as amended April 23, 2018 (incorporated by reference to Exhibit 3(ii) to Honeywell's 10-Q for the quarter ended June 30, 2018)
4.1	Honeywell International Inc. is a party to several long-term debt instruments under which, in each case, the total amount of securities authorized does not exceed 10% of the total assets of Honeywell and its subsidiaries on a consolidated basis. Pursuant to paragraph 4(iii)(A) of Item 601(b) of Regulation S-K, Honeywell agrees to furnish a copy of such instruments to the Securities and Exchange Commission upon request.
4.2	Description of Honeywell International Inc. Securities Registered Pursuant to Section 12 of the Securities Exchange Act of 1934 (filed herewith)
10.1*	Deferred Compensation Plan for Non-Employee Directors of Honeywell International Inc., as amended and restated (incorporated by reference to Exhibit 10.2 to Honeywell's Form 10-Q for quarter ended June 30, 2003)
10.2*	Amendment to Deferred Compensation Plan for Non-Employee Directors of Honeywell International Inc., as amended and restated (incorporated by reference to Exhibit 10.1 to Honeywell's Form 8-K filed December 21, 2004)
10.3*	Amendment to Deferred Compensation Plan for Non-Employee Directors of Honeywell International Inc., as amended and restated (incorporated by reference to Exhibit 10.2 to Honeywell's Form 10-K for the year ended December 31, 2005)
10.4*	Honeywell International Inc. Incentive Compensation Plan for Executive Employees, as amended and restated (incorporated by reference to Exhibit 10.4 to Honeywell's Form 10-K for the year ended December 31, 2018)
10.5*	Honeywell Excess Benefit Plan and Honeywell Supplemental Savings Plan, as amended and restated (filed herewith)
10.6*	Honeywell International Inc. Severance Plan for Designated Officers, as amended and restated (incorporated by reference to Exhibit 10.6 to Honeywell's Form 10-K for the year ended December 31, 2013)
10.7*	Honeywell Deferred Incentive Compensation Plan, as amended and restated (filed herewith)
10.8*	Honeywell International Inc. Supplemental Pension Plan, as amended and restated (incorporated by reference to Exhibit 10.10 to Honeywell's Form 10-K for the year ended December 31, 2008)
10.9*	Amendment to Honeywell International Inc. Supplemental Pension Plan, as amended and restated (incorporated by reference to Exhibit 10.10 to Honeywell's Form 10-K for the year ended December 31, 2009)
10.10*	Amendment to Honeywell International Inc. Supplemental Pension Plan, as amended and restated (incorporated by reference to Exhibit 10.7 to Honeywell's Form 10-K for the year ended December 31, 2015)
10.11*	Honeywell International Inc. Supplemental Executive Retirement Plan for Executives in Career Band 6 and Above, as amended and restated (incorporated by reference to Exhibit 10.12 to Honeywell's Form 10-K for the year ended December 31, 2008)
10.12*	Amendment to Honeywell International Inc. Supplemental Executive Retirement Plan for Executives in Career Band 6 and Above, as amended and restated (incorporated by reference to Exhibit 10.12 to Honeywell's Form 10-K for the year ended December 31, 2009)
10.13*	Amendment to Honeywell International Inc. Supplemental Executive Retirement Plan for Executives in Career Band 6 and Above, as amended and restated (incorporated by reference to Exhibit 10.9 to Honeywell's Form 10-K for the year ended December 31, 2013)
10.14*	

Amendment to Honeywell International Inc. Supplemental Executive Retirement Plan for Executives in Career Band 6 and Above, as amended and restated (incorporated by reference to Exhibit 10.8 to Honeywell's Form 10-K for the year ended December 31, 2015)

Exhibit No.	Description
10.15*	Honeywell Supplemental Defined Benefit Retirement Plan, as amended and restated (incorporated by reference to Exhibit 10.13 to Honeywell's Form 10-K for the year ended December 31, 2008)
10.16*	Amendment to Honeywell Supplemental Defined Benefit Retirement Plan, as amended and restated (incorporated by reference to Exhibit 10.13 to Honeywell's Form 10-K for the year ended December 31, 2009)
10.17*	Amendment to Honeywell Supplemental Defined Benefit Retirement Plan, as amended and restated (incorporated by reference to Exhibit 10.9 to Honeywell's Form 10-K for the year ended December 31, 2015)
10.18*	Honeywell International Inc. Severance Plan for Corporate Staff Employees (Involuntary Termination Following a Change in Control), as amended and restated (incorporated by reference to Exhibit 10.12 to Honeywell's Form 10-K for the year ended December 31, 2013)
10.19*	Honeywell Supplemental Retirement Plan (incorporated by reference to Exhibit 10.24 to Honeywell's Form 10-K for the year ended December 31, 2006)
10.20*	2006 Stock Incentive Plan of Honeywell International Inc. and Its Affiliates, as amended and restated (incorporated by reference to Exhibit 10.26 to Honeywell's Form 10-K for the year ended December 31, 2008)
10.21*	Amendment to the 2006 Stock Incentive Plan of Honeywell International Inc. and Its Affiliates, as amended and restated (incorporated by reference to Exhibit 10.1 to Honeywell's 10-Q for the quarter ended March 31, 2011)
10.22*	2006 Stock Incentive Plan of Honeywell International Inc. and Its Affiliates—Form of Option Award Agreement (incorporated by reference to Exhibit 10.2 to Honeywell's Form 10-Q for the quarter ended March 31, 2009)
10.23*	2006 Stock Plan for Non-Employee Directors of Honeywell International Inc., as amended and restated (incorporated by reference to Exhibit 10.31 to Honeywell's Form 10-K for the year ended December 31, 2008)
10.24*	Amendment to 2006 Stock Plan for Non-Employee Directors of Honeywell International Inc., as amended and restated (incorporated by reference to Exhibit 10.27 to Honeywell's Form 10-K for the year ended December 31, 2011)
10.25*	Amendment to 2006 Stock Plan for Non-Employee Directors of Honeywell International Inc., as amended and restated (incorporated by reference to Exhibit 10.24 to Honeywell's Form 10-K for the year ended December 31, 2014)
10.26*	2006 Stock Plan for Non-Employee Directors of Honeywell International Inc.—Form of Option Agreement (incorporated by reference to Exhibit 10.3 to Honeywell's Form 10-Q for the quarter ended March 31, 2012)
10.27*	2006 Stock Plan for Non-Employee Directors of Honeywell International Inc.—Form of Restricted Unit Agreement (incorporated by reference to Exhibit 10.4 to Honeywell's Form 10-Q for the quarter ended March 31, 2012)
10.28*	2007 Honeywell Global Employee Stock Plan (incorporated by reference to Honeywell's Proxy Statement, dated March 12, 2007, filed pursuant to Rule 14a-6 of the Securities Exchange Act of 1934)
10.29*	2006 Stock Incentive Plan of Honeywell International Inc. and Its Affiliates—Form of Option Award Agreement, Form 2 (incorporated by reference to Exhibit 10.37 to Honeywell's Form 10-K for the year ended December 31, 2010)
10.30*	Letter Agreement dated September 3, 2009 between Honeywell and Timothy Mahoney (incorporated by reference to Exhibit 10.38 to Honeywell's Form 10-K for the year ended December 31, 2010)
10.31*	Form of Honeywell International Inc. Noncompete Agreement for Senior Executives (incorporated by reference to Exhibit 10.39 to Honeywell's Form 10-K for the year ended December 31, 2010)
10.32*	2011 Stock Incentive Plan of Honeywell International Inc. and its Affiliates (incorporated by reference to Honeywell's Proxy Statement, dated March 10, 2011, filed pursuant to Rule 14a-6 of the Securities Exchange Act of 1934)

Exhibit No.	Description
10.33*	Amendment to 2011 Stock Incentive Plan of Honeywell International Inc. and its Affiliates (incorporated by reference to Exhibit 10.36 to Honeywell's Form 10-K for the year ended December 31, 2012)
10.34*	Amendment to 2011 Stock Incentive Plan of Honeywell International Inc. and its Affiliates (incorporated by reference to Exhibit 10.1 to Honeywell's Form 10-Q for the quarter ended March 31, 2014)
10.35*	2011 Stock Incentive Plan of Honeywell International Inc. and its Affiliates—Form of Restricted Unit Agreement (incorporated by reference to Exhibit 10.2 to Honeywell's Form 10-Q for the quarter ended March 31, 2014)
10.36*	2011 Stock Incentive Plan of Honeywell International Inc. and its Affiliates—Form of Restricted Unit Agreement, Form 2 (incorporated by reference to Exhibit 10.3 to Honeywell's Form 10-Q for the quarter ended March 31, 2014)
10.37*	2011 Stock Incentive Plan of Honeywell International Inc. and Its Affiliates—Form of Stock Option Award Agreement (incorporated by reference to Exhibit 10.4 to Honeywell's Form 10-Q for the quarter ended March 31, 2014)
10.38*	2011 Stock Incentive Plan of Honeywell International Inc. and Its Affiliates—Form of Stock Option Award Agreement, Form 2 (incorporated by reference to Exhibit 10.39 to Honeywell's Form 10-K for the year ended December 31, 2014)
10.39*	2011 Stock Incentive Plan of Honeywell International Inc. and Its Affiliates—Form of Growth Plan Agreement (incorporated by reference to Exhibit 10.5 to Honeywell's Form 10-Q for the quarter ended March 31, 2014)
10.40*	2016 Stock Incentive Plan of Honeywell International Inc. and its Affiliates–Form of Performance Plan Grant Agreement (incorporated by reference to Exhibit 10.2 to Honeywell's Form 10-Q for the quarter ended March 31, 2017)
10.41*	Letter Agreement dated February 24, 2012 between Honeywell and Darius Adamczyk (incorporated by reference to Exhibit 10.1 to Honeywell's Form 10-Q for the quarter ended March 31, 2016)
10.42*	Offer letter dated March 31, 2016 from Honeywell International Inc. to Darius Adamczyk (incorporated by reference to Exhibit 99.1 to Honeywell's Form 8-K filed April 6, 2016)
10.43*	Employment Offer Letter dated March 1, 2017 between Honeywell and Darius Adamczyk (incorporated by reference to Exhibit 99.1 to Honeywell's Form 8-K filed March 6, 2017)
10.44*	Offer letter dated March 11, 2013 from Honeywell International Inc. to Krishna Mikkilineni (incorporated by reference to Exhibit 10.43 to Honeywell's Form 10-K for the year ended December 31, 2016)
10.45*	2016 Stock Incentive Plan of Honeywell International Inc. and its Affiliates (incorporated by reference to Honeywell's Proxy Statement, dated March 10, 2016, filed pursuant to Rule 14a-6 of the Securities Exchange Act of 1934)
10.46*	2016 Stock Incentive Plan of Honeywell International Inc. and its Affiliates—Form of Restricted Unit Agreement (incorporated by reference to Exhibit 10.1 to Honeywell's Form 10-Q for the quarter ended June 30, 2016)
10.47*	2016 Stock Incentive Plan of Honeywell International Inc. and its Affiliates—Form of Restricted Unit Agreement, Form 2 (incorporated by reference to Exhibit 10.2 to Honeywell's Form 10-Q for the quarter ended June 30, 2016)
10.48*	2016 Stock Incentive Plan of Honeywell International Inc. and its Affiliates—Form of Stock Option Award Agreement (incorporated by reference to Exhibit 10.3 to Honeywell's Form 10-Q for the quarter ended June 30, 2016)
10.49*	2016 Stock Plan for Non-Employee Directors (incorporated by reference to Honeywell's Proxy Statement, dated March 10, 2016, filed pursuant to Rule 14a-6 of the Securities Exchange Act of 1934)
10.50*	2016 Stock Plan for Non-Employee Directors of Honeywell International Inc.—Form of Stock Option Award Agreement (incorporated by reference to Exhibit 10.74 to Honeywell's Form 10-K for the year ended December 31, 2017)
10.51*	

2016 Stock Plan for Non-Employee Directors of Honeywell International Inc.—Form of Restricted Unit Agreement (incorporated by reference to Exhibit 10.6 to Honeywell's Form 10-Q for the quarter ended June 30, 2016)

Exhibit No.	Description
10.52*	UOP LLC Supplemental Pension Plan, as amended and restated (incorporated by reference to Exhibit 10.76 to Honeywell's 10-K for the year ended December 31, 2017)
10.53*	Letter Agreement dated April 1, 2016 between Honeywell and Rajeev Gautam (incorporated by reference to Exhibit 10.1 to Honeywell's Form 10-Q for the quarter ended March 31, 2018)
10.54*	Letter Agreement dated July 27, 2018 between Honeywell and Greg Lewis (incorporated by reference to Exhibit 99.1 to Honeywell's Form 8-K filed August 2, 2018)
10.55	364-Day Credit Agreement, dated as of April 26, 2019, among Honeywell International Inc., the banks, financial institutions, and other institutional lenders parties thereto, Citibank, N.A., as administrative agent, JPMorgan Chase Bank, N.A., as syndication agent, Bank of America, N.A., Barclays Bank PLC, Deutsche Bank Securities Inc., Goldman Sachs Bank USA, Morgan Stanley MUFG Loan Partners, LLC, and Wells Fargo Bank, National Association, as documentation agents, and Citibank N.A. and JPMorgan Chase Bank, N.A., as joint lead arrangers and co-book managers (incorporated by reference to Exhibit 10.1 to Honeywell's Form 8-K filed April 26, 2019)
10.56	Amended and Restated Five-Year Credit Agreement, dated as of April 26, 2019, among Honeywell International Inc., the banks, financial institutions, and other institutional lenders parties thereto, Citibank, N.A., as administrative agent, Citibank Europe PLC, UK Branch, as swing line agent, JPMorgan Chase Bank, N.A., as syndication agent, Bank of America, N.A., Barclays Bank PLC, Deutsche Bank Securities Inc., Goldman Sachs Bank USA, Morgan Stanley MUFG Loan Partners, LLC, and Wells Fargo Bank, National Association, as documentation agents, and Citibank, N.A. and J.P. Morgan Chase Bank N.A., as joint lead arrangers and co-bookrunners (incorporated by reference to Exhibit 10.2 to Honeywell's Form 8-K filed April 26, 2019)
10.57*	Offer Letter dated July 9, 2018 between Honeywell International Inc. and Mark R. James (incorporated by reference to Exhibit 10.1 to Honeywell's Form 10-Q for the quarter ended March 31, 2019)
10.58	Indemnification and Reimbursement Agreement, dated September 12, 2018, by and among Honeywell ASASCO Inc., Honeywell ASASCO 2 Inc., and Honeywell International Inc. (incorporated by reference to Exhibit 2.1 to Honeywell's Form 8-K filed September 14, 2018)
10.59	Indemnification and Reimbursement Agreement dated October 14, 2018 by and among New HAPI Inc. and Honeywell International Inc. (incorporated by reference to Exhibit 2.1 to Honeywell's Form 8-K filed October 15, 2018)
10.60*	Retirement Agreement dated February 7, 2019 between Honeywell and Krishna Mikkilineni (incorporated by reference to Exhibit 10.72 to Honeywell's Form 10-K for the year ended December 31, 2018)
10.61*	Amendment to the 2016 Stock Plan for Non-Employee Directors of Honeywell International Inc. (incorporated by reference to Exhibit 99.2 to Honeywell's Form 8-K filed October 8, 2019)
21	Subsidiaries of the Registrant (filed herewith)
23.1	Consent of Deloitte & Touche LLP (filed herewith)
24	Powers of Attorney (filed herewith)
31.1	Certification of Principal Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 (filed herewith)
31.2	Certification of Principal Financial Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 (filed herewith)
32.1	Certification of Principal Executive Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (filed herewith)
32.2	Certification of Principal Financial Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (filed herewith)
95	Mine Safety Disclosures (filed herewith)

Exhibit No.	Description
101.INS	The following financial statements from the Company's Annual Report on Form 10-K for the year ended December 31, 2019, formatted in Inline XBRL: (i) Consolidated Statements of Cash Flows, (ii) Consolidated Statements of Operations, (iii) Consolidated Statements of Comprehensive Income, (iv) Consolidated Balance Sheets, and (v) Notes to Consolidated Financial Statements, tagged as blocks of text and including detailed tags.
101.SCH	XBRL Taxonomy Extension Schema (filed herewith)
101.CAL	XBRL Taxonomy Extension Calculation Linkbase (filed herewith)
101.DEF	XBRL Taxonomy Extension Definition Linkbase (filed herewith)
101.LAB	XBRL Taxonomy Extension Label Linkbase (filed herewith)
101.PRE	XBRL Taxonomy Extension Presentation Linkbase (filed herewith)

The Exhibits identified above with an asterisk (*) are management contracts or compensatory plans or arrangements.

** Certain schedules and similar attachments have been omitted pursuant to Item 601(b)(2) of Regulation S-K. The registrant hereby undertakes to furnish copies of any of the omitted schedules and similar attachments upon request by the U.S. Securities and Exchange Commission.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

HONEYWELL INTERNATIONAL INC.

Date: February 14, 2020 By: /s/ Robert D. Mailloux

Robert D. Mailloux
Vice President and Controller
(on behalf of the Registrant
and as the Registrant's
Principal Accounting Officer)

Pursuant to the requirements of the Securities Exchange Act of 1934, this annual report has been signed below by the following persons on behalf of the Registrant and in the capacities and on the date indicated:

Name	Name
/s/ Darius Adamczyk	*
Darius Adamczyk Chairman and Chief Executive Officer (Principal Executive Officer)	Linnet F. Deily Director
*	*
Duncan B. Angove Director	Deborah Flint Director
*	*
William S. Ayer Director	Judd Gregg Director
*	*
Kevin Burke Director	Clive Hollick Director
*	*
Jaime Chico Pardo Director	Grace D. Lieblein Director
*	*
D. Scott Davis Director	George Paz Director

	*
	Robin L. Washington Director
/s/ Gregory P. Lewis	/s/ Robert D. Mailloux
Gregory P. Lewis Senior Vice President and Chief Financial Officer (Principal Financial Officer)	Robert D. Mailloux Vice President and Controller (Principal Accounting Officer)

*By: /s/ Gregory P. Lewis

(Gregory P. Lewis
Attorney-in-fact)

February 14, 2020

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UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

Form 10-K

x ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d)
OF THE SECURITIES EXCHANGE ACT OF 1934
For the fiscal year ended December 31, 2018
OR
o TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d)
OF THE SECURITIES EXCHANGE ACT OF 1934
For the transition period from to
Commission file number 1-8974

Honeywell International Inc.

(Exact name of registrant as specified in its charter)

Delaware	22-2640650

(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
115 Tabor Road Morris Plains, New Jersey	07950
(Address of principal executive offices)	(Zip Code)

Registrant's telephone number, including area code (973) 455-2000

Securities registered pursuant to Section 12(b) of the Act:

Title of Each Class	Name of Each Exchange on Which Registered
Common Stock, par value $1 per share*	New York Stock Exchange
0.650% Senior Notes due 2020	New York Stock Exchange
1.300% Senior Notes due 2023	New York Stock Exchange
2.250% Senior Notes due 2028	New York Stock Exchange

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* The common stock is also listed on the London Stock Exchange.

Securities registered pursuant to Section 12(g) of the Act: None

Indicate by check mark if the Registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes x No o

Indicate by check mark if the Registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Exchange Act. Yes o No x

Indicate by check mark whether the Registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the Registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes x No o

Indicate by check mark whether the Registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes x No o

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of Registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. x

Indicate by check mark whether the Registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See definition of "accelerated filer," "large accelerated filer," and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check One):

Large accelerated filer x   Accelerated filer o   Non-accelerated filer o   Smaller reporting company o

Emerging growth company o

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards pursuant to section 13(a) of the Exchange Act. o

Indicate by check mark whether the Registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes o No x

The aggregate market value of the voting stock held by nonaffiliates of the Registrant was approximately $107.6 billion at June 30, 2018.

There were 729,085,890 shares of Common Stock outstanding at January 25, 2019.

Documents Incorporated by Reference

Part III: Proxy Statement for Annual Meeting of Shareowners to be held April 29, 2019.

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PART I.

Item 1. Business

Honeywell International Inc. (“Honeywell” or “the Company”) invents and commercializes technologies that address some of the world’s most critical challenges around energy, safety, security, productivity and global urbanization. As a diversified technology and manufacturing company, we are uniquely positioned to blend physical products with software to serve customers worldwide with aerospace products and services, energy efficient products and solutions for businesses, specialty chemicals, electronic and advanced materials, process technology for refining and petrochemicals, and productivity, sensing, safety and security technologies for buildings and industries. Our products and solutions enable a safer, more comfortable and more productive world, enhancing the quality of life of people around the globe. Honeywell was incorporated in Delaware in 1985.

Our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and any amendments to those reports, are available free of charge on our website (www.honeywell.com) under the heading Investor Relations (see SEC Filings and Reports) immediately after they are filed with, or furnished to, the Securities and Exchange Commission (SEC). In addition, in this Annual Report on Form 10-K, the Company incorporates by reference certain information from parts of its Proxy Statement for the 2019 Annual Meeting of Stockholders, which we expect to file with the SEC on or about March 14, 2019, and which will also be available free of charge on our website.

Major Businesses

On October 1, 2018, the Company completed the spin-off of its Transportation Systems business, formerly part of Aerospace, and on October 29, 2018, the Company completed the spin-off of its Homes and Global Distribution business, formerly part of Home and Building Technologies. Therefore, as of the end of 2018, those businesses were no longer part of the Company. Following the spin-off of the Homes and Global Distribution business, the Home and Building Technologies segment was renamed Honeywell Building Technologies. The major products/services, customers/uses and key competitors of each of our segments are:

Aerospace

Aerospace is a leading global supplier of products, software and services for aircrafts that it sells to original equipment manufacturers (OEM) and other customers in a variety of end markets including: air transport, regional, business and general aviation aircraft, airlines, aircraft operators and defense and space contractors. Aerospace products and services include auxiliary power units, propulsion engines, environmental control systems, integrated avionics, wireless connectivity services, electric power systems, engine controls, flight safety, communications, navigation hardware, data and software applications, radar and surveillance systems, aircraft lighting, management and technical services, advanced systems and instruments, satellite and space components, aircraft wheels and brakes, repair and overhaul services and thermal systems. Aerospace also provides spare parts, repair, overhaul and maintenance services (principally to aircraft operators) and connected solutions and data services for the aftermarket.

Honeywell Building Technologies

Honeywell Building Technologies is a leading global provider of products, software, solutions and technologies that enable commercial building owners and occupants to ensure their facilities are safe, energy efficient, sustainable and productive. Honeywell Building Technologies products and services include advanced software applications for building control and optimization; sensors, switches, control systems and instruments for energy management; access control; video surveillance; fire products; remote patient monitoring systems; and installation, maintenance and upgrades of systems that keep buildings safe, comfortable and productive.

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Performance Materials and Technologies

Performance Materials and Technologies is a global leader in developing and manufacturing high-quality performance chemicals and materials, process technologies and automation solutions. UOP provides process technology, products, including catalysts and adsorbents, equipment and consulting services that enable customers to efficiently produce gasoline, diesel, jet fuel, petrochemicals and renewable fuels for the petroleum refining, gas processing, petrochemical, and other industries. Process Solutions is a pioneer in automation control, instrumentation, advanced software and related services for the oil and gas, refining, pulp and paper, industrial power generation, chemicals and petrochemicals, biofuels, life sciences, and metals, minerals and mining industries. Through its smart energy business, Process Solutions also enables utilities and distribution companies to deploy advanced capabilities that transform operations, improve reliability and environmental sustainability, and better serve customers. Advanced Materials manufactures a wide variety of high-performance products, including fluorocarbons, hydrofluoroolefins, specialty films, waxes, additives, advanced fibers, customized research chemicals and intermediates, and electronic materials and chemicals.

Safety and Productivity Solutions

Safety and Productivity Solutions is a leading global provider of products, software and connected solutions to customers around the globe that improve productivity, workplace safety and asset performance. Safety products include personal protection equipment, apparel, gear, and footwear designed for work, play and outdoor activities; gas detection technology; and cloud-based notification and emergency messaging. Productivity Solutions products and services include mobile devices and software for computing, data collection and thermal printing; supply chain and warehouse automation equipment, software and solutions; custom-engineered sensors, switches and controls for sensing and productivity solutions; and software-based data and asset management productivity solutions.

Competition

We are subject to competition in substantially all product and service areas. Some of our key competitors are:

- Aerospace: Garmin, Thales, Safran and United Technologies
- Honeywell Building Technologies: Emerson Electric, Itron, Johnson Controls, Schneider Electric and Siemens
- Performance Materials and Technologies: Albemarle, BASF, DowDupont, Emerson Electric and Sinopec
- Safety and Productivity Solutions: 3M, Mine Safety Appliances (MSA), Kion Group, TE Connectivity and Zebra Technologies

Our businesses compete on a variety of factors such as price, quality, reliability, delivery, customer service, performance, applied technology, product innovation and product recognition. Brand identity, service to customers and quality are important competitive factors for our products and services, and there is considerable price competition. Other competitive factors include breadth of product line, research and development efforts and technical and managerial capability. While our competitive position varies among our products and services, we believe we are a significant competitor in each of our major product and service classes. Many of our competitors have substantial financial resources and significant technological capabilities. In addition, some of our products compete with the captive component divisions of OEMs.

Aerospace Sales

Our Aerospace segment sales were 37%, 36% and 38% of our total sales in 2018, 2017 and 2016. Our sales to commercial aerospace OEMs were 7%, 6% and 6% of our total sales in 2018, 2017 and 2016. In addition, our sales to commercial aftermarket customers of aerospace products and services were 13%, 13% and 12% of our total sales in 2018, 2017 and 2016.

U.S. Government Sales

Sales to the U.S. Government (principally by Aerospace), acting through its various departments and agencies and through prime contractors, amounted to $3,403 million, $3,203 million and $3,330 million in 2018, 2017 and 2016, which included sales to the U.S. Department of Defense, as a prime contractor and subcontractor, of $2,832 million, $2,546 million and $2,647 million in 2018, 2017 and 2016. We do not expect our overall operating results to be significantly affected by any proposed changes in 2019 federal defense spending due principally to the varied mix of the government programs which impact us (OEMs' production, engineering development programs, aftermarket spares and repairs and overhaul programs), as well as our diversified commercial businesses.

Backlog

Our backlog represents the estimated remaining value of work to be performed under firm contracts. Starting in 2018 following the adoption of the new revenue recognition standard, backlog is equal to our remaining performance obligations under the contracts that meet the new guidance on revenue from contracts with customers as discussed in Note 7 to the Consolidated Financial Statements. Backlog was $24,850 million and $17,690 million at December 31, 2018 and 2017. We expect to recognize approximately 56% of our remaining performance obligations as revenue in 2019, and the remaining balance thereafter.

International Operations

We are engaged in manufacturing, sales, service and research and development (R&D) globally. U.S. exports and non-U.S. manufactured products are significant to our operations. U.S. exports comprised 13% of our total sales in 2018, 12% in 2017 and 13% in 2016. Non-U.S. manufactured products and services, mainly in Europe and Asia, were 43% of our total sales in 2018, 44% in 2017 and 43% in 2016.

Manufactured Products and Systems and Performance of Services	Year Ended December 31, 2018			
	Aerospace	Honeywell Building Technologies	Performance Materials and Technologies	Safety and Productivity Solutions
	(% of Segment Sales)			
U.S. Exports	21 %	1 %	16 %	3 %
Non-U.S.	31 %	52 %	55 %	40 %

Information related to risks attendant to our foreign operations is included in Item 1A. Risk Factors under the caption "Macroeconomic and Industry Risks."

Raw Materials

The principal raw materials used in our operations are generally readily available. Although we occasionally experience disruption in raw materials supply, we experienced no significant problems in the purchase of key raw materials or commodities in 2018. We are not dependent on any one supplier for a material amount of our raw materials.

The costs of certain key raw materials, including R240, copper, fluorspar, tungsten salts, ethylene, and perchloroethylene in Performance Materials and Technologies and nickel, steel, titanium and other metals in Aerospace, are expected to continue to fluctuate. We will continue to attempt to offset raw material cost increases with formula or long-term supply agreements, price increases and hedging activities where feasible. We do not presently anticipate that a shortage of raw materials will cause any material adverse impacts during 2019.

Patents, Trademarks, Licenses and Distribution Rights

Our segments are not dependent upon any single patent or related group of patents, or any licenses or distribution rights. In our judgment, our intellectual property rights are adequate for the conduct of our business. We believe that, in the aggregate, the rights under our patents, trademarks and licenses are generally important to our operations, but we do not consider any individual patent, trademark or any licensing or distribution rights related to a specific process or product to be of material importance in relation to our total business.

Environment

We are subject to various federal, state, local and foreign government requirements regarding protection of human health and the environment. We believe that, as a general matter, our policies, practices and procedures are properly designed to prevent unreasonable risk of environmental damage, and of resulting financial liability, in connection with our business. Some risk of environmental damage is, however, inherent in some of our operations and products, as it is with other companies engaged in similar businesses.

We are and have been engaged in the handling, manufacturing, use and disposal of many substances classified as hazardous by one or more regulatory agencies. We believe that, as a general matter, our policies, practices and procedures are properly designed to prevent unreasonable risk of environmental damage and personal injury, and that our handling, manufacture, use and disposal of these substances are in accord with environmental and safety laws and regulations. It is also possible that future knowledge or other developments, such as improved capability to detect substances in the environment or increasingly strict environmental laws and standards and enforcement policies, could bring into question our current or past handling, manufacture, use or disposal of these substances.

Among other environmental requirements, we are subject to the federal Superfund and similar state and foreign laws and regulations, under which we have been designated as a potentially responsible party that may be liable for cleanup costs associated with current and former operating sites and various hazardous waste sites, some of which are on the U.S. Environmental Protection Agency's National Priority List. Although there is a possibility that a responsible party might have to bear more than its proportional share of the cleanup costs if it is unable to obtain appropriate contribution from other responsible parties, we do not anticipate having to bear significantly more than our proportional share in multi-party situations taken as a whole.

We do not believe that existing or pending climate change legislation, regulation, or international treaties or accords are reasonably likely to have a material effect in the foreseeable future on the Company's business or markets that it serves, nor on its results of operations, capital expenditures, earnings, competitive position or financial standing. We will continue to monitor emerging developments in this area.

Employees

We have approximately 114,000 employees at December 31, 2018, of whom approximately 44,000 are located in the United States.

Executive Officers of the Registrant

The executive officers of Honeywell, listed as follows, are elected annually by the Board of Directors. There are no family relationships among them.

Name, Age, Date First Elected an Executive Officer	**Business Experience**
Darius Adamczyk, 53 2017[(a)]	Chairman of the Board and Chief Executive Officer since April 2018. President and Chief Executive Officer from April 2017 to April 2018. Chief Operating Officer from April 2016 to March 2017. President and Chief Executive Officer Performance Materials and Technologies from April 2014 to April 2016. President of Honeywell Process Solutions from April 2012 to April 2014.
Que Thanh Dallara, 45 2018	President and Chief Executive Officer Connected Enterprise since October 2018. Vice President and Chief Commercial Officer from January 2017 to October 2018.
Rajeev Gautam, 66 2016	President and Chief Executive Officer Performance Materials and Technologies since April 2016. President of Honeywell UOP from January 2009 to April 2016.
Mark R. James, 57 2007	Senior Vice President Human Resources, Security and Communications since November 2007.
Vimal Kapur, 53 2018	President and Chief Executive Officer Honeywell Building Technologies since May 2018. President of Honeywell Process Solutions from 2014 to May 2018.
Gregory P. Lewis, 51 2018	Senior Vice President and Chief Financial Officer since August 2018. Vice President of Enterprise Information Management from October 2016 to April 2018, prior to being named Vice President, Corporate Finance in May 2018. Chief Financial Officer of Automation and Control Solutions from April 2013 to September 2016.
Anne T. Madden, 54 2017	Senior Vice President and General Counsel since October 2017. Also Corporate Secretary since February 2018. Vice President of Corporate Development and Global Head of M&A from January 2002 to October 2017.
Timothy O. Mahoney, 62 2009	President and Chief Executive Officer Aerospace since September 2009.

Krishna Mikkilineni, 59 2010[b]	Senior Vice President Engineering and Information Technology since April 2013.
John F. Waldron, 43 2016	President and Chief Executive Officer, Safety and Productivity Solutions since July 2016. President of Sensing and Productivity Solutions from July 2015 to July 2016. President of Scanning and Mobility from April 2012 to July 2015.

(a) Also a Director.

(b) Mr. Mikkilineni will retire from the Company effective April 30, 2019.

Item 1A. Risk Factors

Cautionary Statement About Forward-Looking Statements

We describe many of the trends and other factors that drive our business and future results in Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations and in other parts of this report (including this Item 1A). Such discussions contain forward-looking statements within the meaning of Section 21E of the Securities Exchange Act of 1934.

Forward-looking statements are those that address activities, events or developments that management intends, expects, projects, believes or anticipates will or may occur in the future. They are based on management's assumptions and assessments in light of past experience and trends, current economic and industry conditions, expected future developments and other relevant factors. They are not guarantees of future performance, and actual results, developments and business decisions may differ significantly from those envisaged by our forward-looking statements. We do not undertake to update or revise any of our forward-looking statements. Our forward-looking statements are also subject to risks and uncertainties that can affect our performance in both the near-and long-term. These forward-looking statements should be considered in light of the information included in this Form 10-K, including, in particular, the factors discussed below. These factors may be revised or supplemented in subsequent reports on Forms 10-Q and 8-K.

Risk Factors

Our business, operating results, cash flows and financial condition are subject to the principal risks and uncertainties set forth below, any one of which could cause our actual results to vary materially from recent results or from our anticipated future results.

Macroeconomic and Industry Risks

Industry and economic conditions may adversely affect the markets and operating conditions of our customers, which in turn can affect demand for our products and services and our results of operations.

- ***Aerospace***—Operating results of Aerospace are directly tied to cyclical industry and economic conditions, as well as changes in customer buying patterns of aftermarket parts, supplier stability, factory transitions and global supply chain capacity constraints that may lead to shortages of crucial components. The operating results of our Commercial Aviation business unit may be adversely affected by downturns in the global demand for air travel which impacts new aircraft production or the delay or cancellation of new aircraft orders, delays in launch schedules for new aircraft, the retirement of aircraft and global flying hours, which impact air transport, regional, business and general aviation aircraft utilization rates. Operating results could also be impacted by changes in overall trends related to end market demand for the product portfolio, as well as, new entrants and non-traditional players entering the market. Operating results in our Defense and Space business unit may be affected by the mix of U.S. and foreign government appropriations for defense and space programs and by compliance risks. Results may also be impacted by the potential introduction of counterfeit parts into our global supply chain.

- ***Honeywell Building Technologies***—Operating results may be adversely impacted by downturns in the level of global commercial construction activity (including retrofits and upgrades), lower capital spending and operating expenditures on building projects, less industrial plant expansion, changes in the competitive landscape including new market entrants and new technologies, and fluctuations in inventory levels in distribution channels.

- ***Performance Materials and Technologies***—Operating results may be adversely impacted by downturns in capacity utilization for chemical, industrial, refining, petrochemical and semiconductor plants, our customers' availability of capital for refinery construction and expansion, raw material demand and supply volatility, product commoditization, and our ability to maximize our facilities' production capacity and minimize downtime. In particular, the volatility in oil and natural gas prices have and will continue to impact our customers' operating levels and capital spending and thus demand for our products and services.

- ***Safety and Productivity Solutions***—Operating results may be adversely impacted by downturns in the level of global capital spending and operating expenditures, including in the oil and gas industry, reduced investments in process automation, safety monitoring, and plant capacity utilization initiatives, fluctuations in retail markets, lower customer demand due to the failure to anticipate and respond to overall trends related to end market demand, changes in the competitive landscape including new market entrants and technology that may lead to product commoditization, and adverse industry economic conditions, all of which could result in lower market share, reduced selling prices and lower margins.

An increasing percentage of our sales and operations is in non-U.S. jurisdictions and is subject to the economic, political, regulatory, foreign exchange and other risks of international operations.

Our international operations, including U.S. exports, represent more than half of the Company's sales. Risks related to international operations include exchange control regulations, wage and price controls, antitrust regulations, employment regulations, foreign investment laws, import, export and other trade restrictions (such as sanctions and embargoes), violations by our employees of anti-corruption laws (despite our efforts to mitigate these risks), changes in regulations regarding transactions with state-owned enterprises, nationalization of private enterprises, acts of terrorism, and our ability to hire and maintain qualified staff and maintain the safety of our employees in these regions. Instability and uncertainties arising from the global geopolitical environment, and the evolving international and domestic political, regulatory and economic landscape, the potential for changes in global trade policies including sanctions and trade barriers, trends such as populism, economic nationalism and negative sentiment toward multinational companies, and the cost of compliance with increasingly complex and often conflicting regulations worldwide can impair our flexibility in modifying product, marketing, pricing or other strategies for growing our businesses, as well as our ability to improve productivity and maintain acceptable operating margins.

While it is currently not known what the final outcome and full terms of the United Kingdom's future relationship with the European Union will be, it is possible that there will be greater restrictions on imports and exports between the United Kingdom and other countries, including the United States, increased tariffs on U.K. imports and exports, and increased regulatory complexities.

Existing free trade laws and regulations, such as the North American Free Trade Agreement, or any successor agreement, provide certain beneficial duties and tariffs for qualifying imports and exports. Changes in laws or policies governing the terms of foreign trade, and in particular increased trade restrictions, tariffs or taxes on imports from countries where we manufacture products or from where we import products or raw materials, either directly or through our suppliers, could have an impact on our competitive position and financial results.

Operating outside of the United States also exposes us to foreign exchange risk, which we monitor and seek to reduce through hedging activities. However, foreign exchange hedging activities bear a financial cost and may not always be available to us or be successful in eliminating such volatility. Finally, we generate significant amounts of cash outside of the United States that is invested with financial and non-financial counterparties. While we employ comprehensive controls regarding global cash management to guard against cash or investment loss and to ensure our ability to fund our operations and commitments, a material disruption to the counterparties with whom we transact business could expose Honeywell to financial loss.

Risks related to our defined benefit pension plans may adversely impact our results of operations and cash flow.

Significant changes in actual investment return on pension assets, discount rates, and other factors could adversely affect our results of operations and require cash pension contributions in future periods. Changes in discount rates and actual asset returns different than our anticipated asset returns can result in significant non-cash actuarial gains or losses which we record in the fourth quarter of each fiscal year, and, if applicable, in any quarter in which an interim re-measurement is triggered. With regard to cash pension contributions, funding requirements for our pension plans are largely dependent upon interest rates, actual investment returns on pension assets and the impact of legislative or regulatory changes related to pension funding obligations.

Operational Risks

Raw material price fluctuations, the ability of key suppliers to meet quality and delivery requirements, or catastrophic events can increase the cost of our products and services, impact our ability to meet commitments to customers and cause us to incur significant liabilities.

The cost of raw materials is a key element in the cost of our products, particularly in Performance Materials and Technologies (R240, copper, fluorspar, tungsten salts, ethylene, and perchloroethylene) and in Aerospace (nickel, steel, titanium and other metals). Our inability to offset material price inflation through increased prices to customers, formula or long-term fixed price contracts with suppliers, productivity actions or through commodity hedges could adversely affect our results of operations.

Many major components, product equipment items and raw materials, particularly in Aerospace, are procured or subcontracted on a single or sole-source basis. Although we maintain a qualification and performance surveillance process and we believe that sources of supply for raw materials and components are generally adequate, it is difficult to predict what effects shortages or price increases may have in the future. Our ability to manage inventory and meet delivery requirements may be constrained by our suppliers' inability to scale production and adjust delivery of long-lead time products during times of volatile demand. Our inability to fill our supply needs would jeopardize our ability to fulfill obligations under commercial and government contracts, which could, in turn, result in reduced sales and profits, contract penalties or terminations, and damage to customer relationships.

We may be unable to successfully execute or effectively integrate acquisitions, and divestitures may not occur as planned.

We regularly review our portfolio of businesses and pursue growth through acquisitions and seek to divest non-core businesses. We may not be able to complete transactions on favorable terms, on a timely basis, or at all, and during integration we may discover cybersecurity and compliance issues. In addition, our results of operations and cash flows may be adversely impacted by (i) the failure of acquired businesses to meet or exceed expected returns, including risk of impairment; (ii) the failure to integrate multiple acquired businesses into Honeywell simultaneously and on schedule and/or to achieve expected synergies; (iii) the inability to dispose of non-core assets and businesses on satisfactory terms and conditions; (iv) the discovery of unanticipated liabilities, labor relations difficulties or other problems in acquired businesses for which we lack contractual protections, insurance or indemnities, or with regard to divested businesses, claims by purchasers to whom we have provided contractual indemnification and (v) the inability to collect on the indemnification and reimbursement agreements entered into with our spin-offs, Garrett Motion Inc. and Resideo Technologies, Inc.

Our future growth is largely dependent upon our ability to develop new technologies and introduce new products that achieve market acceptance in increasingly competitive markets with acceptable margins.

Our future growth rate depends upon a number of factors, including our ability to (i) identify and evolve with emerging technological and broader industry trends in our target end-markets, (ii) develop and maintain competitive products, (iii) defend our market share against an ever-expanding number of competitors including many new and non-traditional competitors, (iv) enhance our products by adding innovative features that differentiate our products from those of our competitors and prevent commoditization of our products, (v) develop, manufacture and bring compelling new products to market quickly and cost-effectively, (vi) monitor disruptive technologies and business models, (vii) achieve sufficient return on investment for new products introduced based on capital expenditures and research and development spending, (viii) respond to changes in overall trends related to end market demand, and (x) attract, develop and retain individuals with the requisite technical expertise and understanding of customers’ needs to develop new technologies and introduce new products. Competitors may also develop after-market services and parts for our products which attract customers and adversely affect our return on investment for new products.

The failure of our technologies or products to gain market acceptance due to more attractive offerings by our competitors or the failure to address any of the above factors could significantly reduce our revenues and adversely affect our competitive standing and prospects.

Failure to increase productivity through sustainable operational improvements, as well as an inability to successfully execute repositioning projects or to effectively manage our workforce, may reduce our profitability or adversely impact our businesses.

Our profitability and margin growth are dependent upon our ability to drive sustainable improvements. In addition, we seek productivity and cost savings benefits through repositioning actions and projects, such as consolidation of manufacturing facilities, transitions to cost-competitive regions and product line rationalizations. Risks associated with these actions include delays in execution of the planned initiatives, additional unexpected costs, realization of fewer than estimated productivity improvements and adverse effects on employee morale. We may not realize the full operational or financial benefits we expect, the recognition of these benefits may be delayed and these actions may potentially disrupt our operations. In addition, organizational changes, increased attrition, failure to create and implement a succession plan for key Company positions, not retaining key talent, inability to attract new employees with unique skills, labor relations difficulties, or workforce stoppage could have a material adverse effect on our business, reputation, financial position and results of operations.

As a supplier to the U.S. Government, we are subject to unique risks, such as the right of the U.S. Government to terminate contracts for convenience and to conduct audits and investigations of our operations and performance.

U.S. Government contracts are subject to termination by the government, either for the convenience of the government or for our failure to perform consistent with the terms of the applicable contract. Our contracts with the U.S. Government are also subject to government audits that may recommend downward price adjustments and other changes. When appropriate and prudent, we have made adjustments and paid voluntary refunds in the past and may do so in the future.

We are also subject to government investigations of business practices and compliance with government procurement regulations. If, as a result of any such investigation or other government investigations (including investigation of violations of certain environmental, employment or export laws), Honeywell or one of its businesses were found to have violated applicable law, then it could be suspended from bidding on or receiving awards of new government contracts, suspended from contract performance pending the completion of legal proceedings and/or have its export privileges suspended.

Our operations and the prior operations of predecessor companies expose us to the risk of material environmental liabilities.

Mainly because of past operations and operations of predecessor companies, we are subject to potentially material liabilities related to the remediation of environmental hazards and to claims of personal injuries or property damages that may be caused by hazardous substance releases and exposures. We continue to incur remedial response and voluntary clean-up costs for site contamination and are a party to lawsuits and claims associated with environmental and safety matters, including past production of products containing hazardous substances. Additional lawsuits, claims and costs involving environmental matters are likely to continue to arise in the future. Various federal, state, local and foreign governments regulate the discharge of materials into the environment, or the use of or communications respecting certain materials in our products, and can impose substantial fines and criminal sanctions for violations, and require injunctive relief measures, including installation of costly equipment or operational changes to limit emissions and/or decrease the likelihood of accidental hazardous substance releases, or limiting access of our products to markets, among others. In addition, changes in laws, regulations and enforcement of policies, the discovery of previously unknown contamination or new technology or information related to individual sites, the establishment of stricter toxicity standards with respect to certain contaminants, or the imposition of new clean-up requirements or remedial techniques could require us to incur additional costs in the future that would have a negative effect on our financial condition or results of operations.

Cybersecurity incidents could disrupt business operations, result in the loss of critical and confidential information, and adversely impact our reputation and results of operations.

Global cybersecurity threats and incidents can range from uncoordinated individual attempts to gain unauthorized access to information technology (IT) systems to sophisticated and targeted measures known as advanced persistent threats, directed at the Company, its products, its customers and/or its third party service providers, including cloud providers. Our customers, including the U.S. government, are increasingly requiring cybersecurity protections and mandating cybersecurity standards in our products, and we may incur additional costs to comply with such demands. While we have experienced, and expect to continue to experience, these types of threats and incidents, none of them to date have been material to the Company. We seek to deploy comprehensive measures to deter, prevent, detect, respond to and mitigate these threats, including identity and access controls, data protection, vulnerability assessments, product software designs which we believe are less susceptible to cyber attacks, continuous monitoring of our IT networks and systems and maintenance of backup and protective systems. Despite these efforts, cybersecurity incidents, depending on their nature and scope, could potentially result in the misappropriation, destruction, corruption or unavailability of critical data and confidential or proprietary information (our own or that of third parties) and the disruption of business operations. Cybersecurity incidents aimed at the software imbedded in our products could lead to third party claims that our product failures have caused a similar range of damages to our customers, and this risk is enhanced by the increasingly connected nature of our products. The potential consequences of a material cybersecurity incident include financial loss, reputational damage, litigation with third parties, theft of intellectual property, fines levied by the Federal Trade Commission, diminution in the value of our investment in research, development and engineering, and increased cybersecurity protection and remediation costs due to the increasing sophistication and proliferation of threats, which in turn could adversely affect our competitiveness and results of operations.

Data privacy, identity protection, and information security may require significant resources and presents certain risks.

We collect, store, have access to and otherwise process certain confidential or sensitive data, including proprietary business information, personal data or other information that is subject to privacy and security laws, regulations and/or customer-imposed controls. Despite our efforts to protect such data, we may be vulnerable to material security breaches, theft, misplaced or lost data, programming errors, or employee errors that could potentially lead to the compromising of such data, improper use of our systems, software solutions or networks, unauthorized access, use, disclosure, modification or destruction of information, defective products, production downtimes and operational disruptions. In addition, we operate in an environment in which there are different and potentially conflicting data privacy laws in effect in the various U.S. states and foreign jurisdictions in which we operate and we must understand and comply with each law and standard in each of these jurisdictions while ensuring the data is secure. For example, the State of California recently passed legislation granting residents certain new data privacy rights and regulating the security of Internet of Things devices, which will go into effect in January 2020; European laws require us to have an approved legal mechanism to transfer personal data out of Europe; the European Union General Data Protection Regulation, which took effect in May 2018, superseded prior European Union data protection legislation and imposes more stringent requirements in how we collect and process personal data and provides for significantly greater penalties for noncompliance; and several other countries have passed laws that require personal data relating to their citizens to be maintained on local servers and impose additional data transfer restrictions. Government enforcement actions can be costly and interrupt the regular operation of our business, and violations of data privacy laws can result in fines, reputational damage and civil lawsuits, any of which may adversely affect our business, reputation and financial statements.

A material disruption of our operations, particularly at our manufacturing facilities or within our information technology infrastructure, could adversely affect our business.

Our facilities, supply chains, distribution systems and information technology systems are subject to catastrophic loss due to natural disasters including hurricanes and floods, power outages, fires, explosions, terrorism, equipment failures, sabotage, adverse weather conditions, public health crises, labor disputes, critical supply failure, inaccurate downtime forecast, political disruption, and other reasons, which can result in undesirable consequences, including financial losses and damaged relationships with customers. We employ information technology systems and networks to support the business and rely on them to process, transmit and store electronic information, and to manage or support a variety of business processes and activities. Disruptions to our information technology infrastructure from system failures, shutdowns, power outages, telecommunication or utility failures, and other events, including disruptions at our cloud computing, server, systems and other third party IT service providers, could interfere with our operations, interrupt production and shipments, damage customer and business partner relationships, and negatively impact our reputation.

<u>Legal and Regulatory Risks</u>

Our U.S. and non-U.S. tax liabilities are dependent, in part, upon the distribution of income among various jurisdictions in which we operate.

Our future results of operations could be adversely affected by changes in the effective tax rate as a result of a change in the mix of earnings in countries with differing statutory tax rates, changes in tax laws, regulations and judicial rulings (or changes in the interpretation thereof), potential expansion of taxation on digital services, changes in generally accepted accounting principles, changes in the valuation of deferred tax assets and liabilities, changes in the amount of earnings permanently reinvested offshore, the results of audits and examinations of previously filed tax returns and continuing assessments of our tax exposures and various other governmental enforcement initiatives. Our tax expense includes estimates of tax reserves and reflects other estimates and assumptions, including assessments of future earnings of the Company which could impact the valuation of our deferred tax assets. Changes in tax laws or regulations, including further regulatory developments arising from U.S. tax reform legislation as well as multi-jurisdictional changes enacted in response to the action items provided by the Organization for Economic Co-operation and Development (OECD), will increase tax uncertainty and impact our provision for income taxes.

Changes in legislation or government regulations or policies can have a significant impact on our results of operations.

The sales and margins of each of our segments are directly impacted by government regulations including safety, performance and product certification regulations. Within Aerospace, the operating results of Commercial Original Equipment and Commercial Aftermarket may be impacted by, among other things, mandates of the Federal Aviation Administration and other similar international regulatory bodies requiring the installation of equipment on aircraft. Our Defense and Space business unit may be affected by changes in government procurement regulations. Within Honeywell Building Technologies, the demand for and cost of providing products, services and solutions can be impacted by fire, security, safety, health care, environmental and energy efficiency standards and regulations. Performance Materials and Technologies’ results of operations can be impacted by environmental standards, regulations, and judicial determinations. Growth in all our businesses within emerging markets may be adversely impacted by the inability to acquire and retain qualified employees where local employment law mandates may be restrictive. Noncompliance with legislation and regulations can result in fines and penalties.

Increased public awareness and concern regarding global climate change may result in more international, regional and/or federal requirements to reduce or mitigate global warming and these regulations could mandate even more restrictive standards, such as stricter limits on greenhouse gas emissions, than the voluntary commitments that the Company has made or require such changes on a more accelerated time frame. There continues to be a lack of consistent climate legislation, which creates economic and regulatory uncertainty. If environmental laws or regulations are either changed or adopted and impose significant operational restrictions and compliance requirements upon the Company or its products, they could negatively impact the Company's business, capital expenditures, results of operations, financial condition and competitive position.

We cannot predict with certainty the outcome of litigation matters, government proceedings and other contingencies and uncertainties.

We are subject to a number of lawsuits, investigations and disputes (some of which involve substantial amounts claimed) arising out of the conduct of our business, including matters relating to commercial transactions, government contracts, product liability (including asbestos), prior acquisitions and divestitures, employment, employee benefits plans, intellectual property, antitrust, accounting, import and export, and environmental, health and safety matters. Our potential liabilities are subject to change over time due to new developments, changes in settlement strategy or the impact of evidentiary requirements, and we may become subject to or be required to pay damage awards or settlements that could have a material adverse effect on our results of operations, cash flows and financial condition. While we maintain insurance for certain risks, the amount of our insurance coverage may not be adequate to cover the total amount of all insured claims and liabilities. The incurrence of significant liabilities for which there is no or insufficient insurance coverage could adversely affect our results of operations, cash flows, liquidity and financial condition.

Item 1B. Unresolved Staff Comments

None

Item 2. Properties

We have approximately 991 locations, of which 252 are manufacturing sites. Our properties and equipment are in good operating condition and are adequate for our present needs. We do not anticipate difficulty in renewing existing leases as they expire or in finding alternative facilities.

Item 3. Legal Proceedings

We are subject to a number of lawsuits, investigations and claims (some of which involve substantial amounts) arising out of the conduct of our business. See a discussion of environmental, asbestos and other litigation matters in Note 20 Commitments and Contingencies of Notes to Consolidated Financial Statements.

Item 4. Mine Safety Disclosures

Not applicable.

Part II.

Item 5. Market for Registrant’s Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities

Honeywell’s common stock is listed on the New York Stock Exchange under the ticker symbol “HON”. Dividend information for Honeywell’s common stock is included in Note 25 Unaudited Quarterly Financial Information of Notes to Consolidated Financial Statements.

The number of record holders of our common stock at December 31, 2018 was 45,606.

Information regarding securities authorized for issuance under equity compensation plans is included in Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters under the caption “Equity Compensation Plans.”

Honeywell purchased 11,181,042 shares of its common stock, par value $1 per share, in the quarter ending December 31, 2018. In December 2017, the Board of Directors authorized the repurchase of up to a total of $8 billion of Honeywell common stock, which included amounts remaining under and replaced the previously approved share repurchase program. $3.7 billion remained available as of as of December 31, 2018 for additional share repurchases. Honeywell presently expects to repurchase outstanding shares from time to time to generally offset the dilutive impact of employee stock based compensation plans, including option exercises, restricted unit vesting and matching contributions under our savings plans. Additionally, we seek to reduce share count via share repurchases as and when attractive opportunities arise. The amount and timing of future repurchases may vary depending on market conditions and the level of our operating, financing and other investing activities.

The following table summarizes Honeywell’s purchase of its common stock for the three months ended December 31, 2018:

Issuer Purchases of Equity Securities

Period	Total Number of Shares Purchased	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Approximate Dollar Value of Shares that May Yet be Purchased Under Plans or Programs (Dollars in millions)
October 2018	5,360,640	$ 156.75	5,360,640	$ 4,589
November 2018	4,810,000	$ 146.77	4,810,000	$ 3,883

December 2018	1,010,402	$ 143.62	1,010,402	$	3,737

Performance Graph

The following graph compares the five-year cumulative total return on our common stock to the total returns on the Standard & Poor's (S&P) 500 Stock Index and a composite of S&P's Industrial Conglomerates and Aerospace and Defense indices, on a 65%/35% weighted basis (the Composite Index). The weighting of the components of the Composite Index are based on our segments' relative contribution to total segment profit. The selection of the Industrial Conglomerates component of the Composite Index reflects the diverse and distinct range of non-aerospace businesses conducted by Honeywell. The annual changes for the five-year period shown in the graph are based on the assumption that $100 had been invested in Honeywell stock and each index on December 31, 2013 and that all dividends were reinvested.

COMPARISON OF CUMULATIVE FIVE YEAR TOTAL RETURN

HONEYWELL INTERNATIONAL INC.

This selected financial data should be read in conjunction with Honeywell's Consolidated Financial Statements and related Notes included elsewhere in this Annual Report as well as the section of this Annual Report titled Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations.

Item 6. Selected Financial Data

	Years Ended December 31,				
	2018(1)	**2017(1)**	**2016**	**2015**	**2014**
	(Dollars in millions, except per share amounts)				
Results of Operations(2)					
Net sales	$ 41,802	$ 40,534	$ 39,302	$ 38,581	$ 40,306
Net income attributable to Honeywell	6,765	1,545	4,812	4,771	4,262
Earnings Per Common Share(2)					
Earnings from continuing operations:					
Basic	9.10	2.03	6.30	6.12	5.43
Assuming dilution	8.98	2.00	6.21	6.04	5.36
Dividends per share	3.06	2.74	2.45	2.15	1.87
Financial Position at Year-End(2)					
Property, plant and equipment-net	5,296	5,926	5,793	5,789	5,383
Total assets	57,773	59,470	54,566	49,711	45,969
Short-term debt					

	6,458	5,309	3,593	6,514	2,637
Long-term debt	9,756	12,573	12,182	5,554	6,046
Total debt	16,214	17,882	15,775	12,068	8,683
Redeemable noncontrolling interest	7	5	3	290	219
Shareowners’ equity	18,358	16,665	18,883	17,751	17,113

(1) 2018 and 2017 Net Income attributable to Honeywell and Earnings Per Common Share were impacted by U.S. Tax Reform; see Note 5 Income Taxes of Notes to Consolidated Financial Statements for further details.

(2) Results of Operations, Earnings per Common Share and Financial Position at Year-End were revised in years prior to 2018 in connection with our change in accounting for Bendix asbestos-related liabilities for unasserted claims. See Note 20 Commitments and Contingencies of Notes to Consolidated Financial Statements for further details.

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

(Dollars in millions, except per share amounts)

The following Management's Discussion and Analysis of Financial Condition and Results of Operations is intended to help the reader understand the results of operations and financial condition of Honeywell International Inc. and its consolidated subsidiaries ("Honeywell" or "the Company") for the three years ended December 31, 2018. All references to Notes relate to Notes to Consolidated Financial Statements in Item 8. Financial Statements and Supplementary Data.

On October 29, 2018, the Company completed the tax-free spin-off to Honeywell shareowners of its Homes and Global Distribution business, part of Home and Building Technologies (renamed Honeywell Building Technologies following the spin-off), into a standalone publicly-traded company, Resideo Technologies, Inc. ("Resideo"). The assets and liabilities associated with Resideo have been removed from the Company's Consolidated Balance Sheet as of the effective date of the spin-off. The results of operations for Resideo are included in the Consolidated Statement of Operations through the effective date of the spin-off.

On October 1, 2018, the Company completed the tax-free spin-off to Honeywell shareowners of its Transportation Systems business, part of Aerospace, into a standalone publicly-traded company, Garrett Motion Inc. ("Garrett"). The assets and liabilities associated with Garrett have been removed from the Company's Consolidated Balance Sheet as of the effective date of the spin-off. The results of operations for Garrett are included in the Consolidated Statement of Operations through the effective date of the spin-off.

On October 1, 2016, the Company completed the tax-free spin-off to Honeywell shareowners of its Resins and Chemicals business, part of Performance Materials and Technologies, into a standalone, publicly-traded company (named AdvanSix Inc. ("AdvanSix")). The assets and liabilities associated with AdvanSix have been removed from the Company's Consolidated Balance Sheet as of the effective date of the spin-off. The results of operations for AdvanSix are included in the Consolidated Statement of Operations through the effective date of the spin-off.

On September 16, 2016, the Company completed the sale of the Aerospace government services business, Honeywell Technology Solutions Inc ("HTSI" or "government services business"). The assets and liabilities associated with HTSI have been removed from the Company's Consolidated Balance Sheet as of the effective date of the sale. The results of operations for HTSI are included in the Consolidated Statement of Operations through the effective date of the sale.

EXECUTIVE SUMMARY

During 2018, Honeywell continued to deliver on our financial commitments and to create long-term shareowner value. We grew net sales 3% to $41,802 million and grew income before taxes 8% to $7,487 million. The improvement in year over year income before taxes was attributable to both sales growth as well as operational improvements that increased operating margins. We believe our ability to consistently grow earnings derives from the consistent, rigorous deployment of the Honeywell Operating System as well as a long history of identifying and investing in productivity initiatives. We have continued our focus on commercial excellence processes, such as Velocity Product Development ("VPD"), to drive higher sales at better margins.

We are careful not to allow the attainment of short-term financial results to imperil the creation of long-term, sustainable shareowner value. Hence, as part of the announcement in October 2017 of the results of our portfolio review, we affirmed our commitment to a strategy and investments that are intended to enable us to become one of the world's leading software industrial companies. Our refocused strategy and investments are intended to take better advantage of our core technological and software strengths in high growth businesses that participate in six attractive industrial end markets. Each of these end markets is characterized by favorable global mega-trends including energy efficiency, infrastructure investment, urbanization and safety.

In 2018 we deployed capital of $7.6 billion, including the following:

- ***Capital Investment***—we invested over $0.8 billion in capital expenditures focused on high return projects.
- ***Dividends***—In 2018, we paid cash dividends of $2.3 billion and increased our annual dividend rate by 10%, as we seek to continue to grow the dividend in line with earnings. The dividend increase in September 2018 marked the ninth consecutive double-digit increase since 2010.
- ***Share Repurchases***—we continue to repurchase our shares with the goal of keeping share count flat and by offsetting the dilutive impact of employee stock based compensation and savings plans. Additionally, we seek to reduce share count via share repurchases as and when attractive opportunities arise. In 2018, we repurchased 26.5 million shares for $4.0 billion.
- ***Mergers and Acquisitions***—we deployed approximately $0.5 billion during 2018 on acquisitions.

CONSOLIDATED RESULTS OF OPERATIONS

Net Sales

	2018	2017	2016
Net sales	$ 41,802	$ 40,534	$ 39,302
% change compared with prior period	3 %	3 %	

The change in net sales is attributable to the following:

	2018 Versus 2017	2017 Versus 2016
Volume	4%	3%
Price	2%	1%
Acquisitions/Divestitures	(4)%	(1)%
Foreign Currency Translation	1%	0%

	3%	3%

A discussion of net sales by segment can be found in the Review of Business Segments section of this Management's Discussion and Analysis.

The foreign currency translation impact in 2018 compared with 2017 was principally driven by the strengthening on average year over year of the Euro against the U.S. Dollar.

The foreign currency translation impact in 2017 compared with 2016 was flat. The strengthening of the Euro was offset by the weakening of the British Pound against the U.S. Dollar.

Cost of Products and Services Sold

	2018	2017	2016
Cost of products and services sold	$ 29,046	$ 28,144	$ 27,677
% change compared with prior period	3 %	2 %	
Gross Margin percentage	30.5 %	30.6 %	29.6 %

Cost of products and services sold increased in 2018 compared with 2017 principally due to increased direct material costs of approximately $790 million (driven by higher sales volume and inflation partially offset by divestitures and productivity) and higher repositioning and other charges of approximately $70 million.

Gross margin percentage decreased in 2018 compared with 2017 principally due to higher repositioning and other charges (approximately 0.2 percentage point impact) partially offset by higher gross margin in the segments (approximately 0.1 percentage point impact collectively).

Cost of products and services sold increased in 2017 compared with 2016 principally due to increased direct material costs of approximately $290 million (driven by higher sales volume and acquisitions partially offset by divestitures and productivity, net of inflation), higher repositioning and other charges of approximately $220 million and higher depreciation and amortization of approximately $90 million, partially offset by decreased indirect material costs of approximately $70 million and lower labor costs of approximately $60 million.

Gross margin percentage increased in 2017 compared with 2016 principally due to higher gross margin in Aerospace and Performance Materials and Technologies (approximately 1.7 percentage point impact collectively), partially offset by higher repositioning and other charges (approximately 0.5 percentage point impact) and by lower gross margin in Home and Building Solutions and Safety and Productivity Solutions (approximately 0.3 percentage point impact collectively).

Selling, General and Administrative Expenses

	2018	2017	2016
Selling, general and administrative expenses	$ 6,051	$ 6,087	$ 5,574
% of sales	14.5 %	15.0 %	14.2 %

Selling, general and administrative expenses decreased in 2018 compared with 2017 primarily due to productivity and divestiture impacts, partially offset by labor inflation and higher repositioning charges.

Selling, general and administrative expenses increased in 2017 compared with 2016 primarily due to increased labor costs (driven primarily by acquisitions, net of divestitures, investment for growth and merit increases), and higher repositioning charges.

Other (Income) Expense

	2018	2017	2016
Other (income) expense	$ (1,149)	$ (963)	$ (739)

Other (income) expense increased in 2018 compared with 2017 primarily due to an increase in pension ongoing income–non-service, favorable impacts of foreign currency and an increase in interest income, partially offset by separation costs associated with the spin-offs of our Homes and Global Distribution business and Transportation Systems business.

Other (income) expense increased in 2017 compared with 2016 primarily due to due to an increase in pension ongoing income–non-service.

Tax Expense

	2018	2017	2016
Tax expense	$ 659	$ 5,362	$ 1,603
Effective tax rate	8.8 %	77.2 %	24.8 %

The effective tax rate for 2018 was lower than the U.S. federal statutory rate of 21% primarily attributable to internal restructuring initiatives that resulted in a reduction of accrued withholding taxes of approximately $1.1 billion related to unremitted foreign earnings. In addition, we recorded a tax benefit of approximately $440 million as a reduction to our 2017 provisional estimate of impacts from what is commonly referred to as the U.S. Tax Cuts and Jobs Act ("U.S. Tax Reform"), which was partially offset by $411 million of tax costs associated with the internal restructuring of the Homes and Global Distribution business and the Transportation Systems business in advance of their spin-offs.

The effective tax rate for 2017 was higher than the U.S. federal statutory rate of 35% primarily from the estimated impacts of U.S. Tax Reform of approximately $3.8 billion, partially offset by lower tax rates on non-U.S. earnings.

The effective tax rate for 2016 was lower than the U.S. federal statutory rate of 35% primarily from lower tax rates on non-U.S. earnings.

For further discussion of changes in the effective tax rate, see Note 5 Income Taxes of Notes to Consolidated Financial Statements.

Net Income Attributable to Honeywell

	2018	2017	2016
Net income attributable to Honeywell	$ 6,765	$ 1,545	$ 4,812
Earnings per share of common stock–assuming dilution	$ 8.98	$ 2.00	$ 6.21

Earnings per share of common stock–assuming dilution increased in 2018 compared with 2017 primarily driven by the lower income tax expenses (due to reduction of accrued withholding taxes and the higher comparative income taxes in 2017 from U.S. Tax Reform), higher segment profit, increased pension and other postretirement income, and lower share count, partially offset by separation costs and higher repositioning and other charges.

Earnings per share of common stock–assuming dilution decreased in 2017 compared with 2016 primarily driven by additional income tax expense from U.S. Tax Reform, higher repositioning and other charges, partially offset by higher segment profit across all segments, lower pension mark-to-market expense and increased pension and other postretirement income.

BUSINESS OVERVIEW

Our consolidated results are principally impacted by:

- Changes in global economic growth rates and industry conditions and demand in our key end markets;
- The impact of fluctuations in foreign currency exchange rates (in particular the Euro), relative to the U.S. Dollar;
- The extent to which cost savings from productivity actions are able to offset or exceed the impact of material and non-material inflation;
- The spin-offs of the Homes and Global Distribution business and the Transportation Systems business into two stand-alone, publicly-traded companies and the associated separation costs;
- The impact of the pension discount rate and asset returns on pension expense, including mark-to-market adjustments, and funding requirements; and
- The impact of U.S. Tax Reform.

Our 2019 areas of focus, most of which are applicable to each of our segments include:

- Driving profitable growth through research and development and technological excellence to deliver innovative products that customers value, and through expansion and localization of our footprint in high growth regions;
-

- Executing on our strategy to become a software-industrial company, which for us means products and services that facilitate the connected plane, building and factory;
- Expanding margins by optimizing the Company’s cost structure through manufacturing and administrative process improvements, repositioning, and other productivity actions;
- Executing disciplined, rigorous M&A and integration processes to deliver growth through acquisitions;
- Controlling corporate costs, including costs incurred for asbestos and environmental matters, pension and other post-retirement benefits; and
- Increasing availability of capital through strong cash flow conversion from effective working capital management and proactively managing debt levels to enable the Company to smartly deploy capital for strategic acquisitions, dividends, share repurchases and capital expenditures.

Review of Business Segments

	Years Ended December 31,			% Change	
	2018	2017	2016	2018 Versus 2017	2017 Versus 2016
Aerospace Sales					
Commercial Aviation Original Equipment	$ 2,833	$ 2,475	$ 2,525	14 %	(2)%
Commercial Aviation Aftermarket	5,373	5,103	4,796	5 %	6 %
Defense and Space	4,665	4,053	4,375	15 %	(7)%
Transportation Systems	2,622	3,148	3,055	(17)%	3 %
Total Aerospace Sales	15,493	14,779	14,751		
Honeywell Building Technologies Sales					
Homes	3,928	4,482	4,405	(12)%	2 %
Buildings	5,370	5,295	5,085	1 %	4 %
Total Honeywell Building Technologies Sales	9,298	9,777	9,490		
Performance Materials and Technologies Sales					

UOP	2,845	2,753	2,469	3 %	12 %
Process Solutions	4,981	4,795	4,640	4 %	3 %
Advanced Materials	2,848	2,791	3,327	2 %	(16)%
Total Performance Materials and Technologies Sales	10,674	10,339	10,436		
Safety and Productivity Solutions Sales					
Safety	2,278	2,169	2,075	5 %	5 %
Productivity Solutions	4,059	3,470	2,550	17 %	36 %
Total Safety and Productivity Solutions Sales	6,337	5,639	4,625		
Net Sales	$ 41,802	$ 40,534	$ 39,302		

Aerospace

	2018	2017	Change	2016	Change
Net sales	$ 15,493	$ 14,779	5 %	$ 14,751	—
Cost of products and services sold	10,837	10,320		10,820	
Selling, general and administrative and other expenses	1,153	1,171		940	
Segment profit	$ 3,503	$ 3,288	7 %	$ 2,991	10 %

Factors Contributing to Year-Over-Year Change	2018 vs. 2017		2017 vs. 2016	
	Sales	Segment Profit	Sales	Segment Profit
Organic growth/ Operational segment profit	9 %	9 %	2 %	11 %
Foreign currency translation	1 %	1 %	—	—
Acquisitions, divestitures and other, net	(5)%	(3)%	(2)%	(1)%
Total % Change	5 %	7 %	—	10 %

2018 compared with 2017

Aerospace sales increased due to organic sales growth, due to both volume and price, the favorable impact of foreign currency translation, the impact of the adoption of the new revenue recognition accounting standard (included within Acquisitions, divestitures and other, net in the table above), offset by the spin-off of the Transportation Systems business on October 1, 2018.

- Commercial Original Equipment sales increased 14% (increased 11% organic) primarily due to increased demand from business aviation, and air transport and regional original equipment manufacturers (OEM), lower OEM incentives and the impact from the classification of nonrecurring engineering and development funding resulting from the adoption of the new revenue recognition accounting standard.
- Commercial Aftermarket sales increased 5% (increased 5% organic) primarily due to growth in business aviation and air transport and regional.
- Defense and Space sales increased 15% (increased 15% organic) primarily driven by growth in U.S. and international defense.
- Transportation Systems sales decreased 17% driven by divestiture impacts following its October 1, 2018 spin-off. For the nine-month period prior to the spin-off, sales increased 7% organic driven by higher volumes in light vehicle gas turbos and commercial vehicles.

Aerospace segment profit increased due to an increase in operational segment profit, the favorable impact of foreign currency translation, and the impact on service programs from the adoption of the new revenue recognition accounting standard, partially offset by the Transportation Systems divestiture. The increase in operational segment profit was driven primarily by higher organic sales volume, price, productivity net of inflation, and lower OEM incentives, partially offset by the spin-off of the Transportation Systems business. Cost of products and services sold increased primarily due to higher organic sales volume, the impact of foreign currency translation and inflation, partially offset by the Transportation Systems divestiture.

2017 compared with 2016

Aerospace sales were flat due to organic sales growth, offset by the government services business divestiture.

- Commercial Original Equipment sales decreased 2% (decreased 2% organic) primarily due to lower shipments to business jet OEMs, partially offset by lower air transport and regional OEM incentives.
- Commercial Aftermarket sales increased 6% (increased 6% organic) primarily driven by higher repair and overhaul activities and increased spares shipments.
- Defense and Space sales decreased 7% (increased 1% organic) primarily due to the government services business divestiture and lower Space sales, partially offset by growth in U.S. defense.
- Transportation Systems sales increased 3% (increased 2% organic) primarily driven by higher commercial vehicle volumes, gas turbo penetration and the favorable impact from foreign currency translation, partially offset by lower diesel turbo volumes.

Aerospace segment profit increased due to an increase in operational segment profit, partially offset by the government services business divestiture. The increase in operational segment profit was driven primarily by productivity, net of inflation, including restructuring benefits, lower OEM incentives and higher organic sales volume, partially offset by the government services business divestiture. Cost of products and services sold decreased primarily driven by the government services business divestiture and productivity, net of inflation, partially offset by higher organic sales volume.

Honeywell Building Technologies

	2018	2017	Change	2016	Change
Net sales	$ 9,298	$ 9,777	(5)%	$ 9,490	3 %
Cost of products and services sold	6,066	6,430		6,152	
Selling, general and administrative and other expenses	1,624	1,697		1,717	
Segment profit	$ 1,608	$ 1,650	(3)%	$ 1,621	2 %

Factors Contributing to Year-Over-Year Change	2018 vs. 2017		2017 vs. 2016	
	Sales	Segment Profit	Sales	Segment Profit
Organic growth/ Operational segment profit	3 %	5 %	2 %	1 %
Foreign currency translation	1 %	1 %	—	1 %
Acquisitions and divestitures, net	(9)%	(9)%	1 %	—
Total % Change	(5)%	(3)%	3 %	2 %

2018 compared with 2017

Honeywell Building Technologies sales decreased primarily due to the Homes divestiture partially offset by an increase in organic growth, due to both volume and price, and the favorable impact of foreign currency translation.

- Sales in Homes decreased 12% driven by divestiture impacts following its October 29, 2018 spin-off. For the period prior to the spin-off, sales increased 6% organic driven by both Products and Distribution (ADI) businesses.

- Sales in Buildings increased 1% (flat organic) due to the organic growth in Building Solutions and the favorable impact of foreign currency translation, offset by lower sales in Building Management Systems and Building Products.

Honeywell Building Technologies segment profit decreased due to the Homes divestiture, partially offset by an increase in operational segment profit and the favorable impact of foreign currency translation. The increase in operational segment profit was primarily driven by price and productivity, partially offset by inflation and higher sales of lower margin products. Cost of products and services decreased due to the Homes divestiture, partially offset by higher organic sales.

2017 compared with 2016

Honeywell Building Technologies sales increased primarily due to an increase in organic sales, price, and acquisitions.

- Sales in Homes increased 2% (increased 2% organic) due to an increase in organic sales growth in Distribution, partially offset by lower sales volume in Products.

- Sales in Buildings increased 4% (increased 3% organic) due to organic sales growth in Building Products, Building Management Systems, Building Solutions, and acquisitions.

Honeywell Building Technologies segment profit increased due to an increase in operational segment profit and the favorable impact of foreign currency translation. The increase in operational segment profit was primarily driven by productivity, net of inflation, and price, partially offset by higher sales of lower margin products. Cost of products and services increased due to higher organic sales and acquisitions.

Performance Materials and Technologies

	2018	2017	Change	2016	Change
Net sales	$ 10,674	$ 10,339	3 %	$ 10,436	(1)%
Cost of products and services sold	6,948	6,764		6,978	
Selling, general and administrative and other expenses	1,398	1,369		1,346	
Segment profit	$ 2,328	$ 2,206	6 %	$ 2,112	4 %

Factors Contributing to Year-Over-Year Change	2018 vs. 2017		2017 vs. 2016	
	Sales	Segment Profit	Sales	Segment Profit
Organic growth/ Operational segment profit	2 %	5 %	8 %	10 %
Foreign currency translation	1 %	1 %	—	—
Acquisitions and divestitures, net	—	—	(9)%	(6)%
Total % Change	3 %	6 %	(1)%	4 %

2018 compared with 2017

Performance Materials and Technologies sales increased primarily due to organic growth, mainly due to price, and the favorable impact of foreign currency translation.

- UOP sales increased 3% (increased 3% organic) driven primarily by increases in engineering revenues and increased catalyst volumes, partially offset by lower gas processing equipment revenues.
-

- Process Solutions sales increased 4% (increased 3% organic) driven primarily by increases in maintenance and migration services, increased revenues in projects, and higher field products sales.
- Advanced Materials sales increased 2% (flat organic) driven primarily by increased volumes in fluorine products, partially offset by lower other specialty products sales.

Performance Materials and Technologies segment profit increased primarily due to an increase in operational segment profit and the favorable impact of foreign currency translation. The increase in operational segment profit is primarily due to productivity and price, partially offset by inflation, higher sales of lower margin products, and continued investments for growth. Cost of products and services sold increased primarily due to inflation, higher sales of lower margin products, and foreign currency translation, partially offset by productivity.

2017 compared with 2016

Performance Materials and Technologies sales decreased primarily due to divestitures, partially offset by organic growth.

- UOP sales increased 12% (increased 12% organic) driven primarily by higher gas processing project revenues, increased catalyst volumes, increased equipment sales, and increased engineering revenues, partially offset by decreased licensing revenues.
- Process Solutions sales increased 3% (increased 3% organic) driven primarily by higher revenue in smart energy, services, thermal solutions, and software, partially offset by lower field products sales.
- Advanced Materials sales decreased 16% (increased 11% organic) driven primarily by the spin-off of the former resins and chemicals business, partially offset by increased volumes in fluorine products.

Performance Materials and Technologies segment profit increased primarily due to an increase in operational segment profit, partially offset by divestitures. The increase in operational segment profit is primarily due to productivity, net of inflation, higher organic sales volume and pricing, partially offset by unfavorable product mix and continued investments for growth. Cost of products and services sold decreased primarily due to divestitures and productivity, net of inflation, partially offset by higher organic sales volumes.

Safety and Productivity Solutions

	2018	2017	Change	2016	Change
Net sales	$ 6,337	$ 5,639	12 %	$ 4,625	22 %
Cost of products and services sold	4,205	3,714		3,001	
Selling, general and administrative and other expenses	1,100	1,073		944	
Segment profit	$ 1,032	$ 852	21 %	$ 680	25 %

Factors Contributing to Year-Over-Year Change	2018 vs. 2017		2017 vs. 2016	
	Sales	Segment Profit	Sales	Segment Profit
Organic growth/ Operational segment profit	11 %	20 %	5 %	18 %
Foreign currency translation	1 %	1 %	—	—
Acquisitions and divestitures, net	—	—	17 %	7 %
Total % Change	12 %	21 %	22 %	25 %

2018 compared with 2017

Safety and Productivity Solutions sales increased primarily due to organic sales growth, mainly due to sales volume and a modest impact due to price.

- Sales in Safety increased 5% (increased 4% organic) due to increased sales volume in both Industrial Safety and Retail.
- Sales in Productivity Solutions increased 17% (increased 16% organic) primarily due to increased sales volume in Intelligrated, Sensing and IoT, and Productivity Products.

Safety and Productivity Solutions segment profit increased primarily due to an increase in operational segment profit. The increase in operational segment profit was driven by higher sales volume and price. Cost of products and services increased primarily due to higher organic sales.

2017 compared with 2016

Safety and Productivity Solutions sales increased primarily due to acquisitions and organic sales volume.

- Sales in Safety increased 5% (increased 4% organic) due to increased sales volume in the Industrial Safety business, higher distribution in the Retail business, and the favorable impact of foreign currency translation.
- Sales in Productivity Solutions increased 36% (increased 6% organic) principally due to growth from acquisitions (Intelligrated was acquired in August 2016).

Safety and Productivity Solutions segment profit increased due to an increase from operational segment profit and acquisitions. The increase in operational segment profit is driven by higher productivity, net of inflation, and sales volume. Cost of products and services increased primarily due to acquisitions and higher sales volume offset by productivity, net of inflation.

Repositioning Charges

See Note 3 Repositioning and Other Charges of Notes to Consolidated Financial Statements for a discussion of our repositioning actions and related charges incurred in 2018, 2017 and 2016. Cash spending related to our repositioning actions was $285 million, $177 million and $228 million in 2018, 2017 and 2016, and was funded through operating cash flows. In 2019, we expect cash spending for repositioning actions to be approximately $300 million and to be funded through operating cash flows.

LIQUIDITY AND CAPITAL RESOURCES

The Company continues to manage its businesses to maximize operating cash flows as the primary source of liquidity. In addition to our available cash and operating cash flows, additional sources of liquidity include committed credit lines, short-term debt from the commercial paper market, long-term borrowings, access to the public debt and equity markets and the ability to access non-U.S. cash as a result of the U.S. Tax Reform. We continue to balance our cash and financing uses through investment in our existing core businesses, acquisition activity, share repurchases and dividends.

Cash Flow Summary

Our cash flows from operating, investing and financing activities, as reflected in the Consolidated Statement of Cash Flows, are summarized as follows:

	Years Ended December 31,		
	2018	**2017**	**2016**
Cash provided by (used for):			
Operating activities	$ 6,434	$ 5,966	$ 5,498
Investing activities	1,027	(3,574)	(3,342)
Financing activities	(5,032)	(3,516)	346
Effect of exchange rate changes on cash	(201)	340	(114)
Net (decrease) increase in cash and cash equivalents	$ 2,228	$ (784)	$ 2,388

2018 compared with 2017

Cash provided by operating activities increased by $468 million primarily due to a $239 million increase in customer advances and deferred income and lower cash tax payments of $185 million.

Cash provided by investing activities increased by $4,601 million primarily due to a net $4,302 million decrease in investments, primarily short-term marketable securities, and a $620 million favorable change in settlements of foreign currency exchange contracts used as economic hedges on certain non-functional currency denominated monetary assets and liabilities, partially offset by an increase in cash paid for acquisitions of $453 million.

Cash used for financing activities increased by $1,516 million primarily due to an increase in net debt payments of $2,622 million, an increase in net repurchases of common stock of $1,364 million and an increase in cash dividends paid of $153 million, partially offset by net spin separation funding of $2,622 million net of spin-off cash.

2017 compared with 2016

Cash provided by operating activities increased by $468 million primarily due to a $504 million increase in segment profit and a $294 million favorable impact from working capital (favorable accounts payable partially offset by inventory and accounts receivable), partially offset by higher cash tax payments of $609 million.

Cash used for investing activities increased by $232 million primarily due to (i) a net $2,056 million increase in investments, primarily short-term marketable securities, (ii) an increase of $500 million of settlement payments of foreign currency exchange contracts used as economic hedges on certain non-functional currency denominated monetary assets and liabilities and (iii) a decrease in proceeds from the sales of businesses of $296 million (most significantly Honeywell Technology Solutions Inc. in 2016), partially offset by a decrease in cash paid for acquisitions of $2,491 million (most significantly Intelligrated in 2016).

Cash provided by financing activities increased by $3,862 million primarily due to a decrease in the net proceeds from debt issuances of $2,827 million, an increase in net repurchases of common stock of $699 million and an increase in cash dividends paid of $204 million.

Liquidity

Each of our businesses is focused on implementing strategies to increase operating cash flows through revenue growth, margin expansion and improved working capital turnover. Considering the current economic environment in which each of the businesses operate and their business plans and strategies, including the focus on growth, cost reduction and productivity initiatives, we believe that cash balances and operating cash flow will continue to be our principal source of liquidity. In addition to the available cash and operating cash flows, additional sources of liquidity include committed credit lines, short-term debt from the commercial paper markets, long-term borrowings, and access to the public debt and equity markets. To date, the Company has not experienced any limitations in our ability to access these sources of liquidity.

We monitor the third-party depository institutions that hold our cash and cash equivalents on a daily basis. Our emphasis is primarily safety of principal and secondarily maximizing yield of those funds. We diversify our cash and cash equivalents among counterparties to minimize exposure to any one of these entities.

A source of liquidity is our ability to issue short-term debt in the commercial paper market. Commercial paper notes are sold at a discount or premium and have a maturity of not more than 365 days from date of issuance. Borrowings under the commercial paper program are available for general corporate purposes as well as for financing acquisitions. The weighted average interest rate on short-term borrowings and commercial paper outstanding as of December 31, 2018 was (0.31%) and as of December 31, 2017 was (0.17%).

Our ability to access the commercial paper market, and the related cost of these borrowings, is affected by the strength of our credit rating and market conditions. Our credit ratings are periodically reviewed by the major independent debt-rating agencies. As of December 31, 2018, Standard and Poor's (S&P), Fitch, and Moody's have ratings on our long-term debt of A, A and A2 and short-term debt of A-1, F1 and P1. S&P, Fitch and Moody's have Honeywell's rating outlook as "stable."

We also have a current shelf registration statement filed with the Securities and Exchange Commission under which we may issue additional debt securities, common stock and preferred stock that may be offered in one or more offerings on terms to be determined at the time of the offering. Net proceeds of any offering would be used for general corporate purposes, including repayment of existing indebtedness, share repurchases, capital expenditures and acquisitions.

See Note 2 Acquisitions and Divestitures and Note 13 Long-term Debt and Credit Agreements of Notes to Consolidated Financial Statements for additional discussion of items impacting our liquidity.

In 2018, the Company repurchased $4,000 million of outstanding shares to offset the dilutive impact of employee stock based compensation plans, including option exercises, restricted unit vesting and matching contributions under our savings plans, and to reduce share count when attractive opportunities arise. In December 2017, the Board of Directors authorized the repurchase of up to a total of $8 billion of Honeywell common stock, of which $3.7 billion remained available as of December 31, 2018 for additional share repurchases. This authorization included amounts remaining under and replaced the previously approved share repurchase program. Honeywell presently expects to repurchase outstanding shares from time to time to offset the dilutive impact of employee stock based compensation plans, including option exercises, restricted unit vesting and matching contributions under our savings plans. We will continue to seek to reduce share count via share repurchases as and when attractive opportunities arise.

In addition to our normal operating cash requirements, our principal future cash requirements will be to fund capital expenditures, share repurchases, dividends, strategic acquisitions and debt repayments.

Specifically, we expect our primary cash requirements in 2019 to be as follows:

- Capital expenditures—we expect to spend approximately $800 million for capital expenditures in 2019 primarily for growth, production and capacity expansion, cost reduction, maintenance, and replacement.

- Share repurchases—under the Company's share repurchase program, $3.7 billion is available as of December 31, 2018 for additional share repurchases. Honeywell presently expects to repurchase outstanding shares from time to time to offset the dilutive impact of employee stock-based compensation plans, including option exercises, restricted unit vesting and matching contributions under our savings plans. Additionally, we will seek to reduce share count via share repurchases as and when attractive opportunities arise. The amount and timing of future repurchases may vary depending on market conditions and our level of operating, financing and other investing activities.
- Dividends—we increased our quarterly dividend rate by 10% to $0.82 per share of common stock effective with the fourth quarter 2018 dividend. The Company intends to continue to pay quarterly dividends in 2019.

We continuously assess the relative strength of each business in our portfolio as to strategic fit, market position, profit and cash flow contribution in order to upgrade our combined portfolio and identify business units that will most benefit from increased investment. We identify acquisition candidates that will further our strategic plan and strengthen our existing core businesses. We also identify businesses that do not fit into our long-term strategic plan based on their market position, relative profitability or growth potential. These businesses are considered for potential divestiture, restructuring or other repositioning actions subject to regulatory constraints. In 2018, we realized $2,622 million in net cash proceeds from the spin-off of non-strategic businesses.

Based on past performance and current expectations, we believe that our operating cash flows will be sufficient to meet our future operating cash needs. Our available cash, committed credit lines and access to the public debt and equity markets, provide additional sources of short-term and long-term liquidity to fund current operations, debt maturities, and future investment opportunities.

Contractual Obligations and Probable Liability Payments

Following is a summary of our significant contractual obligations and probable liability payments at December 31, 2018:

		Payments by Period			
	Total(6)(7)	**2019**	**2020-2021**	**2022-2023**	**Thereafter**
Long-term debt, including capitalized leases(1)	$ 12,628	$ 2,872	$ 3,761	$ 1,778	$ 4,217
Interest payments on long-term debt, including capitalized leases	3,049	313	519	389	1,828

Minimum operating lease payments	856	210	310	189	147
Purchase obligations(2)	2,002	1,146	578	250	28
Estimated environmental liability payments(3)	755	175	355	172	53
Asbestos related liability payments(4)	2,514	245	786	710	773
Asbestos insurance recoveries(5)	(477)	(40)	(114)	(84)	(239)
	$ 21,327	$ 4,921	$ 6,195	$ 3,404	$ 6,807

(1) Assumes all long-term debt is outstanding until scheduled maturity.

(2) Purchase obligations are entered into with various vendors in the normal course of business and are consistent with our expected requirements.

(3) The payment amounts in the table only reflect the environmental liabilities which are probable and reasonably estimable as of December 31, 2018.

(4) These amounts are estimates of asbestos related cash payments for NARCO and Bendix based on our asbestos related liabilities which are probable and reasonably estimable as of December 31, 2018. See Asbestos Matters in Note 20 Commitments and Contingencies of Notes to Consolidated Financial Statements for additional information.

(5) These amounts represent our insurance recoveries that are deemed probable for asbestos related liabilities as of December 31, 2018. See Asbestos Matters in Note 20 Commitments and Contingencies of Notes to Consolidated Financial Statements for additional information.

(6) The table excludes tax liability payments, including those for unrecognized tax benefits. See Note 5 Income Taxes of Notes to Consolidated Financial Statements for additional information.

(7) The table excludes expected proceeds from the indemnification and reimbursement agreements entered into with Garrett and Resideo. See Note 20 Commitments and Contingencies of Notes to Consolidated Financial Statements for additional information.

Environmental Matters

Accruals for environmental matters deemed probable and reasonably estimable were $395 million, $287 million and $195 million in 2018, 2017 and 2016. In addition, in 2018, 2017 and 2016 we incurred operating costs for ongoing businesses of approximately $95 million, $82 million and $83 million relating to compliance with environmental regulations.

Spending related to known environmental matters was $218 million, $212 million and $228 million in 2018, 2017 and 2016 and is estimated to be approximately $175 million in 2019. We expect to fund expenditures for these environmental matters from operating cash flow. The timing of cash expenditures depends on several factors, including the timing of litigation and settlements of remediation liability, personal injury and property damage claims, regulatory approval of cleanup projects, execution timeframe of projects, remedial techniques to be utilized and agreement with other parties.

Reimbursements from Resideo for spending for environmental matters at certain sites as defined in the indemnification and reimbursement agreement was $25 million in 2018 and is expected to be $140 million in 2019. Such reimbursements will offset operating cash outflows incurred by the Company.

See Note 20 Commitments and Contingencies of Notes to Consolidated Financial Statements for further discussion of our environmental matters and the indemnification and reimbursement agreement entered into with Resideo.

Financial Instruments

The following table illustrates the potential change in fair value for interest rate sensitive instruments based on a hypothetical immediate one percentage point increase in interest rates across all maturities and the potential change in fair value for foreign exchange rate sensitive instruments based on a 10% weakening of the U.S. Dollar versus local currency exchange rates across all maturities at December 31, 2018 and 2017.

	Face or Notional Amount	Carrying Value[1]	Fair Value[1]	Estimated Increase (Decrease)

				in Fair Value(2)
December 31, 2018				
Interest Rate Sensitive Instruments				
Long-term debt (including current maturities)	$ 12,628	$ (12,628)	$ (13,133)	$ (654)
Interest rate swap agreements	2,600	(45)	(45)	(83)
Foreign Exchange Rate Sensitive Instruments				
Foreign currency exchange contracts(3)	14,995	115	115	(742)
Cross currency swap agreements	1,200	32	32	(117)
December 31, 2017				
Interest Rate Sensitive Instruments				
Long-term debt (including current maturities)	$ 13,924	$ (13,924)	$ (14,695)	$ (782)
Interest rate swap agreements	2,600	(8)	(8)	(233)
Foreign Exchange Rate Sensitive Instruments				
Foreign currency exchange contracts(3)	9,273	(53)	(53)	(58)

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(1) Asset or (liability).

(2) A hypothetical immediate one percentage point decrease in interest rates across all maturities and a potential change in fair value of foreign exchange rate sensitive instruments based on a 10% strengthening of the U.S. dollar versus local currency exchange rates across all maturities will result in a change in fair value approximately equal to the inverse of the amount disclosed in the table.

(3) Changes in the fair value of foreign currency exchange contracts are offset by changes in the fair value, cash flows, or net investments of underlying hedged foreign currency transactions or foreign operations.

See Note 15 Financial Instruments and Fair Value Measures of Notes to Consolidated Financial Statements for further discussion on the agreements.

CRITICAL ACCOUNTING POLICIES

The preparation of our consolidated financial statements in accordance with generally accepted accounting principles is based on the selection and application of accounting policies that require us to make significant estimates and assumptions about the effects of matters that are inherently uncertain. We consider the accounting policies discussed below to be critical to the understanding of our financial statements. Actual results could differ from our estimates and assumptions, and any such differences could be material to our consolidated financial statements.

Contingent Liabilities—We are subject to a number of lawsuits, investigations and claims (some of which involve substantial dollar amounts) that arise out of the conduct of our global business operations or those of previously owned entities, including matters relating to commercial transactions, government contracts, product liability (including asbestos), prior acquisitions and divestitures, employee benefit plans, intellectual property, legal and environmental, health and safety matters. We continually assess the likelihood of any adverse judgments or outcomes to our contingencies, as well as potential amounts or ranges of probable losses, and recognize a liability, if any, for these contingencies based on a thorough analysis of each matter with the assistance of outside legal counsel and, if applicable, other experts. Such analysis includes making judgments concerning matters such as the costs associated with environmental matters, the outcome of negotiations, the number and cost of pending and future asbestos claims, and the impact of evidentiary requirements. Because most contingencies are resolved over long periods of time, liabilities may change in the future due to new developments (including new discovery of facts, changes in legislation and outcomes of similar cases through the judicial system), changes in assumptions or changes in our settlement strategy. See Note 20 Commitments and Contingencies of Notes to Consolidated Financial Statements for a discussion of management's judgment applied in the recognition and measurement of our environmental and asbestos liabilities which represent our most significant contingencies.

Asbestos Related Liabilities and Insurance Recoveries, and Indemnification Receivables—Honeywell's involvement in asbestos related personal injury actions relates to two predecessor companies. Regarding North American Refractories Company ("NARCO") asbestos related claims, we accrued for pending claims based on terms and conditions in agreements with NARCO, its former parent company, and certain asbestos claimants, and an estimate of the unsettled claims pending as of the time NARCO filed for bankruptcy protection. We also accrued for the estimated value of future NARCO asbestos related claims expected to be asserted against the NARCO Trust. The estimate of future NARCO claims was prepared in 2002, in the same year NARCO filed for bankruptcy protection, using NARCO tort system litigation experience based on a commonly accepted methodology used by numerous bankruptcy courts addressing 524(g) trusts. Accordingly, the estimated value of future NARCO asbestos claims was prepared before there was data on claims filings and payment rates in the NARCO Trust under the Trust Distribution Procedures and prepared when the stay of all NARCO asbestos claims was in effect (which remained in effect until NARCO emerged from Bankruptcy protection). Some critical assumptions underlying this commonly accepted methodology included claims filing rates, disease criteria and payment values contained in the Trust Distribution Procedures, estimated approval rates of claims submitted to the NARCO Trust and epidemiological studies estimating disease instances. This estimate resulted in a range of estimated liability of $743 million to $961 million. We believe that no amount within this range is a better estimate than any other amount and accordingly, we have recorded the minimum amount in the range. Given the Trust's lack of sufficiently reliable claims data since NARCO emerged from bankruptcy protection, it is not yet possible to update our estimated future claim costs based on actual NARCO Trust experience. Regarding Bendix Friction Materials ("Bendix") asbestos related claims, we accrued for the estimated value of pending claims using average resolution values for the previous five years. We also accrued for the estimated value of future claims related to Bendix over the full term of epidemiological projections through 2059 based on historic and anticipated claims filing experience and dismissal rates, disease classifications, and average resolution values in the tort system for the previous five years.

In connection with the recognition of liabilities for asbestos related matters, we record asbestos related insurance recoveries that are deemed probable. In assessing the probability of insurance recovery, we make judgments concerning insurance coverage that we believe are reasonable and consistent with our historical dealings and our knowledge of any pertinent solvency issues surrounding insurers. While the substantial majority of our insurance carriers are solvent, some of our individual carriers are insolvent, which has been considered in our analysis of probable recoveries. Projecting future events is subject to various uncertainties that could cause the insurance recovery on asbestos related liabilities to be higher or lower than that projected and recorded. Given the inherent uncertainty in making future projections, we reevaluate our projections concerning our probable insurance recoveries considering any changes to the projected liability, our recovery experience or other relevant factors that may impact future insurance recoveries.

Additionally, in conjunction with the Garrett spin-off, the Company entered into an indemnification and reimbursement agreement with a Garrett subsidiary, pursuant to which Garrett's subsidiary has an obligation to make cash payments to Honeywell as reimbursement for asbestos liabilities. Accordingly, the Company has recorded an indemnification receivable and we monitor the recoverability of such receivable, which is subject to terms of applicable credit agreements of Garrett and its general ability to pay.

See Note 20 Commitments and Contingencies of Notes to Consolidated Financial Statements for a discussion of management's judgments applied in the recognition and measurement of our asbestos-related liabilities and related insurance recoveries, and additional details regarding the indemnification and reimbursement agreement.

Defined Benefit Pension Plans—We sponsor both funded and unfunded U.S. and non-U.S. defined benefit pension plans. For financial reporting purposes, net periodic pension (income) expense is calculated annually based upon a number of actuarial assumptions, including a discount rate for plan obligations and an expected long-term rate of return on plan assets. Changes in the discount rate and expected long-term rate of return on plan assets could materially affect the annual pension (income) expense amount. Annual pension (income) expense is comprised of service and interest cost, assumed return on plan assets, prior service amortization (Pension Ongoing (Income) Expense) and a potential mark-to-market adjustment (MTM Adjustment).

The key assumptions used in developing our 2018, 2017 and 2016 net periodic pension (income) expense for our U.S. plans included the following:

	2018	2017	2016
Discount Rate:			
Projected benefit obligation	3.68 %	4.20 %	4.46 %
Service cost	3.77 %	4.42 %	4.69 %
Interest cost	3.27 %	3.49 %	3.59 %
Assets:			
Expected rate of return	7.75 %	7.75 %	7.75 %
Actual rate of return	-1.8 %	20.5 %	9.7 %
Actual 10 year average annual compounded rate of return	11.0 %	7.4 %	6.4 %

The MTM Adjustment represents the recognition of net actuarial gains or losses in excess of 10% of the greater of the fair value of plan assets or the plans' projected benefit obligation (the corridor). Net actuarial gains and losses occur when the actual experience differs from any of the various assumptions used to value our pension plans or when assumptions change. The primary factors contributing to actuarial gains and losses are changes in the discount rate used to value pension obligations as of the measurement date each year and the difference between expected and actual returns on plan assets. The mark-to-market accounting method results in the potential for volatile and difficult to forecast MTM Adjustments. MTM charges were $37 million, $87 million and $273 million in 2018, 2017 and 2016.

We determine the expected long-term rate of return on plan assets utilizing historical plan asset returns over varying long-term periods combined with our expectations of future market conditions and asset mix considerations (see Note 21 Pension and Other Postretirement Benefits of Notes to Consolidated Financial Statements for details on the actual various asset classes and targeted asset allocation percentages for our pension plans). We plan to use an expected rate of return on plan assets of 6.75% for 2019 down from 7.75% for 2018 reflecting a re-balancing of assets to more fixed income during 2018.

The discount rate reflects the market rate on December 31 (measurement date) for high-quality fixed-income investments with maturities corresponding to our benefit obligations and is subject to change each year. The discount rate can be volatile from year to year as it is determined based upon prevailing interest rates as of the measurement date. We used a 4.35% discount rate to determine benefit obligations as of December 31, 2018, reflecting the increase in the market interest rate environment since the prior year-end.

In addition to the potential for MTM Adjustments, changes in our expected rate of return on plan assets and discount rate resulting from economic events also affects future pension ongoing (income) expense. The following table highlights the sensitivity of our U.S. pension obligations and ongoing (income) expense to changes in these assumptions, assuming all other assumptions remain constant. These estimates exclude any potential MTM Adjustment:

Change in Assumption	Impact on 2019 Pension Ongoing Expense	Impact on PBO
0.25 percentage point decrease in discount rate	Decrease $20 million	Increase $420 million
0.25 percentage point increase in discount rate	Increase $20 million	Decrease $410 million
0.25 percentage point decrease in expected rate of return on assets	Increase $41 million	—

0.25 percentage point increase in expected rate of return on assets	Decrease $41 million	—

Pension ongoing income for our world-wide pension plans is expected to be approximately $590 million in 2019 compared with pension ongoing income of $992 million in 2018. The expected decrease in pension income is primarily due to lower actual asset returns in 2018 and a lower expected return on asset assumption for 2019 in our U.S. and UK plans. Also, if required, an MTM Adjustment will be recorded in the fourth quarter of 2019 in accordance with our pension accounting method as previously described. It is difficult to reliably forecast or predict whether there will be a MTM Adjustment in 2019, and if one is required, what the magnitude of such adjustment will be. MTM Adjustments are primarily driven by events and circumstances beyond the control of the Company such as changes in interest rates and the performance of the financial markets.

Long-Lived Assets (including Tangible and Finite-Lived Intangible Assets)—The determination of useful lives (for depreciation/amortization purposes) and whether or not tangible and intangible assets are impaired involves the use of accounting estimates and assumptions, changes in which could materially impact our financial condition or operating performance if actual results differ from such estimates and assumptions. We evaluate the recoverability of the carrying amount of our long-lived assets whenever events or changes in circumstances indicate that the carrying amount of a long-lived asset group may not be fully recoverable. The principal factors in considering when to perform an impairment review are as follows:

- Significant under-performance (i.e., declines in sales, earnings or cash flows) of a business or product line in relation to expectations;

- Annual operating plans or strategic plan outlook that indicate an unfavorable trend in operating performance of a business or product line;

- Significant negative industry or economic trends; or

- Significant changes or planned changes in our use of the assets.

Once it is determined that an impairment review is necessary, recoverability of assets is measured by comparing the carrying amount of the asset grouping to the estimated future undiscounted cash flows. If the carrying amount exceeds the estimated future undiscounted cash flows, the asset grouping is considered to be impaired. The impairment is then measured as the difference between the carrying amount of the asset grouping and its fair value. We endeavor to utilize the best information available to measure fair value, which is usually either market prices (if available), level 1 or level 2 of the fair value hierarchy, or an estimate of the future discounted cash flow, level 3 of the fair value hierarchy. The key estimates in our discounted cash flow analysis include assumptions as to expected industry and business growth rates, sales volume, selling prices and costs, cash flows, and the discount rate selected. These estimates are subject to changes in the economic environment, including market interest rates and expected volatility. Management believes the estimates of future cash flows and fair values are reasonable; however, changes in estimates due to variance from assumptions could materially affect the valuations.

Goodwill and Indefinite-Lived Intangible Assets Impairment Testing—Goodwill and intangible assets deemed to have indefinite lives are not amortized, but are subject to annual, or more frequent if necessary, impairment testing. In testing goodwill and indefinite-lived intangible assets, the fair value is estimated utilizing a discounted cash flow approach utilizing cash flow forecasts in our five year strategic and annual operating plans adjusted for terminal value assumptions. These impairment tests involve the use of accounting estimates and assumptions, changes in which could materially impact our financial condition or operating performance if actual results differ from such estimates and assumptions. To address this uncertainty we perform sensitivity analysis on key estimates and assumptions.

Income Taxes—On a recurring basis, we assess the need for a valuation allowance against our deferred tax assets by considering all available positive and negative evidence, such as past operating results, projections of future taxable income, enacted tax law changes and the feasibility and impact of tax planning initiatives. Our projections of future taxable income include a number of estimates and assumptions regarding our volume, pricing and costs, as well as the timing and amount of reversals of taxable temporary differences.

For further discussion of additional income tax policies and provision items recorded in regards to U.S Tax Reform, see Note 1 Summary of Significant Accounting Policies and Note 5 Income Taxes of Notes to Consolidated Financial Statements.

Sales Recognition on Long-Term Contracts—We recognize sales for long-term contracts with performance obligations satisfied over time using either an input or output method. We recognize revenue over time as we perform on these contracts based on the continuous transfer of control to the customer. With control transferring over time, revenue is recognized based on the extent of progress towards completion of the performance obligation. We generally use the cost-to-cost input method of progress for our contracts because it best depicts the transfer of control to the customer that occurs as we incur costs. Under the cost-to-cost method, the extent of progress towards completion is measured based on the proportion of costs incurred to date to the total estimated costs at completion of the performance obligation. Due to the nature of the work required to be performed on many of our performance obligations, the estimation of total revenue and cost at completion requires judgment. Contract revenues are largely determined by negotiated contract prices and quantities, modified by our assumptions regarding contract options, change orders, incentive and award provisions associated with technical performance and price adjustment clauses (such as inflation or index-based clauses). Cost estimates are largely based on negotiated or estimated purchase contract terms, historical performance trends and other economic projections. Significant factors that influence these estimates include inflationary trends, technical and schedule risk, internal and subcontractor performance trends, business volume assumptions, asset utilization, and anticipated labor agreements. Revenue and cost estimates are regularly monitored and revised based on changes in circumstances. Impacts from changes in estimates of net sales and cost of sales are recognized on a cumulative catch-up basis, which recognizes in the current period the cumulative effect of the changes on current and prior periods based on a performance obligation’s percentage of completion. Anticipated losses on long-term contracts are recognized when such losses become evident. We maintain financial controls over the customer qualification, contract pricing and estimation processes to reduce the risk of contract losses.

OTHER MATTERS

Litigation

See Note 20 Commitments and Contingencies of Notes to Consolidated Financial Statements for a discussion of environmental, asbestos and other litigation matters.

Recent Accounting Pronouncements

See Note 1 Summary of Significant Accounting Policies of Notes to Consolidated Financial Statements for a discussion of recent accounting pronouncements.

Item 7A. Quantitative and Qualitative Disclosures About Market Risks

Information relating to market risks is included in Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations under the caption "Financial Instruments".

Item 8. Financial Statements and Supplementary Data

HONEYWELL INTERNATIONAL INC.
CONSOLIDATED STATEMENT OF OPERATIONS

	Years Ended December 31,		
	2018	**2017**	**2016**
	(Dollars in millions, except per share amounts)		
Product sales	$ 32,848	$ 32,317	$ 31,362
Service sales	8,954	8,217	7,940
Net sales	41,802	40,534	39,302
Costs, expenses and other			
Cost of products sold	23,634	23,176	22,612
Cost of services sold	5,412	4,968	5,065
	29,046	28,144	27,677
Selling, general and administrative expenses	6,051	6,087	5,574
Other (income) expense	(1,149)	(963)	(739)
Interest and other financial charges	367	316	338
	34,315	33,584	32,850
Income before taxes	7,487	6,950	6,452

Tax expense	659	5,362	1,603
Net income	6,828	1,588	4,849
Less: Net income attributable to the noncontrolling interest	63	43	37
Net income attributable to Honeywell	$ 6,765	$ 1,545	$ 4,812
Earnings per share of common stock—basic	$ 9.10	$ 2.03	$ 6.30
Earnings per share of common stock—assuming dilution	$ 8.98	$ 2.00	$ 6.21

The Notes to Consolidated Financial Statements are an integral part of this statement.

HONEYWELL INTERNATIONAL INC.
CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

	Years Ended December 31,		
	2018	2017	2016
	(Dollars in millions)		
Net income	$ 6,828	$ 1,588	$ 4,849
Other comprehensive income (loss), net of tax			
Foreign exchange translation adjustment	(685)	(37)	(52)
Actuarial gains (losses)	(602)	753	(443)
Prior service (cost) credit	2	(59)	(18)
Prior service credit recognized during year	(74)	(70)	(78)
Actuarial losses recognized during year	35	83	236
Settlements and curtailments	2	19	(5)
Foreign exchange translation and other	31	(49)	73
Pensions and other postretirement benefit adjustments	(606)	677	(235)
Effective portion of cash flow hedges recognized in other comprehensive income	89	(101)	103
Less: reclassification adjustment for (losses) gains included in net income	4	60	(5)
Changes in fair value of effective cash flow hedges	85	(161)	108

Other comprehensive income (loss), net of tax	(1,206)	479	(179)
Comprehensive income	5,622	2,067	4,670
Less: Comprehensive income attributable to the noncontrolling interest	53	51	29
Comprehensive income attributable to Honeywell	$ 5,569	$ 2,016	$ 4,641

The Notes to Consolidated Financial Statements are an integral part of this statement.

HONEYWELL INTERNATIONAL INC.
CONSOLIDATED BALANCE SHEET

	December 31,	
	2018	2017
	(Dollars in millions)	
ASSETS		
Current assets:		
Cash and cash equivalents	$ 9,287	$ 7,059
Short-term investments	1,623	3,758
Accounts receivable—net	7,508	8,866
Inventories	4,326	4,613
Other current assets	1,618	1,706
Total current assets	24,362	26,002
Investments and long-term receivables	742	667
Property, plant and equipment—net	5,296	5,926
Goodwill	15,546	18,277
Other intangible assets—net	4,139	4,496
Insurance recoveries for asbestos related liabilities	437	479

Deferred income taxes	382	251
Other assets	6,869	3,372
Total assets	$ 57,773	$ 59,470
LIABILITIES		
Current liabilities:		
Accounts payable	$ 5,607	$ 6,584
Commercial paper and other short-term borrowings	3,586	3,958
Current maturities of long-term debt	2,872	1,351
Accrued liabilities	6,859	6,968
Total current liabilities	18,924	18,861
Long-term debt	9,756	12,573
Deferred income taxes	1,713	2,664
Postretirement benefit obligations other than pensions	344	512
Asbestos related liabilities	2,269	2,260
Other liabilities	6,402	5,930
Redeemable noncontrolling interest	7	5
SHAREOWNERS' EQUITY		
Capital—common stock issued		

	958	958
—additional paid-in capital	6,452	6,212
Common stock held in treasury, at cost	(19,771)	(15,914)
Accumulated other comprehensive income (loss)	(3,437)	(2,235)
Retained earnings	33,978	27,481
Total Honeywell shareowners' equity	18,180	16,502
Noncontrolling interest	178	163
Total shareowners' equity	18,358	16,665
Total liabilities, redeemable noncontrolling interest and shareowners' equity	$ 57,773	$ 59,470

The Notes to Consolidated Financial Statements are an integral part of this statement.

HONEYWELL INTERNATIONAL INC.
CONSOLIDATED STATEMENT OF CASH FLOWS

	Years Ended December 31,		
	2018	2017	2016
	(Dollars in millions)		
Cash flows from operating activities:			
Net income	$ 6,828	$ 1,588	$ 4,849
Less: Net income attributable to the noncontrolling interest	63	43	37
Net income attributable to Honeywell	6,765	1,545	4,812
Adjustments to reconcile net income attributable to Honeywell to net cash provided by operating activities:			
Depreciation	721	717	726
Amortization	395	398	304
(Gain) loss on sale of non-strategic businesses and assets	—	7	(178)
Repositioning and other charges	1,091	973	690
Net payments for repositioning and other charges	(652)	(628)	(625)
Pension and other postretirement (income) expense	(987)	(647)	(360)
Pension and other postretirement benefit payments	(80)	(106)	(143)
Stock compensation expense	175	176	184

Deferred income taxes	(586)	2,452	78
Other	(694)	1,642	194
Changes in assets and liabilities, net of the effects of acquisitions and divestitures:			
Accounts receivable	(236)	(682)	(547)
Inventories	(503)	(259)	(18)
Other current assets	218	(568)	(106)
Accounts payable	733	924	254
Accrued liabilities	74	22	233
Net cash provided by operating activities	6,434	5,966	5,498
Cash flows from investing activities:			
Expenditures for property, plant and equipment	(828)	(1,031)	(1,095)
Proceeds from disposals of property, plant and equipment	15	86	21
Increase in investments	(4,059)	(6,743)	(3,954)
Decrease in investments	6,032	4,414	3,681
Cash paid for acquisitions, net of cash acquired	(535)	(82)	(2,573)
Proceeds from sales of businesses, net of fees paid	—	—	296
Other	402	(218)	282

Net cash provided by (used for) investing activities	1,027	(3,574)	(3,342)
Cash flows from financing activities:			
Proceeds from issuance of commercial paper and other short-term borrowings	23,891	13,701	18,997
Payments of commercial paper and other short-term borrowings	(24,095)	(13,532)	(21,461)
Proceeds from issuance of common stock	267	520	409
Proceeds from issuance of long-term debt	27	1,238	9,245
Payments of long-term debt	(1,330)	(292)	(2,839)
Repurchases of common stock	(4,000)	(2,889)	(2,079)
Cash dividends paid	(2,272)	(2,119)	(1,915)
Payments to purchase the noncontrolling interest	—	—	(238)
Pre-separation funding	2,801	—	269
Pre-spin borrowing	—	—	38
Spin-off cash	(179)	—	(38)
Other	(142)	(143)	(42)
Net cash (used for) provided by financing activities	(5,032)	(3,516)	346
Effect of foreign exchange rate changes on cash and cash equivalents	(201)	340	(114)
Net increase (decrease) in cash and cash equivalents	2,228	(784)	2,388
Cash and cash equivalents at beginning of period			

	7,059	7,843	5,455
Cash and cash equivalents at end of period	$ 9,287	$ 7,059	$ 7,843

The Notes to Consolidated Financial Statements are an integral part of this statement.

HONEYWELL INTERNATIONAL INC.
CONSOLIDATED STATEMENT OF SHAREOWNERS' EQUITY

	Years Ended December 31,					
	2018		2017		2016	
	Shares	$	Shares	$	Shares	$
	(in millions)					
Common stock, par value	957.6	958	957.6	958	957.6	958
Additional paid-in capital						
Beginning balance		6,212		5,781		5,377
Issued for employee savings and option plans		65		255		183
Stock-based compensation expense		175		176		171
Other owner changes		—		—		50
Ending balance		6,452		6,212		5,781
Treasury stock						
Beginning balance	(206.7)	(15,914)	(196.8)	(13,366)	(187.2)	(11,664)
Reacquired stock or repurchases of common stock	(26.5)	(4,000)	(20.5)	(2,889)	(19.3)	(2,079)
Issued for employee savings and option plans	5.2	143	10.6	341	9.7	377

Ending balance	(228.0)	(19,771)	(206.7)	(15,914)	(196.8)	(13,366)
Retained earnings						
Beginning balance		27,481		28,046		25,480
Adoption of new accounting standards		264		—		—
Net income attributable to Honeywell		6,765		1,545		4,812
Dividends on common stock		(2,279)		(2,101)		(1,883)
Spin-offs		1,749		(9)		(362)
Redemption value adjustment		(2)		—		(1)
Ending balance		33,978		27,481		28,046
Accumulated other comprehensive income (loss)						
Beginning balance		(2,235)		(2,714)		(2,535)
Foreign exchange translation adjustment		(728)		(37)		(52)
Pensions and other postretirement benefit adjustments		(559)		677		(235)
Changes in fair value of effective cash flow hedges		85		(161)		108
Ending balance		(3,437)		(2,235)		(2,714)

Noncontrolling interest						
Beginning balance		163		178		135
Acquisitions, divestitures, and other		(12)		(11)		31
Net income attributable to noncontrolling interest		63		43		37
Foreign exchange translation adjustment		(10)		8		(8)
Dividends paid		(26)		(55)		(17)
Ending balance		178		163		178
Total shareowners' equity	729.6	18,358	750.9	16,665	760.8	18,883

The Notes to Consolidated Financial Statements are an integral part of this statement.

Note 1. Summary of Significant Accounting Policies

Accounting Principles—The financial statements and accompanying notes are prepared in accordance with accounting principles generally accepted in the United States of America. The following is a description of Honeywell's significant accounting policies.

Principles of Consolidation—The consolidated financial statements include the accounts of Honeywell International Inc. and all of its subsidiaries and entities in which a controlling interest is maintained. Our consolidation policy requires equity investments that we exercise significant influence over but do not control the investee and are not the primary beneficiary of the investee's activities to be accounted for using the equity method. Investments through which we are not able to exercise significant influence over the investee and which we do not have readily determinable fair values are accounted for under the cost method. All intercompany transactions and balances are eliminated in consolidation.

Property, Plant and Equipment—Property, plant and equipment are recorded at cost, including any asset retirement obligations, less accumulated depreciation. For financial reporting, the straight-line method of depreciation is used over the estimated useful lives of 10 to 50 years for buildings and improvements and 2 to 16 years for machinery and equipment. Recognition of the fair value of obligations associated with the retirement of tangible long-lived assets is required when there is a legal obligation to incur such costs. Upon initial recognition of a liability, the cost is capitalized as part of the related long-lived asset and depreciated over the corresponding asset's useful life.

Goodwill and Indefinite-Lived Intangible Assets—Goodwill and indefinite-lived intangible assets are subject to impairment testing annually as of March 31, and whenever events or changes in circumstances indicate that the carrying amount may not be fully recoverable. This testing compares carrying values to fair values and, when appropriate, the carrying value of these assets is reduced to fair value. We completed our annual goodwill impairment test as of March 31, 2018 and determined that there was no impairment as of that date.

Other Intangible Assets with Determinable Lives—Other intangible assets with determinable lives consist of customer lists, technology, patents and trademarks and other intangibles and are amortized over their estimated useful lives, ranging from 2 to 24 years.

Sales Recognition—Product and service sales are recognized when or as we transfer control of the promised products or services to our customer. Revenue is measured as the amount of consideration we expect to receive in exchange for transferring goods or providing services. Service sales, principally representing repair, maintenance and engineering activities are recognized over the contractual period or as services are rendered. Sales under long-term contracts with performance obligations satisfied over time are recognized using either an input or output method. We recognize revenue over time as we perform on these contracts because of the continuous transfer of control to the customer. With control transferring over time, revenue is recognized based on the extent of progress towards completion of the performance obligation. We generally use the cost-to-cost input method of progress for our contracts because it best depicts the transfer of control to the customer that occurs as we incur costs. Under the cost-to-cost method, the extent of progress towards completion is measured based on the proportion of costs incurred to date to the total estimated costs at completion of the performance obligation. We review our cost estimates on significant contracts on a periodic basis, or when circumstances change and warrant a modification to a previous estimate. Cost estimates are largely based on negotiated or estimated purchase contract terms, historical performance trends and other economic projections. Significant factors that influence these estimates include inflationary trends, technical and schedule risk, internal and subcontractor performance trends, business volume assumptions, asset utilization, and anticipated labor agreements. Provisions for anticipated losses on long-term contracts are recorded in full when such losses become evident, to the extent required.

The customer funding for costs incurred for nonrecurring engineering and development activities of our products under agreements with commercial customers is deferred and subsequently recognized as revenue as products are delivered to the customers. Additionally, expenses incurred, up to the customer agreed funded amount, are deferred as an asset and recognized as cost of sales when products are delivered to the customer. The deferred customer funding and costs result in recognition of deferred costs (asset) and deferred revenue (liability) on our Consolidated Balance Sheet.

Revenues for our mechanical service programs are recognized as performance obligations are satisfied over time, with recognition reflecting a series of distinct services using the output method.

The terms of a contract or the historical business practice can give rise to variable consideration due to, but not limited to, cash-based incentives, rebates, performance awards, or credits. We estimate variable consideration at the most likely amount we will receive from customers. We include estimated amounts in the transaction price to the extent it is probable that a significant reversal of cumulative revenue recognized for such transaction will not occur, or when the uncertainty associated with the variable consideration is resolved. Our estimates of variable consideration and determination of whether to include estimated amounts in the transaction price are based largely on an assessment of our anticipated performance and all information (historical, current and forecasted) that is reasonably available to us.

For the years ended 2017 and 2016, prior to the adoption of the revenue recognition standard (see Note 7 Revenue Recognition and Contracts with Customers), product and service sales were recognized when persuasive evidence of an arrangement existed, product delivery had occurred or services had been rendered, pricing was fixed or determinable, and collection was reasonably assured. Service sales, principally representing repair, maintenance and engineering activities were recognized over the contractual period or as services were rendered. Sales under long-term contracts were recorded on a percentage-of-completion method measured on the cost-to-cost basis for engineering-type contracts and the units-of-delivery basis for production-type contracts. Provisions for anticipated losses on long-term contracts were recorded in full when such losses became evident. Revenues from contracts with multiple element arrangements were recognized as each element was earned based on the relative fair value of each element provided the delivered elements had value to customers on a standalone basis. Amounts allocated to each element were based on its objectively determined fair value, such as the sales price for the product or service when it was sold separately or competitor prices for similar products or services.

Environmental—We accrue costs related to environmental matters when it is probable that we have incurred a liability related to a contaminated site and the amount can be reasonably estimated. For additional information, see Note 20 Commitments and Contingencies.

Asbestos Related Liabilities and Insurance Recoveries, and Indemnification Receivables—We recognize a liability for any asbestos related contingency that is probable of occurrence and reasonably estimable. In connection with the recognition of liabilities for asbestos related matters, we record asbestos related insurance recoveries that are deemed probable. Additionally, in conjunction with the Garrett spin-off, the Company entered into an indemnification and reimbursement agreement with a Garrett subsidiary, pursuant to which Garrett's subsidiary has an obligation to make cash payments to Honeywell as reimbursement for asbestos liabilities. Accordingly, the Company has recorded an indemnification receivable and we monitor the recoverability of such receivable, which is subject to terms of applicable credit agreements of Garrett and its general ability to pay. For additional information, see Note 20 Commitments and Contingencies.

Aerospace Sales Incentives—We provide sales incentives to commercial aircraft manufacturers and airlines in connection with their selection of our aircraft equipment, predominately wheel and braking system hardware, avionics, and auxiliary power units, for installation on commercial aircraft. These incentives consist of free or deeply discounted products, credits for future purchases of product or upfront cash payments. These costs are generally recognized in the period incurred as cost of products sold or as a reduction to relevant sales, as appropriate.

Research and Development—Research and development costs for company-sponsored research and development projects are expensed as incurred. Such costs are principally included in cost of products sold and were $1,809 million, $1,835 million and $1,864 million in 2018, 2017 and 2016.

Stock-Based Compensation Plans—The principal awards issued under our stock-based compensation plans, which are described in Note 19 Stock-Based Compensation Plans, are non-qualified stock options and restricted stock units. The cost for such awards is measured at the grant date based on the fair value of the award. The value of the portion of the award that is ultimately expected to vest is recognized as expense over the requisite service periods (generally the vesting period of the equity award) and is included in selling, general and administrative expenses. Forfeitures are estimated at the time of grant to recognize expense for those awards that are expected to vest and are based on our historical forfeiture rates.

Pension Benefits—On January 1, 2018, we retrospectively adopted the new accounting guidance on presentation of net periodic pension costs. That guidance requires that we disaggregate the service cost component of net benefit costs and report those costs in the same line item or items in the Consolidated Statement of Operations as other compensation costs arising from services rendered by the pertinent employees during the period. The other non-service components of net benefit costs are required to be presented separately from the service cost component.

Following the adoption of this guidance, we continue to record the service cost component of Pension ongoing (income) expense in Costs of products and services sold and Selling, general and administrative expenses. The remaining components of net benefit costs within Pension ongoing (income) expense, primarily interest costs and assumed return on plan assets, are now recorded in Other (income) expense. See Note 4 Other (Income) Expense for amounts that were reclassified. We will continue to recognize net actuarial gains or losses in excess of 10% of the greater of the fair value of plan assets or the plans' projected benefit obligation (the corridor) annually in the fourth quarter each year (MTM Adjustment). The MTM Adjustment will also be reported in Other (income) expense.

Foreign Currency Translation—Assets and liabilities of subsidiaries operating outside the United States with a functional currency other than U.S. Dollars are translated into U.S. Dollars using year-end exchange rates. Sales, costs and expenses are translated at the average exchange rates in effect during the year. Foreign currency translation gains and losses are included as a component of Accumulated other comprehensive income (loss). For subsidiaries operating in highly inflationary environments, inventories and property, plant and equipment, including related expenses, are remeasured at the exchange rate in effect on the date the assets were acquired, while monetary assets and liabilities are remeasured at year-end exchange rates. Remeasurement adjustments for these subsidiaries are included in earnings.

Derivative Financial Instruments—We minimize our risks from interest and foreign currency exchange rate fluctuations through our normal operating and financing activities and, when deemed appropriate through the use of derivative financial instruments. Derivative financial instruments are used to manage risk and are not used for trading or other speculative purposes. We do not use leveraged derivative financial instruments. Derivative financial instruments that qualify for hedge accounting must be designated and effective as a hedge of the identified risk exposure at the inception of the contract. Accordingly, changes in fair value of the derivative contract must be highly correlated with changes in fair value of the underlying hedged item at inception of the hedge and over the life of the hedge contract.

All derivatives are recorded on the balance sheet as assets or liabilities and measured at fair value. For derivatives designated as hedges of the fair value of assets or liabilities, the changes in fair values of both the derivatives and the hedged items are recorded in current earnings. For derivatives designated as cash flow hedges, the effective portion of the changes in fair value of the derivatives are recorded in Accumulated other comprehensive income (loss) and subsequently recognized in earnings when the hedged items impact earnings. Cash flows of such derivative financial instruments are classified consistent with the underlying hedged item. We have elected to exclude the time value of the derivatives (i.e., the forward points) from the assessment of hedge effectiveness and recognize the initial value of the excluded component in earnings using the amortization approach. For derivative instruments that are designated and qualify as a net investment hedge, the effective portion of the derivative's gain or loss is reported as a component of Other comprehensive income (loss) and recorded in Accumulated other comprehensive income (loss). The gain or loss will be subsequently reclassified into net earnings when the hedged net investment is either sold or substantially liquidated.

Income Taxes—Significant judgment is required in evaluating tax positions. We establish additional reserves for income taxes when, despite the belief that tax positions are fully supportable, there remain certain positions that do not meet the minimum recognition threshold. The approach for evaluating certain and uncertain tax positions is defined by the authoritative guidance which determines when a tax position is more likely than not to be sustained upon examination by the applicable taxing authority. In the normal course of business, the Company and its subsidiaries are examined by various federal, state and foreign tax authorities. We regularly assess the potential outcomes of these examinations and any future examinations for the current or prior years in determining the adequacy of our provision for income taxes. We continually assess the likelihood and amount of potential adjustments and adjust the income tax provision, the current tax liability and deferred taxes in the period in which the facts that give rise to a change in estimate become known. For discussion of the impacts from what is commonly referred to as the U.S. Tax Cuts and Jobs Act ("U.S Tax Reform"), see Note 5 Income Taxes.

Cash and cash equivalents—Cash and cash equivalents include cash on hand and highly liquid investments having an original maturity of three months or less.

Earnings Per Share—Basic earnings per share is based on the weighted average number of common shares outstanding. Diluted earnings per share is based on the weighted average number of common shares outstanding and all dilutive potential common shares outstanding.

Reclassifications—Certain prior year amounts have been reclassified to conform to the current year presentation.

Recent Accounting Pronouncements—We consider the applicability and impact of all Accounting Standards Updates (ASUs) issued by the Financial Accounting Standards Board (FASB). ASUs not listed below were assessed and determined to be either not applicable or are expected to have minimal impact on our consolidated results of operations, financial position and cash flows (consolidated financial statements).

In February 2016, the FASB issued guidance on accounting for leases which requires lessees to recognize most leases on their balance sheets for the rights and obligations created by those leases. The guidance requires enhanced disclosures regarding the amount, timing, and uncertainty of cash flows arising from leases that will be effective for interim and annual periods beginning after December 15, 2018. The standard allows modified retrospective transition method where an entity can elect to apply the transition provisions at the adoption date and recognize a cumulative-effect adjustment to the opening balance of retained earnings in the period of adoption.

Effective January 1, 2019, the Company adopted the new lease accounting standard using the modified retrospective transition option of applying the new standard at the adoption date. In addition, we elected the package of practical expedients permitted under the transition guidance within the new standard, which among other things, allowed us to carry forward the historical lease classification. Adoption of the new standard resulted in the recording of additional net lease assets and lease liabilities of approximately $0.7 billion. The adoption of this standard did not have a material impact related to existing leases and as a result, a cumulative-effect adjustment was not recorded. We are currently working to complete the implementation of new processes and information technology tools to assist in our ongoing lease data collection and analysis, and updating our accounting policies and internal controls in connection with the adoption of the new standard.

In October 2016, the FASB issued an accounting standard update which requires an entity to recognize the income tax consequences of an intra-entity transfer of an asset, other than inventory, at the time the entity transfer occurs rather than when the asset is ultimately transferred to a third party, as required under current U.S. GAAP. The guidance is intended to reduce diversity in practice, particularly for transfers involving intellectual property. We adopted the accounting standard update as of January 1, 2018. The guidance requires application on a modified retrospective basis. The adoption of this guidance increases our deferred tax assets by $339 million with a cumulative-effect adjustment to retained earnings of the same amount.

In August 2017, the FASB issued amendments to hedge accounting guidance. These amendments are intended to better align risk management strategies and financial reporting for hedging relationships. Under the new guidance, more hedging strategies will be eligible for hedge accounting and the application of hedge accounting is simplified. In addition, the new guidance amends presentation and disclosure requirements. The Company adopted this standard effective January 1, 2018 using a modified retrospective approach. The adoption did not have a material impact on the Company’s financial position, results of operations, or cash flows.

In February 2018, the FASB issued guidance that allows for an entity to elect to reclassify the income tax effects on items within accumulated other comprehensive income resulting from U.S. Tax Reform to retained earnings. The guidance is effective for fiscal years beginning after December 15, 2018 with early adoption permitted, including interim periods within those years. Upon adoption, the Company does not expect to elect to reclassify the stranded income tax effects of U.S. Tax Reform from accumulated other comprehensive income to retained earnings.

Note 2. Acquisitions and Divestitures

During 2018, we acquired businesses for an aggregate cost (net of cash and debt assumed) of approximately $535 million, mainly due to the November 2018 acquisition of Transnorm, a global leader in high-performance conveyor and warehouse solutions. Transnorm is part of Safety and Productivity Solutions. The preliminary determination of the assets and liabilities acquired with Transnorm have been included in the Consolidated Balance Sheet as of December 31, 2018, including $338 million allocated to goodwill, which is non-deductible for tax purposes.

During 2017 there were no significant acquisitions individually or in aggregate. During 2016, we acquired businesses for an aggregate cost (net of cash and debt assumed) of $2,538 million.

In August 2016, the Company acquired Intelligrated, a leading provider of supply chain and warehouse automation technologies, for an aggregate value, net of cash acquired, of $1,488 million. Intelligrated is part of Safety and Productivity Solutions. Management recorded goodwill and intangible assets acquired of, $1,121 million and $507 million, respectively. The Intelligrated identifiable intangible assets primarily include customer relationships, technology, and trade name that are being amortized over their estimated lives ranging from 1 to 15 years using straight line and accelerated amortization methods. The goodwill is non-deductible for tax purposes.

In April 2016, the Company completed the acquisition of Xtralis International Holdings Limited (“Xtralis”), a leading global provider of aspiration smoke detection and perimeter security technologies, for an aggregate cost, net of cash acquired and debt assumed, of $515 million. Xtralis is part of Honeywell Building Technologies.

In February 2016, the Company acquired 100 percent of the issued and outstanding shares of COM DEV International (“COM DEV”), a leading satellite and space components provider, for an aggregate value, net of cash acquired and debt assumed, of $347 million. COM DEV is part of Aerospace.

In January 2016, the Company acquired the remaining 30 percent noncontrolling interest in UOP Russell LLC, which develops technology and manufactures modular equipment to process natural gas, for $240 million. UOP Russell LLC is part of Performance Materials and Technologies.

On October 1, 2018, the Company completed the tax-free spin-off to Honeywell shareowners of its Transportation Systems business, part of Aerospace, into a standalone publicly-traded company, Garrett Motion Inc. ("Garrett"). On October 29, 2018, the Company completed the tax-free spin-off to Honeywell shareowners of its Homes and Global Distribution business, part of Home and Building Technologies (renamed Honeywell Building Technologies following the spin-off), into a standalone publicly-traded company, Resideo Technologies, Inc. ("Resideo"). The assets of approximately $5.5 billion, including approximately $2.8 billion of goodwill and net of recorded indemnification receivables, and liabilities of approximately $7.2 billion associated with spin-off entities have been removed through Retained Earnings from the Company's Consolidated Balance Sheet as of the effective date of the spin-off. The results of operations and cash flows are included in the Consolidated Statement of Operations and Consolidated Statement of Cash Flows through the effective date of the spin-off. The Income before taxes attributable to the spin-off businesses were $0.4 billion, $0.5 billion, and $0.6 billion for 2018, 2017 and 2016.

Honeywell shareowners of record as of the close of business on October 16, 2018 received one share of Resideo common stock for every 6 shares of Honeywell common stock. Immediately prior to the effective date of the spin-off, Resideo incurred debt of $1.2 billion to make a cash distribution to the Company.

Honeywell shareowners of record as of the close of business on September 18, 2018 received one share of Garrett common stock for every 10 shares of Honeywell common stock. Immediately prior to the effective date of the spin-off, Garrett incurred debt of $1.6 billion to make a cash distribution to the Company.

In 2018 in connection with the spin-off, the Company entered into certain agreements with Resideo and Garrett to effect our legal and structural separation, including transition services agreements to provide certain administrative and other services for a limited time, and tax matters and indemnity agreements. As of the end of 2018, most of those agreements are still in effect.

On October 1, 2016, the Company completed the tax-free spin-off to Honeywell shareowners of its Resins and Chemicals business, part of Performance Materials and Technologies, into a standalone, publicly-traded company (named AdvanSix Inc. ("AdvanSix")). The assets and liabilities associated with AdvanSix have been removed from the Company's Consolidated Balance Sheet as of the effective date of the spin-off. The results of operations for AdvanSix are included in the Consolidated Statement of Operations through the effective date of the spin-off.

Honeywell shareowners of record as of the close of business on September 16, 2016 received one share of AdvanSix common stock for every 25 shares of Honeywell common stock. Immediately prior to the effective date of the spin-off, AdvanSix incurred debt to make a cash distribution of $269 million to the Company. At the same time, AdvanSix also incurred $38 million of borrowings in order to fund its post spin-off working capital.

In 2016 in connection with the spin-off, the Company entered into certain agreements with AdvanSix to effect our legal and structural separation including a transition services agreement with AdvanSix to provide certain administrative and other services for a limited time. As of the end of 2018, those agreements have ended.

On September 16, 2016, the Company completed the sale of Honeywell Technology Solutions Inc. for a sale price of $300 million. The Company recognized a pre-tax gain of $176 million, which was recorded in Other (income) expense. The Honeywell Technology Solutions Inc. business was part of Aerospace.

(Dollars in millions, except per share amounts)

Note 3. Repositioning and Other Charges

A summary of repositioning and other charges follows:

	Years Ended December 31,		
	2018	**2017**	**2016**
Severance	$ 289	$ 305	$ 283
Asset impairments	162	142	43
Exit costs	79	60	43
Reserve adjustments	(10)	(16)	(109)
Total net repositioning charge	520	491	260
Asbestos related litigation charges, net of insurance and indemnities	163	159	217
Probable and reasonably estimable environmental liabilities, net of indemnities	345	287	195
Other	63	36	18
Total net repositioning and other charges	$ 1,091	$ 973	$ 690

The following table summarizes the pre-tax distribution of total net repositioning and other charges by classification:

	Years Ended December 31,		
	2018	**2017**	**2016**
Cost of products and services sold	$ 811	$ 736	$ 517
Selling, general and administrative expenses			

	239	187	126
Other (income) expense	41	50	47
	$ 1,091	$ 973	$ 690

The following table summarizes the pre-tax impact of total net repositioning and other charges by segment:

	Years Ended December 31,		
	2018	2017	2016
Aerospace	$ 154	$ 248	$ 293
Honeywell Building Technologies	111	78	28
Performance Materials and Technologies	191	102	101
Safety and Productivity Solutions	133	51	1
Corporate	502	494	267
	$ 1,091	$ 973	$ 690

In 2018, we recognized repositioning charges totaling $530 million including severance costs of $289 million related to workforce reductions of 6,486 manufacturing and administrative positions across our segments. The workforce reductions were primarily related to planned site closures, mainly in Safety and Productivity Solutions, Performance Materials and Technologies and Honeywell Building Technologies, as we transition manufacturing sites to more cost-effective locations. The workforce reductions were also related to our productivity and ongoing functional transformation initiatives. The repositioning charge included asset impairments of $162 million mainly related to manufacturing plant and equipment associated with planned site closures. Asset impairments also included the write-down of a legacy property in Corporate in connection with its planned disposition and the write-off of certain capitalized assets in Corporate. The repositioning charge included exit costs of $79 million primarily related to a termination fee associated with the early cancellation of a supply agreement for certain raw materials in Performance Materials and Technologies and for closure obligations associated with planned site closures.

In 2017, we recognized repositioning charges totaling $507 million including severance costs of $305 million related to workforce reductions of 7,096 manufacturing and administrative positions across our segments. The workforce reductions were primarily related to cost savings actions taken in connection with our productivity and ongoing functional transformation initiatives and with site transitions, in each of our segments, to more cost-effective locations. The repositioning charge included asset impairments of $142 million principally in our Corporate segment related to the write-down of legacy properties and certain equipment in connection with their planned disposition and the write-down of a research and development facility in connection with a planned exit from such facility. The repositioning charge included exit costs of $60 million principally for closure obligations associated with site transitions in each of our segments and for lease exit obligations in our Corporate segment.

(Dollars in millions, except per share amounts)

In 2016, we recognized repositioning charges totaling $369 million including severance costs of $283 million related to workforce reductions of 6,585 manufacturing and administrative positions across our segments. The workforce reductions were primarily related to cost savings actions taken in connection with our productivity and ongoing functional transformation initiatives; the separation of the former Automation and Control Solutions reporting segment into two new reporting segments; site transitions in each of our segments to more cost-effective locations; and achieving acquisition-related synergies. The repositioning charge included asset impairments of $43 million principally related to the write-off of certain intangible assets in connection with the sale of a Performance Materials and Technologies business. The repositioning charge included exit costs of $43 million principally for expenses related to the spin-off of our AdvanSix business and closure obligations associated with site transitions. Also, $109 million of previously established accruals, primarily for severance, were returned to income as a result of higher attrition than anticipated in prior severance programs resulting in lower required severance payments, lower than expected severance costs in certain repositioning actions, and changes in scope of previously announced repositioning actions.

The following table summarizes the status of our total repositioning reserves:

	Severance Costs	Asset Impairments	Exit Costs	Total
Balance at December 31, 2015	$ 329	$ —	$ 21	$ 350
2016 charges	283	43	43	369
2016 usage—cash	(203)	—	(25)	(228)
2016 usage—noncash	(6)	(43)	—	(49)
Adjustments	(106)	—	(3)	(109)

Foreign currency translation	1	—	(3)	(2)
Balance at December 31, 2016	298	—	33	331
2017 charges	305	142	60	507
2017 usage—cash	(163)	—	(14)	(177)
2017 usage—noncash	—	(142)	—	(142)
Adjustments and reclassifications	(13)	—	(10)	(23)
Foreign currency translation	15	—	2	17
Balance at December 31, 2017	442	—	71	513
2018 charges	289	162	79	530
2018 usage—cash	(218)	—	(67)	(285)
2018 usage—noncash	—	(163)	—	(163)
Divestitures	(11)	—	(3)	(14)
Adjustments	(8)	1	(3)	(10)
Foreign currency translation	(5)	—	—	(5)
Balance at December 31, 2018	$ 489	$ —	$ 77	$ 566

Certain repositioning projects will recognize exit costs in future periods when the actual liability is incurred. Such exit costs incurred in 2018, 2017 and 2016 were not significant.

In 2018, the other charge of $63 million mainly relates to reserves taken due to the required wind-down of our activities in Iran and the evaluation of potential resolution of a certain legal matter.

(Dollars in millions, except per share amounts)

Note 4. Other (Income) Expense

	Years Ended December 31,		
	2018	2017	2016
Interest income	$ (217)	$ (151)	$ (106)
Pension ongoing income—non-service	(1,165)	(875)	(605)
Other postretirement income—non-service	(32)	(21)	(32)
Equity income of affiliated companies	(50)	(39)	(31)
Loss (gain) on sale of non-strategic business and assets	—	7	(178)
Foreign exchange	(63)	18	12
Separation costs	321	16	—
Other (net)	57	82	201
	$ (1,149)	$ (963)	$ (739)

Separation costs are associated with the spin-offs of our Homes and Global Distribution business and Transportation Systems business, and are primarily associated with third party services.

For the year ended December 31, 2018 and 2017, Other (net) includes asset impairments in Corporate related to the write-down of a legacy property in connection with its planned disposition. See Note 3 Repositioning and Other Charges.

Refer to Note 2 Acquisitions and Divestitures and Note 13 Long-term Debt and Credit Agreements for further details of transactions recognized in 2016 within Other (income) expense.

Note 5. Income Taxes

Income before taxes

	Years Ended December 31,		
	2018	2017	2016
U.S.	$ 2,919	$ 2,873	$ 2,981
Non-U.S.	4,568	4,077	3,471
	$ 7,487	$ 6,950	$ 6,452

Tax expense (benefit)

	Years Ended December 31,		
	2018	2017	2016
Tax expense (benefit) consists of			
Current:			
U.S. Federal	$ (21)	$ 2,061	$ 869
U.S. State	89	62	97
Non-U.S.	1,177	787	559
	$ 1,245	$ 2,910	$ 1,525
Deferred:			
U.S. Federal	$ 396	$ 190	$ 40
U.S. State	8	139	17

Non-U.S.	(990)	2,123	21
	(586)	2,452	78
	$ 659	$ 5,362	$ 1,603

(Dollars in millions, except per share amounts)

	Years Ended December 31,		
	2018	2017	2016
The U.S. federal statutory income tax rate is reconciled to our effective income tax rate as follows:			
U.S. federal statutory income tax rate	21.0 %	35.0 %	35.0 %
Taxes on non-U.S. earnings(1)(2)	0.2	(12.8)	(8.0)
U.S. state income taxes(1)	1.6	1.4	1.1
Reserves for tax contingencies	0.3	1.6	1.2
Employee share-based payments	(0.7)	(2.9)	(2.0)
U.S. Tax Reform	(5.8)	56.0	—
Reduction of taxes on unremitted earnings	(14.2)	—	—
Separation tax costs	5.5	—	—
All other items—net	0.9	(1.1)	(2.5)
	8.8 %	77.2 %	24.8 %

(1) Net of changes in valuation allowance

(2) Includes U.S. taxes on non-U.S. earnings

The effective tax rate decreased by 68.4 percentage points in 2018 compared to 2017. The decrease was primarily attributable to internal restructuring initiatives that resulted in a reduction of accrued withholding taxes of approximately $1.1 billion related to unremitted foreign earnings. In addition, we recorded a tax benefit of approximately $440 million as a reduction to our 2017 provisional estimate of impacts from U.S. Tax Reform, which was partially offset by $411 million of tax costs associated with the internal restructuring of the Homes and Global Distribution business and Transportation Systems business in advance of their spin-offs. The Company’s non-U.S. effective tax rate was 4.1%, a decrease of approximately 67.3 percentage points compared to 2017. The year over year decrease in the foreign effective tax rate was primarily attributable to the impact of the Company’s internal restructuring initiatives and the reduction of accrued withholding taxes on unremitted foreign earnings, partially offset by the spin-off transactions.

The effective tax rate increased by 52.4 percentage points in 2017 compared to 2016. The increase was primarily attributable to the provisional impact of U.S. Tax Reform, partially offset by increased tax benefits from foreign tax credits and for employee share-based payments. The Company’s non-U.S. effective tax rate was 71.4%, an increase of approximately 54.7 percentage points compared to 2016. The year-over-year increase in the non-U.S. effective tax rate was primarily driven by the Company’s change in assertion regarding foreign unremitted earnings, increased expense for reserves in various jurisdictions and increased withholding taxes, partially offset by higher earnings in low tax rate jurisdictions.

(Dollars in millions, except per share amounts)

Deferred tax assets (liabilities)

The tax effects of temporary differences and tax carryforwards which give rise to future income tax benefits and payables are as follows:

	December 31,	
Deferred tax assets:	**2018**	**2017**
Postretirement benefits other than pensions	120	177
Asbestos and environmental	589	570
Employee compensation and benefits	262	218
Other accruals and reserves	336	376
Net operating and capital losses	688	632
Tax credit carryforwards	154	510
Gross deferred tax assets	2,149	2,483
Valuation allowance	(689)	(663)
Total deferred tax assets	$ 1,460	$ 1,820
Deferred tax liabilities:		
Pension	$ (40)	$ (40)
Property, plant and equipment	(422)	(439)

Intangibles	(1,553)	(1,326)
Unremitted earnings of foreign subsidiaries	(616)	(2,151)
Other asset basis differences	(110)	(210)
Other	(50)	(67)
Total deferred tax liabilities	(2,791)	(4,233)
Net deferred tax liability	$ (1,331)	$ (2,413)

Our gross deferred tax assets include $794 million related to non-U.S. operations comprised principally of net operating losses, capital loss and tax credit carryforwards (mainly in Canada, France, Germany, Luxembourg and the United Kingdom) and deductible temporary differences. We maintain a valuation allowance of $686 million against a portion of the non-U.S. gross deferred tax assets. The change in the valuation allowance resulted in increases of $57 million, $4 million and $69 million to income tax expense in 2018, 2017 and 2016. In the event we determine that we will not be able to realize our net deferred tax assets in the future, we will reduce such amounts through an increase to income tax expense in the period such determination is made. Conversely, if we determine that we will be able to realize net deferred tax assets in excess of the carrying amounts, we will decrease the recorded valuation allowance through a reduction to income tax expense in the period that such determination is made.

As of December 31, 2018, we have recorded a $616 million deferred tax liability on all of our unremitted foreign earnings based on estimated earnings and profits of approximately $20.5 billion as of the balance sheet date.

As of December 31, 2018, our net operating loss, capital loss and tax credit carryforwards were as follows:

Jurisdiction	**Expiration Period**	**Net Operating and Capital Loss Carryforwards**	**Tax Credit Carryforwards**
U.S. Federal	2038	$ 9	$ 22
U.S. State	2038	406	18
Non-U.S.	2038	310	117

Non-U.S.	Indefinite	2,353	—
		$ 3,078	$ 157

(Dollars in millions, except per share amounts)

Many jurisdictions impose limitations on the timing and utilization of net operating loss and tax credit carryforwards. In those instances, whereby there is an expected permanent limitation on the utilization of the net operating loss or tax credit carryforward, the deferred tax asset and amount of the carryforward have been reduced.

	2018	2017	2016
Change in unrecognized tax benefits:			
Balance at beginning of year	$ 947	$ 877	$ 765
Gross increases related to current period tax positions	370	94	96
Gross increases related to prior periods tax positions	82	153	88
Gross decreases related to prior periods tax positions	(201)	(91)	(33)
Decrease related to resolutions of audits with tax authorities	(40)	(76)	(3)
Expiration of the statute of limitations for the assessment of taxes	(50)	(54)	(10)
Foreign currency translation	(19)	44	(26)
Balance at end of year	$ 1,089	$ 947	$ 877

As of December 31, 2018, 2017, and 2016 there were $1,089 million, $947 million and $877 million of unrecognized tax benefits that if recognized would be recorded as a component of Tax expense.

The following table summarizes tax years that remain subject to examination by major tax jurisdictions as of December 31, 2018:

Jurisdiction	Open Tax Years Based on Originally Filed Returns

	Examination in progress	Examination not yet initiated
U.S. Federal	2015 – 2016	2015, 2017 – 2018
U.S. State	2011 – 2017	2012 – 2018
Australia	N/A	2016 – 2018
Canada(1)	2010 – 2016	2017 – 2018
China	2003 – 2017	2018
France	2008 – 2017	2018
Germany(1)	2007 – 2018	N/A
India	1998 – 2016	2017 – 2018
Switzerland(1)	2013 – 2014	2017 – 2018
United Kingdom	2013 – 2017	2018

(1) Includes provincial or similar local jurisdictions, as applicable.

Based on the outcome of these examinations, or as a result of the expiration of statute of limitations for specific jurisdictions, it is reasonably possible that certain unrecognized tax benefits for tax positions taken on previously filed tax returns will materially change from those recorded as liabilities in our financial statements. In addition, the outcome of these examinations may impact the valuation of certain deferred tax assets (such as net operating losses) in future periods.

Unrecognized tax benefits for examinations in progress were $304 million, $487 million and $398 million, as of December 31, 2018, 2017, and 2016. Estimated interest and penalties related to the underpayment of income taxes are classified as a component of Tax expense in the Consolidated Statement of Operations and totaled $45 million, $28 million and $18 million for the years ended December 31, 2018, 2017, and 2016. Accrued interest and penalties were $426 million, $423 million and $395 million, as of December 31, 2018, 2017, and 2016.

U.S. Tax Reform

During the quarter ending December 31, 2018, the Company completed the accounting for the tax effects of U.S. Tax Reform which amounted to a total tax charge of approximately $3.5 billion, most of which was recorded as a provisional estimate at the end of 2017. During 2018, we reduced our provisional estimate by approximately $440 million as a reduction to Tax expense.

Corporate Tax Rate Change—The Company recorded a total tax benefit of approximately $190 million due to the decrease in the corporate statutory tax rate from 35% to 21%. This includes a measurement period adjustment of approximately $90 million recorded during 2018 as a reduction to Tax expense. The change in the provisional estimate primarily relates to information contained in tax returns that were filed during the quarter ending December 31, 2018, some of which require approval from U.S. tax authorities. The tax benefit from the change in tax rates results from the Company's deferred tax liability position for the excess of its net book value over its tax basis of its U.S. assets and liabilities that will generate future taxable income in excess of book income. This additional taxable income will be subject to tax at a lower corporate tax rate, consequently reducing the Company's deferred tax liability.

Mandatory Transition Tax—The Company recorded a total tax charge of approximately $1,950 million due to the imposition of the mandatory transition tax ("MTT") on the deemed repatriation of undistributed foreign earnings. This includes a measurement period adjustment of approximately $50 million recorded during 2018 as an increase to Tax expense. The change in the provisional estimate primarily relates to updated amounts from tax returns that were finalized during 2018, computations based on 2018 testing dates and guidance from the taxing authorities that was received during the year. The Company has elected to pay the MTT liability over a period of eight years.

Undistributed Foreign Earnings—The Company recorded a total tax charge of approximately $1,700 million due to the Company's intent to no longer permanently reinvest the historical unremitted earnings of its foreign affiliates that existed as of December 31, 2017. This includes a measurement period adjustment of approximately $400 million recorded during 2018 as a reduction to Tax expense. The change in the provisional estimate primarily relates to updated amounts from tax returns that were finalized during 2018, the application of foreign tax credits based on guidance issued during the year and changes to the applicable withholding tax rates in local jurisdictions. During 2018, the Company executed various internal restructuring initiatives that reduced the taxes on unremitted foreign earnings by approximately $1.1 billion that was recorded as a reduction to Tax expense.

Global Intangible Low Taxed Income—U.S. Tax Reform imposes a U.S. tax on global intangible low taxed income ("GILTI") that is earned by certain foreign affiliates owned by a U.S. shareholder. GILTI is generally intended to impose tax on the earnings of a foreign corporation that are deemed to exceed a certain threshold return relative to the underlying business investment. The Company has made a policy election to treat future taxes related to GILTI as a current period expense in the reporting period in which the tax is incurred.

Note 6. Earnings Per Share

The details of the earnings per share calculations for the years ended December 31, 2018, 2017 and 2016 are as follows:

Basic	Years Ended December 31,		
	2018	2017	2016
Net income attributable to Honeywell	$ 6,765	$ 1,545	$ 4,812
Weighted average shares outstanding	743.0	762.1	764.3
Earnings per share of common stock	$ 9.10	$ 2.03	$ 6.30

(Dollars in millions, except per share amounts)

Assuming Dilution	Years Ended December 31, 2018	2017	2016
Net income attributable to Honeywell	$ 6,765	$ 1,545	$ 4,812
Average Shares			
Weighted average shares outstanding	743.0	762.1	764.3
Dilutive securities issuable—stock plans	10.0	10.0	11.0
Total weighted average diluted shares outstanding	753.0	772.1	775.3
Earnings per share of common stock—assuming dilution	$ 8.98	$ 2.00	$ 6.21

The diluted earnings per share calculations exclude the effect of stock options when the options' assumed proceeds exceed the average market price of the common shares during the period. In 2018, 2017, and 2016 the weighted number of stock options excluded from the computations were 2.5 million, 2.8 million, and 7.5 million. These stock options were outstanding at the end of each of the respective periods.

Note 7. Revenue Recognition and Contracts with Customers

Adoption

On January 1, 2018, the Company adopted new guidance on revenue from contracts with customers using the modified retrospective method applied to contracts that were not completed as of January 1, 2018. Results for reporting periods beginning after January 1, 2018 are presented under the new guidance, while prior period amounts are not adjusted and continue to be reported in accordance with previous guidance.

We recorded a net decrease to opening retained earnings of $75 million as of January 1, 2018, for the cumulative impact of adopting the new guidance. The impact primarily related to the change in accounting for mechanical service programs (change from input to output method, resulting in unbilled receivables (within Accounts receivable–net) and deferred revenue (within Accrued liabilities) being eliminated through Retained earnings) and for customer funding and the related costs incurred for nonrecurring engineering and development activities (deferral of revenues and related incurred costs until products are delivered to customers, resulting in increases in both deferred costs (assets) and deferred revenue (liability) by approximately $1.1 billion at adoption).

	Balance at December 31, 2017	New Revenue Standard Adjustment	Balance at January 1, 2018
ASSETS			
Current assets:			
Accounts receivable—net	$ 8,866	$ (149)	$ 8,717
Inventories	4,613	(10)	4,603
Deferred income taxes	251	40	291
Other assets	3,372	1,082	4,454
LIABILITIES			
Current liabilities:			
Accrued liabilities	6,968	(48)	6,920
Deferred income taxes	2,664	1	2,665
Other liabilities	5,930	1,084	7,014
SHAREOWNERS' EQUITY			
Retained earnings	27,481	(75)	27,406
Noncontrolling interest	$ 163	$ 1	$ 164

(Dollars in millions, except per share amounts)

Under the modified retrospective method of adoption, we are required to disclose the impact to revenues had we continued to follow our accounting policies under the previous revenue recognition guidance. We estimate that the impact to revenues for the year ended December 31, 2018 would have been a decrease of approximately $339 million, which is primarily due to the net impact of the classification change and deferral impact of nonrecurring engineering and development activities, and the net impact from service programs with certain amounts being recognized that would have previously been deferred, and certain amount being deferred that would have previously been recognized.

Refer to Note 1 Summary of Significant Accounting Policies for a summary of our significant policies for revenue recognition.

Disaggregated Revenue

Honeywell has a comprehensive offering of products and services, including software and technologies, that are sold to a variety of customers in multiple end markets. See the following table and related discussions by operating segment for details.

	Year Ended December 31, 2018
Aerospace	
Commercial Aviation Original Equipment	$ 2,833
Commercial Aviation Aftermarket	5,373
Defense Services	4,665
Transportation Systems	2,622
	15,493
Honeywell Building Technologies	
Products and Software	1,732

Distribution (ADI)	2,196
Building Management Systems	830
Building Solutions	2,417
Building Products	2,123
	9,298
Performance Materials and Technologies	
UOP	2,845
Process Solutions	3,758
Smart Energy	1,223
Specialty Products	1,134
Fluorine Products	1,714
	10,674
Safety and Productivity Solutions	
Safety and Retail	2,278
Productivity Products	1,373
Warehouse and Workflow Solutions	1,829
Sensing & Internet-of-Things (IoT)	857

	6,337
Net sales	$ 41,802

Aerospace—A global supplier of products, software and services for aircraft and vehicles. Products include aircraft propulsion engines, auxiliary power units, environmental control systems, integrated avionics, electric power systems, hardware for engine controls, flight safety, communications, and navigation, satellite and space components, aircraft wheels and brakes, turbochargers and thermal systems. Software includes engine controls, flight safety, communications, navigation, radar and surveillance systems, internet connectivity and aircraft instrumentation. Services are provided to customers for the repair, overhaul, retrofit and modification of propulsion engines, auxiliary power units, avionics and mechanical systems and aircraft wheels and brakes.

Honeywell Building Technologies—A global provider of products, software, solutions and technologies. Products include controls and displays for heating, cooling, indoor air quality, ventilation, humidification, combustion, lighting and home automation; sensors, switches, control systems and instruments for measuring pressure, air flow, temperature and electrical current; access control; video surveillance; fire detection; remote patient monitoring systems; and installation, maintenance and upgrades of systems that keep buildings safe, comfortable and productive. Software includes monitoring and managing heating, cooling, indoor air quality, ventilation, humidification, combustion, lighting and home automation; advanced applications for home/building control and optimization; video surveillance; and to support remote patient monitoring systems. Installation, maintenance and upgrade services of products used in commercial building applications for heating, cooling, maintaining indoor air quality, ventilation, humidification, combustion, lighting, video surveillance and fire safety.

Performance Materials and Technologies—A global provider of products, software, solutions and technologies. Products include catalysts, absorbents, equipment and high-performance materials, devices for measurement, regulation, control and metering of gases and electricity, and metering and communications systems for water utilities and industries. Software is provided to support process technologies supporting automation and to monitor a variety of industrial processes used in industries such as oil and gas, chemicals, petrochemicals, metals, minerals and mining industries. Services are provided for installation and maintenance of products.

Safety and Productivity Solutions—A global provider of products, software and solutions. Products include personal protection equipment and footwear, gas detection devices, mobile computing, data collection and thermal printing devices, automation equipment for supply chain and warehouse automation and custom-engineered sensors, switches and controls. Software and solutions are provided to customers for supply chain and warehouse automation, to manage data and assets to drive productivity and for computing, data collection and thermal printing.

For a summary by disaggregated product and services sales for each segment, refer to Note 22 Segment Financial Data.

We recognize revenue arising from performance obligations outlined in contracts with our customers that are satisfied at a point in time and over time. The disaggregation of our revenue based off timing of recognition is as follows:

	Year Ended December 31, 2018
Products, transferred point in time	67 %
Products, transferred over time	12
Net product sales	79
Services, transferred point in time	7
Services, transferred over time	14
Net service sales	21
Net sales	100 %

Contract Balances

Progress on satisfying performance obligations under contracts with customers and the related billings and cash collections are recorded on the Consolidated Balance Sheet in Accounts receivable—net and Other assets (the current and noncurrent portions, respectively, of unbilled receivables (contract assets) and billed receivables) and Accrued liabilities and Other liabilities (the current and noncurrent portions, respectively, of customer advances and deposits (contract liabilities)). Unbilled receivables (contract assets) arise when the timing of cash collected from customers differs from the timing of revenue recognition, such as when contract provisions require specific milestones to be met before a customer can be billed. Those assets are recognized when the revenue associated with the contract is recognized prior to billing and derecognized when billed in accordance with the terms of the contract. Contract liabilities are recorded when customers remit contractual cash payments in advance of us satisfying performance obligations under contractual arrangements, including those with performance obligations to be satisfied over a period of time. Contract liabilities are derecognized when revenue is recorded, either when a milestone is met triggering the contractual right to bill or when the performance obligation is satisfied.

Contract balances are classified as assets or liabilities on a contract-by-contract basis at the end of each reporting period.

The following table summarizes our contract assets and liabilities balances:

	2018
Contract assets—January 1	$ 1,721
Contract assets—December 31	1,548
Change in contract assets—increase (decrease)	$ (173)
Contract liabilities—January 1	$ (2,973)
Contract liabilities—December 31	(3,378)
Change in contract liabilities—(increase) decrease	$ (405)

Net change	$ (578)

The net change was primarily driven by the receipt of advance payments from customers exceeding reductions from recognition of revenue as performance obligations were satisfied and related billings. For the year ended December 31, 2018, we recognized revenue of $1,166 million that was previously included in the beginning balance of contract liabilities.

When contracts are modified to account for changes in contract specifications and requirements, we consider whether the modification either creates new or changes the existing enforceable rights and obligations. Contract modifications that are for goods or services that are not distinct from the existing contract, due to the significant integration with the original good or service provided, are accounted for as if they were part of that existing contract. The effect of a contract modification on the transaction price and our measure of progress for the performance obligation to which it relates, is recognized as an adjustment to revenue (either as an increase in or a reduction of revenue) on a cumulative catch-up basis. When the modifications include additional performance obligations that are distinct and at relative stand-alone selling price, they are accounted for as a new contract and performance obligation, which are recognized prospectively.

Performance Obligations

A performance obligation is a promise in a contract to transfer a distinct good or service to the customer, and is defined as the unit of account. A contract's transaction price is allocated to each distinct performance obligation and recognized as revenue when, or as, the performance obligation is satisfied. When our contracts with customers require highly complex integration or manufacturing services that are not separately identifiable from other promises in the contracts and, therefore, not distinct, then the entire contract is accounted for as a single performance obligation. In situations when our contract includes distinct goods or services that are substantially the same and have the same pattern of transfer to the customer over time, they are recognized as a series of distinct goods or services. For any contracts with multiple performance obligations, we allocate the contract's transaction price to each performance obligation based on the estimated relative standalone selling price of each distinct good or service in the contract. For product sales, each product sold to a customer typically represents a distinct performance obligation. In such cases, the observable standalone sales are used to determine the stand alone selling price.

(Dollars in millions, except per share amounts)

Performance obligations are satisfied as of a point in time or over time. Performance obligations are supported by contracts with customers, providing a framework for the nature of the distinct goods, services or bundle of goods and services. The timing of satisfying the performance obligation is typically indicated by the terms of the contract. The following table outlines our performance obligations disaggregated by segment.

	2018
Aerospace	$ 10,228
Honeywell Building Technologies	6,302
Performance Materials and Technologies	6,436
Safety and Productivity Solutions	1,884
	$ 24,850

Performance obligations recognized as of December 31, 2018 will be satisfied over the course of future periods. Our disclosure of the timing for satisfying the performance obligation is based on the requirements of contracts with customers. However, from time to time, these contracts may be subject to modifications, impacting the timing of satisfying the performance obligations. Performance obligations expected to be satisfied within one year and greater than one year are 56% and 44%.

The timing of satisfaction of our performance obligations does not significantly vary from the typical timing of payment. Typical payment terms of our fixed-price over time contracts include progress payments based on specified events or milestones, or based on project progress. For some contracts we may be entitled to receive an advance payment.

We have applied the practical expedient for certain revenue streams to exclude the value of remaining performance obligations for (i) contracts with an original expected term of one year or less or (ii) contracts for which we recognize revenue in proportion to the amount we have the right to invoice for services performed.

Note 8. Accounts Receivable

	December 31,			
	2018		2017	
Trade	$	7,705	$	9,068
Less—Allowance for doubtful accounts		(197)		(202)
		7,508		8,866

Trade Receivables includes $1,543 million and $1,853 million of unbilled balances under long-term contracts as of December 31, 2018 and December 31, 2017. These amounts are billed in accordance with the terms of customer contracts to which they relate.

(Dollars in millions, except per share amounts)

Note 9. Inventories

	December 31,	
	2018	2017
Raw materials	$ 1,109	$ 1,193
Work in process	811	790
Finished products	2,445	2,669
	4,365	4,652
Reduction to LIFO cost basis	(39)	(39)
	$ 4,326	$ 4,613

Inventories valued at LIFO amounted to $294 million and $324 million at December 31, 2018 and 2017. Had such LIFO inventories been valued at current costs, the carrying values would have been approximately $39 million higher at December 31, 2018 and 2017.

Note 10. Property, Plant and Equipment—Net

	December 31,	
	2018	2017
Land and improvements	$ 262	$ 287
Machinery and equipment	9,435	10,762
Buildings and improvements	3,125	3,463
Construction in progress		

	588	675
	13,410	15,187
Less—Accumulated depreciation	(8,114)	(9,261)
	$ 5,296	$ 5,926

Depreciation expense was $721 million, $717 million and $726 million in 2018, 2017 and 2016.

Note 11. Goodwill and Other Intangible Assets—Net

The following table summarizes the change in the carrying amount of goodwill for the years ended December 31, 2018 and 2017 by segment.

	December 31, 2017	**Acquisitions/ Divestitures**	**Currency Translation Adjustment**	**December 31, 2018**
Aerospace	$ 2,468	$ (193)	$ (17)	$ 2,258
Honeywell Building Technologies	5,960	(2,640)	(82)	3,238
Performance Materials and Technologies	5,242	23	(118)	5,147
Safety and Productivity Solutions	4,607	338	(42)	4,903
	$ 18,277	$ (2,472)	$ (259)	$ 15,546

(Dollars in millions, except per share amounts)

Other intangible assets are comprised of:

	December 31, 2018			December 31, 2017		
	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
Determinable life intangibles:						
Patents and technology	$ 1,996	$ (1,332)	$ 664	$ 1,990	$ (1,272)	$ 718
Customer relationships	3,785	(1,510)	2,275	3,911	(1,366)	2,545
Trademarks	326	(206)	120	328	(189)	139
Other	349	(299)	50	353	(304)	49
	6,456	(3,347)	3,109	6,582	(3,131)	3,451
Indefinite life intangibles:						
Trademarks	1,030	—	1,030	1,045	—	1,045
	$ 7,486	$ (3,347)	$ 4,139	$ 7,627	$ (3,131)	$ 4,496

Intangible assets amortization expense was $395 million, $398 million, and $304 million in 2018, 2017, 2016. Estimated intangible asset amortization expense for each of the next five years approximates $386 million in 2019, $349 million in 2020, $312 million in 2021, $288 million in 2022, and $251 million in 2023.

Note 12. Accrued Liabilities

	December 31,	
	2018	2017

Customer advances and deferred income	$ 2,403	$ 2,198
Compensation, benefit and other employee related	1,469	1,420
Asbestos related liabilities	245	350
Repositioning	566	508
Product warranties and performance guarantees	243	307
Environmental costs	175	226
Income taxes	166	134
Accrued interest	94	94
Other taxes	234	277
Insurance	170	199
Other (primarily operating expenses)	1,094	1,255
	$ 6,859	$ 6,968

(Dollars in millions, except per share amounts)

Note 13. Long-term Debt and Credit Agreements

	December 31,	
	2018	**2017**
Two year floating rate Euro notes due 2018	—	1,199
1.40% notes due 2019	1,250	1,250
Three year floating rate notes due 2019	250	250
Two year floating rate notes due 2019	450	450
1.80% notes due 2019	750	750
0.65% Euro notes due 2020	1,145	1,199
4.25% notes due 2021	800	800
1.85% notes due 2021	1,500	1,500
1.30% Euro notes due 2023	1,432	1,499
3.35% notes due 2023	300	300
2.50% notes due 2026	1,500	1,500
2.25% Euro notes due 2028	859	900
5.70% notes due 2036	441	441
5.70% notes due 2037	462	462

5.375% notes due 2041	417	417
3.812% notes due 2047	445	445
Industrial development bond obligations, floating rate maturing at various dates through 2037	22	22
6.625% debentures due 2028	201	201
9.065% debentures due 2033	51	51
Other (including capitalized leases and debt issuance costs), 5.0% weighted average maturing at various dates through 2025	353	288
	12,628	13,924
Less: current portion	(2,872)	(1,351)
	$ 9,756	$ 12,573

The schedule of principal payments on long-term debt is as follows:

	December 31, 2018
2019	$ 2,872
2020	1,416
2021	2,345
2022	22
2023	1,756
Thereafter	4,217

	12,628
Less-current portion	(2,872)
	$ 9,756

In October of 2017, the Company issued $450 million Floating Rate Senior Notes due 2019 and $750 million 1.80% Senior Notes due 2019 (collectively, the "2017 Notes"). The 2017 Notes are senior unsecured and unsubordinated obligations of Honeywell and rank equally with all of Honeywell's existing and future senior unsecured debt and senior to all of Honeywell's subordinated debt. The offering resulted in gross proceeds of $1,200 million, offset by $5 million in discount and closing costs related to the offering.

In November of 2017, the Company issued $445 million 3.812% Senior Notes due 2047 (the "Exchange Notes"). The Exchange Notes are senior unsecured and unsubordinated obligations of

Honeywell and rank equally with all of Honeywell's existing and future senior unsecured debt and senior to all of Honeywell's subordinated debt. The Exchange Notes were issued in partial exchange for the 6.625% Debentures due 2028, the 5.70% Notes due 2036, the 5.70% Notes due 2037 and the 5.375% Notes due 2041. The Company paid $133 million to bondholders in connection with the partial exchange.

On January 29, 2018, the Company completed an exchange offer for any and all of its outstanding Exchange Notes, which had not been registered under the Securities Act of 1933, as amended ("Securities Act") for an equal principal amount of new 3.812% Notes due 2047 which had been registered under the Securities Act ("Registered Notes"). 99.4% of the Exchange Notes were exchanged for Registered Notes, representing 99.4% of the principal amount of the Company's outstanding 3.812% Notes due 2047.

On February 22, 2018, the Company paid its Two year floating rate Euro notes due 2018.

For the issuances described above, unless otherwise noted, all debt issuance costs are deferred and recognized as a direct deduction to the related debt liability and are amortized to interest expense over the debt term.

In connection with the Garrett spin-off, wholly owned subsidiaries of Garrett issued notes and entered new credit facilities, which obligations were retained by Garrett in the spin-off. On September 27, 2018 the Company received net proceeds of $1,604 million from such borrowings.

In connection with the Resideo spin-off, wholly owned subsidiaries of Resideo issued notes and entered new credit facilities, which obligations were retained by Resideo in the spin-off. On October 25, 2018 the Company received net proceeds of $1,197 million from such borrowings.

On February 16, 2018, the Company entered into a $1.5 billion 364-Day Credit Agreement with a syndicate of banks. This 364-Day Credit Agreement was maintained for general corporate purposes and was terminated November 9, 2018.

On April 27, 2018, the Company entered into a $4 billion Amended and Restated Five Year Credit Agreement (the "5-Year Credit Agreement"), with a syndicate of banks. The 5-Year Credit Agreement is maintained for general corporate purposes. Commitments under the 5-Year Credit Agreement can be increased pursuant to the terms of the 5-Year Credit Agreement to an aggregate amount not to exceed $4.5 billion. The 5-Year Credit Agreement amends and restates the previously reported $4 billion five year credit agreement dated as of July 10, 2015 (the "Prior Agreement"). The 5-Year Credit Agreement has substantially the same material terms and conditions as the Prior Agreement.

On April 27, 2018, the Company entered into an additional $1.5 billion 364-Day Credit Agreement with a syndicate of banks. This 364-Day Credit Agreement is maintained for general corporate purposes.

There have been no borrowings under any of the credit agreements previously described.

(Dollars in millions, except per share amounts)

Note 14. Lease Commitments

Future minimum lease payments under operating leases having initial or remaining noncancellable lease terms in excess of one year are as follows:

	At December 31, 2018
2019	$ 210
2020	168
2021	142
2022	109
2023	80
Thereafter	147
	$ 856

Rent expense was $360 million, $385 million and $387 million in 2018, 2017 and 2016.

Note 15. Financial Instruments and Fair Value Measures

Credit and Market Risk—Financial instruments, including derivatives, expose us to counterparty credit risk for nonperformance and to market risk related to changes in interest and currency exchange rates. We manage our exposure to counterparty credit risk through specific minimum credit standards, diversification of counterparties, and procedures to monitor concentrations of credit risk. Our counterparties in derivative transactions are substantial investment and commercial banks with significant experience using such derivative instruments. We monitor the impact of market risk on the fair value and cash flows of our derivative and other financial instruments considering reasonably possible changes in interest rates and currency exchange rates and restrict the use of derivative financial instruments to hedging activities.

We continually monitor the creditworthiness of our customers to which we grant credit terms in the normal course of business. The terms and conditions of our credit sales are designed to mitigate or eliminate concentrations of credit risk with any single customer. Our sales are not materially dependent on a single customer or a small group of customers.

Foreign Currency Risk Management—We conduct our business on a multinational basis in a wide variety of foreign currencies. Our exposure to market risk for changes in foreign currency exchange rates arises from international financing activities between subsidiaries, foreign currency denominated monetary assets and liabilities and transactions arising from international trade. Our primary objective is to preserve the U.S. Dollar value of foreign currency denominated cash flows and earnings. We attempt to hedge currency exposures with natural offsets to the fullest extent possible and, once these opportunities have been exhausted, through foreign currency exchange forward and option contracts (foreign currency exchange contracts) with third parties.

We hedge monetary assets and liabilities denominated in non-functional currencies. Prior to conversion into U.S. dollars, these assets and liabilities are remeasured at spot exchange rates in effect on the balance sheet date. The effects of changes in spot rates are recognized in earnings and included in other (income) expense. We partially hedge forecasted sales and purchases, which are denominated in non-functional currencies, with foreign currency exchange contracts. Changes in the forecasted non-functional currency cash flows due to movements in exchange rates are substantially offset by changes in the fair value of the foreign currency exchange contracts designated as hedges. Market value gains and losses on these contracts are recognized in earnings when the hedged transaction is recognized. At December 31, 2018 and 2017, we had contracts with notional amounts of $14,995 million and $9,273 million to exchange foreign currencies, principally the U.S. Dollar, Euro, British Pound, Canadian Dollar, Mexican Peso, Swiss Franc, Indian Rupee, Russian Ruble, and Chinese Renminbi. As of December 31, 2018, we estimate that approximately $90 million of net derivative gains related to our cash flow hedges included in Accumulated other comprehensive income (loss) will be reclassified into earnings within the next 12 months.

(Dollars in millions, except per share amounts)

We have also designated foreign currency debt and certain derivative contracts as hedges against portions of our net investment in foreign operations during the year ended December 31, 2018. Gains or losses on the effective portion of the foreign currency debt designated as a net investment hedge are recorded in the same manner as foreign currency translation adjustments. The Company did not have ineffectiveness related to net investment hedges during the year ended December 31, 2018.

Interest Rate Risk Management—We use a combination of financial instruments, including long-term, medium-term and short-term financing, variable-rate commercial paper, and interest rate swaps to manage the interest rate mix of our total debt portfolio and related overall cost of borrowing. At December 31, 2018 and 2017, interest rate swap agreements designated as fair value hedges effectively changed $2,600 million of fixed rate debt at 2.93% to LIBOR based floating rate debt. Our interest rate swaps mature at various dates through 2026.

Fair Value of Financial Instruments—The FASB's accounting guidance defines fair value as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date (exit price).

Financial and nonfinancial assets and liabilities are classified in their entirety based on the lowest level of input that is significant to the fair value measurement. The following table sets forth the Company's financial assets and liabilities that were accounted for at fair value on a recurring basis as of December 31, 2018 and 2017:

	December 31,	
	2018	**2017**
Assets:		
Foreign currency exchange contracts	$ 119	$ 17
Available for sale investments	1,784	3,916
Interest rate swap agreements	20	44
Cross currency swap agreements	32	—

Liabilities:

Foreign currency exchange contracts	$ 4	$ 70
Interest rate swap agreements	65	52

The foreign currency exchange contracts, interest rate swap agreements, and cross currency swap agreements are valued using broker quotations, or market transactions in either the listed or over-the-counter markets. As such, these derivative instruments are classified within level 2. The Company also holds investments in commercial paper, certificates of deposits, and time deposits that are designated as available for sale and are valued using published prices based off observable market data. As such, these investments are classified within level 2. The Company also holds available for sale investments in U.S. government and corporate debt securities valued utilizing published prices based on quoted market pricing, which are classified within level 1.

The carrying value of cash and cash equivalents, trade accounts and notes receivables, payables, commercial paper and short-term borrowings contained in the Consolidated Balance Sheet approximates fair value. The following table sets forth the Company's financial assets and liabilities that were not carried at fair value:

	December 31, 2018		**December 31, 2017**	
	Carrying Value	**Fair Value**	**Carrying Value**	**Fair Value**
Assets				
Long-term receivables	$ 333	$ 329	$ 296	$ 289
Liabilities				
Long-term debt and related current maturities	$ 12,628	$ 13,133	$ 13,924	$ 14,695

(Dollars in millions, except per share amounts)

The following table sets forth the amounts recorded on the Consolidated Balance Sheet related to cumulative basis adjustments for fair value hedges:

Line in the Consolidated Balance Sheet of Hedged Item	Carrying Amount of the Hedged Item		Cumulative Amount of Fair Value Hedging Adjustment Included in the Carrying Amount of the Hedged Item	
	December 31, 2018	December 31, 2017	December 31, 2018	December 31, 2017
Long-term debt	$ 2,555	$ 2,592	$ (45)	$ (8)

The Company determined the fair value of the long-term receivables by discounting based upon the terms of the receivable and counterparty details including credit quality. As such, the fair value of these receivables is considered level 2. The Company determined the fair value of the long-term debt and related current maturities utilizing transactions in the listed markets for identical or similar liabilities. As such, the fair value of the long-term debt and related current maturities is considered level 2.

Interest rate swap agreements are designated as hedge relationships with gains or losses on the derivative recognized in interest and other financial charges offsetting the gains and losses on the underlying debt being hedged. Losses on interest rate swap agreements recognized in earnings were $37 million, $29 million and $71 million in the years ended December 31, 2018, 2017 and 2016. Gains and losses are fully offset by losses and gains on the underlying debt being hedged.

We economically hedge our exposure to changes in foreign exchange rates principally with forward contracts. These contracts are marked-to-market with the resulting gains and losses recognized in earnings offsetting the gains and losses on the non-functional currency denominated monetary assets and liabilities being hedged. We recognized $394 million of income and $207 million of expense in Other (income) expense in the years ended December 31, 2018 and 2017. We recognized $232 million of income in Other (income) expense in the year ended December 31, 2016.

The following tables summarize the location and impact to the Consolidated Statement of Operations related to fair value and cash flow hedging relationships:

	Year Ended December 31, 2018

	Revenue	Cost of Products Sold	SG&A	Other (Income) Expense	Interest and Other Financial Charges
	$ 41,802	$ 23,634	$ 6,051	$ (1,149)	$ 367
Gain or (loss) on cash flow hedges:					
Foreign Currency Exchange Contracts:					
Amount reclassified from accumulated other comprehensive income into income	(9)	(35)	(2)	47	—
Amount excluded from effectiveness testing recognized in earnings using an amortization approach	—	6	—	9	—
Gain or (loss) on fair value hedges:					
Interest Rate Swap Agreements:					
Hedged Items	—	—	—	—	37
Derivatives designated as hedges	—	—	—	—	(37)

(Dollars in millions, except per share amounts)

	Year Ended December 31, 2017			
	Revenue	Cost of Products Sold	SG&A	Interest and Other Financial Charges
	$ 40,534	$ 23,176	$ 6,087	$ 316
Gain or (loss) on cash flow hedges:				
Foreign Currency Exchange Contracts:				
Amount reclassified from accumulated other comprehensive income into income	15	31	28	—
Gain or (loss) on fair value hedges:				
Interest Rate Swap Agreements:				
Hedged Items	—	—	—	29
Derivatives designated as hedges	—	—	—	(29)

The following table summarizes the amounts of gain or (loss) on net investment hedges recognized in Accumulated other comprehensive income (loss):

Derivatives Net Investment Hedging Relationships	Years Ended December 31, 2018	2017
Euro-denominated long-term debt	$ 177	$ (582)
Euro-denominated commercial paper	168	(458)

Cross currency swap	44	—

Note 16. Other Liabilities

	December 31,	
	2018	2017
Pension and other employee related	$ 1,795	$ 1,986
Income taxes	2,236	2,898
Environmental	580	369
Insurance	236	233
Product warranties and performance guarantees	67	101
Asset retirement obligations	74	82
Deferred income	1,264	76
Other	150	185
	$ 6,402	$ 5,930

Note 17. Capital Stock

We are authorized to issue up to 2,000,000,000 shares of common stock, with a par value of $1. Common shareowners are entitled to receive such dividends as may be declared by the Board of Directors, are entitled to one vote per share, and are entitled, in the event of liquidation, to share ratably in all the assets of Honeywell which are available for distribution to the common shareowners. Common shareowners do not have preemptive or conversion rights. Shares of common stock issued and outstanding or held in the treasury are not liable to further calls or assessments. There are no restrictions on us relative to dividends or the repurchase or redemption of common stock.

In December 2017, the Board of Directors authorized the repurchase of up to $8 billion of Honeywell common stock. Approximately $3.7 billion and $7.7 billion remained available as of December 31, 2018, and December 31, 2017 for additional share repurchases.

(Dollars in millions, except per share amounts)

We repurchased approximately 26.5 million and 20.5 million shares of our common stock in 2018 and 2017, for $4,000 million and $2,889 million.

We are authorized to issue up to 40,000,000 shares of preferred stock, without par value, and can determine the number of shares of each series, and the rights, preferences and limitations of each series. At December 31, 2018, there was no preferred stock outstanding.

Note 18. Accumulated Other Comprehensive Income (Loss)

The changes in Accumulated other comprehensive income (loss) are provided in the tables below. Comprehensive income (loss) attributable to noncontrolling interest consists predominantly of net income.

	Pre-tax	Tax	After-Tax
Year Ended December 31, 2018			
Foreign exchange translation adjustment	$ (728)	$ —	$ (728)
Pensions and other postretirement benefit adjustments	(727)	168	(559)
Changes in fair value of effective cash flow hedges	102	(17)	85
	$ (1,353)	$ 151	$ (1,202)
Year Ended December 31, 2017			
Foreign exchange translation adjustment	$ (37)	$ —	$ (37)
Pensions and other postretirement benefit adjustments	847	(170)	677
Changes in fair value of effective cash flow hedges	(194)	33	(161)
	$ 616	$ (137)	$ 479

Year Ended December 31, 2016

Foreign exchange translation adjustment	$ (52)	$ —	$ (52)
Pensions and other postretirement benefit adjustments	(336)	101	(235)
Changes in fair value of effective cash flow hedges	134	(26)	108
	$ (254)	$ 75	$ (179)

Components of Accumulated Other Comprehensive Income (Loss)

	December 31,	
	2018	2017
Cumulative foreign exchange translation adjustment	$ (2,709)	$ (1,981)
Pensions and other postretirement benefit adjustments	(761)	(202)
Fair value of effective cash flow hedges	33	(52)
	$ (3,437)	$ (2,235)

(Dollars in millions, except per share amounts)

Changes in Accumulated Other Comprehensive Income (Loss) by Component

	Foreign Exchange Translation Adjustment	Pension and Other Postretirement Adjustments	Changes in Fair Value of Effective Cash Flow Hedges	Total
Balance at December 31, 2016	$ (1,944)	$ (879)	$ 109	$ (2,714)
Other comprehensive income (loss) before reclassifications	(37)	645	(101)	507
Amounts reclassified from accumulated other comprehensive income (loss)	—	32	(60)	(28)
Net current period other comprehensive income (loss)	(37)	677	(161)	479
Balance at December 31, 2017	$ (1,981)	$ (202)	$ (52)	$ (2,235)
Other comprehensive income (loss) before reclassifications	(685)	(569)	89	(1,165)
Amounts reclassified from accumulated other comprehensive income	—	(37)	(4)	(41)
Spin-off	(43)	47	—	4
Net current period other comprehensive income (loss)	(728)	(559)	85	(1,202)
Balance at December 31, 2018	$ (2,709)	$ (761)	$ 33	$ (3,437)

Reclassifications Out of Accumulated Other Comprehensive Income (Loss)

	Year Ended December 31, 2018 Affected Line in the Consolidated Statement of Operations					
	Product Sales	**Cost of Products Sold**	**Cost of Services Sold**	**Selling, General and Admin. Expenses**	**Other (Income) Expense**	**Total**
Amortization of Pension and Other Postretirement Items:						
Actuarial losses recognized	$ —	$ —	$ —	$ —	$ 45	$ 45
Prior service (credit) recognized	—	—	—	—	(99)	(99)
Settlements and curtailments	—	—	—	—	2	2
Losses (gains) on cash flow hedges	10	30	6	2	(47)	1
Total before tax	$ 10	$ 30	$ 6	$ 2	$ (99)	$ (51)
Tax expense (benefit)						10
Total reclassifications for the period, net of tax						$ (41)

(Dollars in millions, except per share amounts)

	Year Ended December 31, 2017 Affected Line in the Consolidated Statement of Operations					
	Product Sales	Cost of Products Sold	Cost of Services Sold	Selling, General and Admin. Expenses	Other (Income) Expense	Total
Amortization of Pension and Other Postretirement Items:						
Actuarial losses recognized	$ —	$ —	$ —	$ —	$ 110	$ 110
Prior service (credit) recognized	—	—	—	—	(103)	(103)
Settlements and curtailments	—	—	—	—	24	24
Losses (gains) on cash flow hedges	(15)	(22)	(4)	(28)	—	(69)
Total before tax	$ (15)	$ (22)	$ (4)	$ (28)	$ 31	$ (38)
Tax expense (benefit)						10
Total reclassifications for the period, net of tax						$ (28)

Note 19. Stock-Based Compensation Plans

The 2016 Stock Incentive Plan of Honeywell International Inc. and its Affiliates (2016 Plan) and 2016 Stock Plan for Non-Employee Directors of Honeywell International Inc (2016 Directors Plan) were both approved by the shareowners at the Annual Meeting of Shareowners effective on April 25, 2016. Following approval of both plans, we have not and will not grant any new awards under any previously existing stock-based compensation plans. At December 31, 2018, there were 40,270,690, and 893,809 shares of Honeywell common stock available for future grants under terms of the 2016 Plan and 2016 Directors Plan, respectively.

Stock Options—The exercise price, term and other conditions applicable to each option granted under our stock plans are generally determined by the Management Development and Compensation Committee of the Board. The exercise price of stock options is set on the grant date and may not be less than the fair market value per share of our stock on that date. The fair value is recognized as an expense over the employee's requisite service period (generally the vesting period of the award). Options generally vest over a four-year period and expire after ten years.

The fair value of each option award is estimated on the date of grant using the Black-Scholes option-pricing model. Expected volatility is based on implied volatilities from traded options on our common stock and historical volatility of our common stock. We used a Monte Carlo simulation model to derive an expected term which represents an estimate of the time options are expected to remain outstanding. Such model uses historical data to estimate option exercise activity and post-vest termination behavior. The risk-free rate for periods within the contractual life of the option is based on the U.S. treasury yield curve in effect at the time of grant.

The following table summarizes the impact to the Consolidated Statement of Operations from stock options:

	Years Ended December 31,		
	2018	**2017**	**2016**
Compensation expense	$ 64	$ 79	$ 87
Future income tax benefit recognized	13	17	29

The following table sets forth fair value per share information, including related weighted-average assumptions, used to determine compensation cost.

(Dollars in millions, except per share amounts)

	Years Ended December 31,		
	2018	**2017**	**2016**
Weighted average fair value per share of options granted during the year(1)	$ 23.63	$ 16.68	$ 15.59
Assumptions:			
Expected annual dividend yield	2.49 %	2.81 %	2.92 %
Expected volatility	18.93 %	18.96 %	23.07 %
Risk-free rate of return	2.71 %	2.02 %	1.29 %
Expected option term (years)	4.95	5.04	4.97

(1) Estimated on date of grant using Black-Scholes option-pricing model.

The following table summarizes information about stock option activity for the three years ended December 31, 2018:

	Number of Options	**Weighted Average Exercise Price**
Outstanding at December 31, 2015	30,569,438	$ 70.76
Granted	6,281,053	103.51
Exercised	(7,075,852)	57.41
Lapsed or canceled	(1,107,339)	96.81
Outstanding at December 31, 2016		

	28,667,300	79.57
Granted	5,098,569	125.16
Exercised	(8,840,019)	62.34
Lapsed or canceled	(1,516,557)	109.04
Outstanding at December 31, 2017	23,409,293	94.16
Spin related adjustment[1]	989,158	
Granted	3,303,722	148.48
Exercised	(3,399,375)	78.29
Lapsed or canceled	(1,824,217)	123.01
Outstanding at December 31, 2018	22,478,581	$ 97.83
Vested and expected to vest at December 31, 2018[2]	21,590,740	$ 96.27
Exercisable at December 31, 2018	14,073,120	$ 83.42

(1) Additional options granted to offset the dilutive impact of the spin-offs on outstanding options.

(2) Represents the sum of vested options of 14.1 million and expected to vest options of 7.5 million. Expected to vest options are derived by applying the pre-vesting forfeiture rate assumption to total outstanding unvested options of 8.6 million.

(Dollars in millions, except per share amounts)

The following table summarizes information about stock options outstanding and exercisable at December 31, 2018:

	Options Outstanding				**Options Exercisable**		
Range of Exercise prices	**Number Outstanding**	**Weighted Average Life(1)**	**Weighted Average Exercise Price**	**Aggregate Intrinsic Value**	**Number Exercisable**	**Weighted Average Exercise Price**	**Aggregate Intrinsic Value**
$27.00–$64.99	3,225,142	2.47	$ 53.34	$ 254	3,225,142	$ 53.34	$ 254
$65.00–$89.99	4,788,204	4.72	79.22	253	4,788,204	79.22	253
$90.00–$99.99	7,614,190	6.69	98.80	254	4,885,314	98.82	163
$100.00–$134.99	4,155,389	8.12	119.20	54	1,155,376	118.67	16
$135.00–$156.00	2,695,656	9.17	148.45	—	19,084	148.79	—
	22,478,581	6.23	97.83	$ 815	14,073,120	$ 83.42	$ 686

(1) Average remaining contractual life in years.

There were 12,288,854, and 15,536,961 options exercisable at weighted average exercise prices of $78.35 and $63.39 at December 31, 2017 and 2016.

The following table summarizes the financial statement impact from stock options exercised:

Options Exercised	**Years Ended December 31,**		
	2018	**2017**	**2016**
Intrinsic value(1)	$ 238	$ 620	$ 395
Tax benefit realized	47	221	137

(1) Represents the amount by which the stock price exceeded the exercise price of the options on the date of exercise.

At December 31, 2018 there was $89 million of total unrecognized compensation cost related to non-vested stock option awards which is expected to be recognized over a weighted-average period of 2.43 years. The total fair value of options vested during 2018, 2017 and 2016 was $73 million, $87 million and $76 million.

Restricted Stock Units—Restricted stock unit (RSU) awards entitle the holder to receive one share of common stock for each unit when the units vest. RSUs are issued to certain key employees and directors as compensation at fair market value at the date of grant. RSUs typically become fully vested over periods ranging from three to seven years and are payable in Honeywell common stock upon vesting.

(Dollars in millions, except per share amounts)

The following table summarizes information about RSU activity for the three years ended December 31, 2018:

	Number of Restricted Stock Units	Weighted Average Grant Date Fair Value Per Share
Non-vested at December 31, 2015	4,981,588	$ 82.18
Granted	1,364,469	110.49
Vested	(1,486,173)	68.58
Forfeited	(392,541)	88.88
Non-vested at December 31, 2016	4,467,343	94.17
Granted	1,274,791	129.71
Vested	(1,289,892)	81.37
Forfeited	(505,415)	103.06
Non-vested at December 31, 2017	3,946,827	108.60
Spin related adjustment[(1)]	154,346	
Granted	1,360,338	153.46
Vested	(988,787)	91.68

Forfeited	(814,851)	117.40
Non-vested at December 31, 2018	3,657,873	$ 125.35

(1) Additional RSU grants to offset the dilutive impact of the spin-offs on non-vested RSUs.

As of December 31, 2018, there was approximately $218 million of total unrecognized compensation cost related to non-vested RSUs granted under our stock plans which is expected to be recognized over a weighted-average period of 3.05 years.

The following table summarizes the impact to the Consolidated Statement of Operations from RSUs:

	Years Ended December 31,		
	2018	2017	2016
Compensation expense	$ 111	$ 97	$ 97
Future income tax benefit recognized	21	19	30

Note 20. Commitments and Contingencies

Environmental Matters

We are subject to various federal, state, local and foreign government requirements relating to the protection of the environment. We believe that, as a general matter, our policies, practices and procedures are properly designed to prevent unreasonable risk of environmental damage and personal injury and that our handling, manufacture, use and disposal of hazardous substances are in accordance with environmental and safety laws and regulations. However, mainly because of past operations and operations of predecessor companies, we, like other companies engaged in similar businesses, have incurred remedial response and voluntary cleanup costs for site contamination and are a party to lawsuits and claims associated with environmental and safety matters, including past production of products containing hazardous substances. Additional lawsuits, claims and costs involving environmental matters are likely to continue to arise in the future.

With respect to environmental matters involving site contamination, we continually conduct studies, individually or jointly with other potentially responsible parties, to determine the feasibility of various remedial techniques. It is our policy to record appropriate liabilities for environmental matters

(Dollars in millions, except per share amounts)

when remedial efforts or damage claim payments are probable and the costs can be reasonably estimated. Such liabilities are based on our best estimate of the undiscounted future costs required to complete the remedial work. The recorded liabilities are adjusted periodically as remediation efforts progress or as additional technical, regulatory or legal information becomes available. Given the uncertainties regarding the status of laws, regulations, enforcement policies, the impact of other potentially responsible parties, technology and information related to individual sites, we do not believe it is possible to develop an estimate of the range of reasonably possible environmental loss in excess of our recorded liabilities. We expect to fund expenditures for these matters from operating cash flow. The timing of cash expenditures depends on a number of factors, including the timing of remedial investigations and feasibility studies, the timing of litigation and settlements of remediation liability, personal injury and property damage claims, regulatory approval of cleanup projects, remedial techniques to be utilized and agreements with other parties.

The following table summarizes information concerning our recorded liabilities for environmental costs:

	Years Ended December 31,		
	2018	**2017**	**2016**
Beginning of year	$ 595	$ 511	$ 518
Accruals for environmental matters deemed probable and reasonably estimable	395	287	195
Environmental liability payments	(218)	(212)	(228)
Other	(17)	9	26
End of year	$ 755	$ 595	$ 511

Environmental liabilities are included in the following balance sheet accounts:

	December 31,	
	2018	**2017**
Accrued liabilities	$ 175	$ 226

Other liabilities	580	369
	$ 755	$ 595

We do not currently possess sufficient information to reasonably estimate the amounts of environmental liabilities to be recorded upon future completion of studies, litigation or settlements, and neither the timing nor the amount of the ultimate costs associated with environmental matters can be determined although they could be material to our consolidated results of operations and operating cash flows in the periods recognized or paid. However, considering our past experience and existing reserves, we do not expect that environmental matters will have a material adverse effect on our consolidated financial position.

In conjunction with the Resideo spin-off, the Company entered into an indemnification and reimbursement agreement with a Resideo subsidiary, pursuant to which Resideo's subsidiary has an ongoing obligation to make cash payments to Honeywell in amounts equal to 90 percent of Honeywell's annual net spending for environmental matters at certain sites as defined in the agreement. The amount payable to Honeywell in any given year is subject to a cap of $140 million, and the obligation will continue until the earlier of December 31, 2043, or December 31 of the third consecutive year during which the annual payment obligation has been less than $25 million. Reimbursements associated with this indemnification agreement were $25 million in 2018 and offset operating cash outflows incurred by the Company. As the Company records the accruals for environmental matters deemed probable and reasonably estimable related to the sites covered by the indemnification agreement, a corresponding receivable from Resideo for 90 percent of that accrual is also recorded. This receivable amount recorded in 2018 subsequent to the spin-off was $50 million. As of December 31, 2018, Other Current Assets and Other Assets includes $140 million and $476 million representing the short-term and long-term portion of the receivable amount due from Resideo under the indemnification and reimbursement agreement.

(Dollars in millions, except per share amounts)

Asbestos Matters

Honeywell is a defendant in asbestos related personal injury actions related to North American Refractories Company ("NARCO"), which was sold in 1986, and Bendix Friction Materials ("Bendix") business, which was sold in 2014.

In the third quarter of 2018, the Company revised its accounting to correct the time period associated with the determination of appropriate accruals for the legacy Bendix asbestos-related liability for unasserted claims. The prior accounting treatment applied a five-year time horizon; the revised treatment reflects the full term of epidemiological projections through 2059. Previously issued financial statements have been revised for this correction with the following effects: The Company's revised estimated asbestos-related liabilities are now $2,610 million as of December 31, 2017, which is $1,087 million higher than the Company's prior estimate. The Company's insurance recoveries for asbestos-related liabilities are estimated to be $503 million as of December 31, 2017, which is $68 million higher than the Company's prior estimate. As of December 31, 2017, the net deferred income taxes impact was $245 million, with a decrease to liabilities and increase to assets, and the cumulative impact on retained earnings was a decrease of $774 million. For 2017 and 2016 Cost of services sold decreased $48 million and $5 million, Tax expense increased $158 million and $2 million, and Net income decreased $110 million and $3 million.

This revision followed the Securities and Exchange Commission (SEC) Division of Corporation Finance review of our Annual Report on Form 10-K for 2017, which included review of our prior accounting for liability for unasserted Bendix-related asbestos claims. On September 13, 2018, following completion of Corporation Finance's review, the SEC Division of Enforcement advised that it has opened an investigation related to this matter. Honeywell intends to provide requested information and otherwise fully cooperate with the SEC staff. On October 31, 2018, David Kanefsky, a Honeywell shareholder, filed a putative class action complaint alleging violations of the Securities Exchange Act of 1934 and Rule 10b-5 related to the prior accounting for Bendix asbestos claims. We believe the Complaint has no merit.

The following tables summarize information concerning NARCO and Bendix asbestos related balances:

Asbestos Related Liabilities

	Year Ended December 31,	Year Ended December 31,	Year Ended December
	2018	2017	2016

	Bendix	NARCO	Total	Bendix	NARCO	Total	Bendix	NARCO
Beginning of year	$ 1,703	$ 907	$ 2,610	$ 1,789	$ 919	$ 2,708	$ 1,793	$ 921
Accrual for update to estimated liability	197	32	229	199	31	230	203	9
Change in estimated cost of future claims	(72)	—	(72)	(65)	—	(65)	(10)	—
Update of expected resolution values for pending claims	1	—	1	3	—	3	4	—
Asbestos related liability payments	(206)	(48)	(254)	(223)	(43)	(266)	(201)	(11
End of year	$ 1,623	$ 891	$ 2,514	$ 1,703	$ 907	$ 2,610	$ 1,789	$ 919

(Dollars in millions, except per share amounts)

Insurance Recoveries for Asbestos Related Liabilities

	Year Ended December 31,			Year Ended December 31,			Year Ended December 31,		
	2018			2017			2016		
	Bendix	NARCO	Total	Bendix	NARCO	Total	Bendix	NARCO	Total
Beginning of year	$ 191	$ 312	$ 503	$ 201	$ 319	$ 520	$ 222	$ 325	$ 54
Probable insurance recoveries related to estimated liability	11	—	11	10	—	10	8	—	8
Insurance receipts for asbestos related liabilities	(33)	(5)	(38)	(20)	(7)	(27)	(37)	(6)	(4
Insurance receivables settlements and write offs	1	—	1	—	—	—	7	—	7
Other	—	—	—	—	—	—	1	—	1
End of year	$ 170	$ 307	$ 477	$ 191	$ 312	$ 503	$ 201	$ 319	$ 52

NARCO and Bendix asbestos related balances are included in the following balance sheet accounts:

	December 31,	
	2018	2017
Other current assets	$ 40	$ 24

Insurance recoveries for asbestos related liabilities	437	479
	$ 477	$ 503
Accrued liabilities	$ 245	$ 350
Asbestos related liabilities	2,269	2,260
	$ 2,514	$ 2,610

NARCO Products—Honeywell's predecessor, Allied Corporation owned NARCO from 1979 to 1986. When the NARCO business was sold, Honeywell's predecessor entered into a cross-indemnity agreement with NARCO which included an obligation to indemnify the purchaser for asbestos claims. Such claims arise primarily from alleged occupational exposure to asbestos-containing refractory brick and mortar for high-temperature applications. NARCO ceased manufacturing these products in 1980, and the first asbestos claims were filed in the tort system against NARCO in 1983. Claims filings and related costs increased dramatically in the late 1990s through 2001, which led to NARCO filing for bankruptcy in January 2002. Once NARCO filed for bankruptcy, all then current and future NARCO asbestos claims were stayed against both NARCO and Honeywell pending the reorganization of NARCO.

Following the bankruptcy filing, in December 2002 Honeywell recorded a total NARCO asbestos liability of $3.2 billion, which was comprised of three components: (i) the estimated liability to settle pre-bankruptcy petition NARCO claims and certain post-petition settlements ($2.2 billion, referred to as "Pre-bankruptcy NARCO Liability"), (ii) the estimated liability related to then unasserted NARCO claims for the period 2004 through 2018 ($950 million, referred to as "NARCO Trust Liability"), and (iii) other NARCO bankruptcy-related obligations totaling $73 million.

When the NARCO Trust Liability of $950 million was established in 2002, the methodology for estimating the potential liability was based primarily on: (a) epidemiological projections of the future incidence of disease for the period 2004 through 2018, a fifteen-year period; (b) historical claims rates in the tort system for the five-year period prior to the bankruptcy filing date; and (c) anticipated NARCO Trust payment values set forth in the then current draft of the NARCO Trust Distribution Procedures. The methodology required estimating, by disease, three critical inputs: (i) likely number of claims to be asserted against the NARCO Trust in the future, (ii) percentage of those claims likely to receive payment, and (iii) payment values. The Company utilized outside asbestos liability valuation specialists to support our preparation of the NARCO Trust Liability estimate, which was based on a commonly accepted methodology used by numerous bankruptcy courts addressing 524(g) trusts.

In 2002, when we first established our initial liability, NARCO asbestos claims resolution shifted from the tort system to an anticipated NARCO Trust framework, where claims would be processed in accordance with established NARCO Trust Distribution Procedures, including strict medical and exposure criteria for a plaintiff to receive compensation. We believed at the time that the NARCO Trust's claims filing and resolution experience after the NARCO Trust became operational would be significantly different from pre-bankruptcy tort system experience in light of these more rigorous claims processing requirements in the NARCO Trust Distribution Procedures and Honeywell's active oversight of claims processing and approval. Given these anticipated differences, we believed that a 15-year time period was the appropriate horizon for establishing a probable and reasonably estimable liability for then unasserted NARCO claims as it represented our best estimate of the time period it would take for the NARCO Trust to be approved by the Bankruptcy Court, become fully operational and generate sufficiently reliable claims data (i.e., a data set which is statistically representative) to enable us to update our NARCO Trust Liability.

The NARCO Trust Distribution Procedures were finalized in 2006, and the Company updated its NARCO Trust Liability to reflect the final terms and payment values. The original 15-year period (from 2004 through 2018) for unasserted claims did not change as asbestos claims filings continued to be stayed against both Honeywell and NARCO. The 2006 update resulted in a range of the estimated liability for unasserted claims of $743 million to $961 million, and we believed that no amount within this range was a better estimate than any other amount. In accordance with ASC 450–Contingencies ("ASC 450"), we recorded the low end of the range of $743 million which resulted in a reduction of $207 million in our NARCO Trust Liability.

NARCO emerged from bankruptcy on April 30, 2013, at which time a federally authorized 524(g) trust was established for the evaluation and resolution of all existing and future NARCO asbestos claims. Both Honeywell and NARCO are protected by a permanent channeling injunction barring all present and future individual actions in state or federal courts and requiring all asbestos related claims based on exposure to NARCO asbestos-containing products to be made against the NARCO Trust.

The NARCO Trust Agreement and the NARCO Trust Distribution Procedures are the principal documents setting forth the structure of the NARCO Trust. These documents establish Honeywell's evergreen funding obligations. Honeywell is obligated to fund NARCO asbestos claims submitted to the NARCO Trust which qualify for payment under the Trust Distribution Procedures (Annual Contribution Claims), subject to an annual cap of $145 million. However, the initial $100 million of claims processed through the NARCO Trust (the Initial Claims Amount) will not count against the annual cap and any unused portion of the Initial Claims Amount will roll over to subsequent years until fully utilized. These documents also establish the material operating rules for the NARCO Trust, including Honeywell audit rights and the criteria claimants must meet to have a valid claim paid. These claims payment criteria include providing the NARCO Trust with adequate medical evidence of the claimant's asbestos-related condition and credible evidence of exposure to a specific NARCO asbestos-containing product. Further, the NARCO Trust is eligible to receive cash dividends from Harbison-

Walker International Inc ("HWI"), the reorganized and renamed entity that emerged, fully operational, from the NARCO bankruptcy. The NARCO Trust is required to use any funding received from HWI to pay Annual Contribution Claims until those funds are exhausted. It is only at this point that Honeywell's funding obligation to the Trust is triggered. Thus, there is an unrelated primary source for funding that affects Honeywell's funding of the NARCO Trust Liability.

Once operational, the NARCO Trust began to receive, process and pay claims that had been previously stayed pending the Trust becoming operational. As the NARCO Trust began to pay claims in 2014, we began to assert our on-going audit rights to review and monitor the claims processor's adherence to the established requirements of the NARCO Trust Distribution Procedures. While doing so, we identified several issues with the way the Trust was implementing the NARCO Trust Distribution Procedures. In 2015, Honeywell filed suit against the NARCO Trust in Bankruptcy Court alleging breach of certain provisions of the NARCO Trust Agreement and NARCO Trust Distribution Procedures. The parties agreed to dismiss the proceeding without prejudice pursuant to an 18-month Standstill Agreement, which expired in October 2017. Notwithstanding its expiration, claims processing continues, and Honeywell continues to negotiate and attempt to resolve remaining disputed issues (that is, instances where Honeywell believes the NARCO Trust is not processing claims in accordance with established NARCO Trust Distribution Procedures). Honeywell reserves the right to seek judicial intervention should negotiations fail.

After the NARCO Trust became effective in 2013, the $743 million NARCO Trust Liability was then comprised of:

(i) liability for unasserted claims; and

(ii) liability for claims asserted after the NARCO Trust became operational but not yet paid.

Although we know the number of claims filed with the NARCO Trust each year, we are not able to determine at this time the portion of the NARCO Trust Liability which represents asserted versus unasserted claims due to the lack of sufficiently reliable claims data because of the claims processing issues described previously.

Honeywell maintained the $743 million accrual for NARCO Trust Liability, as there has not been sufficiently reliable claims data history to enable us to update that liability.

As of December 31, 2018, our total NARCO asbestos liability of $891 million reflects Pre-bankruptcy NARCO liability of $148 million and NARCO Trust Liability of $743 million. Through December 31, 2018, Pre-bankruptcy NARCO Liability has been reduced by approximately $2 billion since first established in 2002, largely related to settlement payments. The remaining Pre-bankruptcy NARCO liability principally represents estimated amounts owed pursuant to settlement agreements reached during the pendency of the NARCO bankruptcy proceedings that provide for the right to submit claims to the NARCO Trust subject to qualification under the terms of the settlement agreements and Trust Distribution Procedures. The other NARCO bankruptcy obligations were paid in 2013 and no further liability is recorded.

As of December 31, 2018, Honeywell has not made any payments to the NARCO Trust for Annual Contribution Claims as Annual Contribution Claims which have been paid since the Trust became operational have been funded by cash dividends from HWI.

Honeywell continues to evaluate the appropriateness of the $743 million NARCO Trust Liability. Despite becoming effective in 2013, the NARCO Trust has experienced delays in becoming fully operational. Violations of the Trust Distribution Procedures and the resulting disputes and challenges, a standstill pending dispute resolution, and limited claims payments, have all contributed to the lack of sufficient normalized data based on actual claims processing experience in the Trust since it became operational. As a result, we have not been able to further update the NARCO Trust Liability. The $743 million NARCO Trust Liability continues to be appropriate because of the unresolved pending claims in the Trust, some portion of which will result in payouts in the future, and because new claims continue to be filed with the NARCO Trust. When sufficiently reliable claims data exists, we will update our estimate of the NARCO Trust Liability and it is possible that a material change may need to be recognized.

Our insurance receivable of $307 million as of December 31, 2018, corresponding to the estimated liability for asserted and unasserted NARCO asbestos claims, reflects coverage which reimburses Honeywell for portions of NARCO-related indemnity and defense costs and is provided by a large number of insurance policies written by dozens of insurance companies in both the domestic insurance market and the London excess market. We conduct analyses to estimate the probable amount of insurance that is recoverable for asbestos claims. While the substantial majority of our insurance carriers are solvent, some of our individual carriers are insolvent, which has been considered in our analysis of probable recoveries. We made judgments concerning insurance coverage that we believe are reasonable and consistent with our historical dealings and our knowledge of any pertinent solvency issues surrounding insurers.

(Dollars in millions, except per share amounts)

Bendix Products—Bendix manufactured automotive brake linings that contained chrysotile asbestos in an encapsulated form. Claimants consist largely of individuals who allege exposure to asbestos from brakes from either performing or being in the vicinity of individuals who performed brake replacements. The following tables present information regarding Bendix related asbestos claims activity:

Claims Activity	**Years Ended December 31,**	
	2018	**2017**
Claims Unresolved at the beginning of year	6,280	7,724
Claims Filed	2,430	2,645
Claims Resolved	(2,501)	(4,089)
Claims Unresolved at the end of year	6,209	6,280

Disease Distribution of Unresolved Claims	**December 31,**	
	2018	**2017**
Mesothelioma and Other Cancer Claims	2,949	3,062
Nonmalignant Claims	3,260	3,218
Total Claims	6,209	6,280

Honeywell has experienced average resolution values per claim excluding legal costs as follows:

	Years Ended December 31,				
	2018	2017	2016	2015	2014
	(in whole dollars)				
Malignant claims	$ 55,300	$ 56,000	$ 44,000	$ 44,000	$ 53,500
Nonmalignant claims	$ 4,700	$ 2,800	$ 4,485	$ 100	$ 120

It is not possible to predict whether resolution values for Bendix-related asbestos claims will increase, decrease or stabilize in the future.

Our consolidated financial statements reflect an estimated liability for resolution of asserted (claims filed as of the financial statement date) and unasserted Bendix-related asbestos claims and excludes the Company’s legal fees to defend such asbestos claims which will continue to be expensed by the Company as they are incurred. We have valued Bendix asserted and unasserted claims using average resolution values for the previous five years. We update the resolution values used to estimate the cost of Bendix asserted and unasserted claims during the fourth quarter each year.

Honeywell reflects the inclusion of all years of epidemiological disease projection through 2059 when estimating the liability for unasserted Bendix-related asbestos claims. Such liability for unasserted Bendix-related asbestos claims is based on historic and anticipated claims filing experience and dismissal rates, disease classifications, and resolution values in the tort system for the previous five years.

Our insurance receivable corresponding to the liability for settlement of asserted and unasserted Bendix asbestos claims reflects coverage which is provided by a large number of insurance policies written by dozens of insurance companies in both the domestic insurance market and the London excess market. Based on our ongoing analysis of the probable insurance recovery, insurance receivables are recorded in the financial statements simultaneous with the recording of the estimated liability for the underlying asbestos claims. This determination is based on our analysis of the underlying insurance policies, our historical experience with our insurers, our ongoing review of the solvency of our insurers, judicial determinations relevant to our insurance programs, and our consideration of the impacts of any settlements reached with our insurers.

In conjunction with the Garrett spin-off, the Company entered into an indemnification and reimbursement agreement with a Garrett subsidiary, pursuant to which Garrett's subsidiary will have an obligation to make cash payments to Honeywell in amounts equal to (i) 90% of Honeywell's asbestos-related liability payments primarily related to the Bendix business in the United States, as well as certain environmental-related liability payments and accounts payable and non-United States asbestos-related liability payments, in each case related to legacy elements of the Garrett business, including the legal costs of defending and resolving such liabilities, less (ii) 90% of Honeywell's net insurance receipts and, as may be applicable, certain other recoveries associated with such liabilities. The amount payable to Honeywell in respect of such liabilities arising in any given year will be subject to a cap of approximately Euro 150 million (equivalent to $175 million at the time the indemnification agreement was entered into). The obligation will continue until the earlier of December 31, 2048, or December 31 of the third consecutive year during which the annual indemnification obligation has been less than the Euro equivalent, at the fixed exchange rate at time of the indemnification agreement, of $25 million. Reimbursements associated with this indemnification agreement were $42 million in 2018. As the Company records the accruals for matters covered by the indemnification agreement, a corresponding receivable from Garrett is recorded for 90 percent of that accrual as determined by the terms of the agreement. In 2018 subsequent to the spin-off, the Company recorded a reversal to the receivable for $17 million in the fourth quarter of 2018. As of December 31, 2018, Other Current Assets and Other Assets includes $171 million and $1,058 million representing the short-term and long-term portion of the receivable amount due from Garrett under the indemnification and reimbursement agreement.

Other Matters

We are subject to a number of other lawsuits, investigations and disputes (some of which involve substantial amounts claimed) arising out of the conduct of our business, including matters relating to commercial transactions, government contracts, product liability, prior acquisitions and divestitures, employee benefit plans, intellectual property, and environmental, health and safety matters. We recognize a liability for any contingency that is probable of occurrence and reasonably estimable. We continually assess the likelihood of adverse judgments of outcomes in these matters, as well as potential ranges of possible losses (taking into consideration any insurance recoveries), based on a careful analysis of each matter with the assistance of outside legal counsel and, if applicable, other experts. Included in these other matters are the following:

Honeywell v. United Auto Workers (UAW) et. al—In September 2011, the UAW and certain Honeywell retirees (Plaintiffs) filed a suit in the Eastern District of Michigan (the District Court) alleging that a series of Master Collective Bargaining Agreements (MCBAs) between Honeywell and the UAW provided the retirees with rights to lifetime, vested healthcare benefits that could never be changed or reduced. Plaintiffs alleged that Honeywell had violated those vested rights by implementing express limitations (CAPS) on the amount Honeywell contributed toward healthcare coverage for the retirees. Honeywell subsequently answered the UAW's complaint and asserted counterclaims, including for breach of implied warranty.

Between 2014 and 2015, Honeywell began enforcing the CAPS against former employees. In response, the UAW and certain of the Plaintiffs filed a motion seeking a ruling that the MCBAs do not limit Honeywell's obligation to contribute to healthcare coverage for those retirees.

On March 29, 2018, the District Court issued its opinion resolving all pending summary judgment motions, except for Honeywell's counterclaim for breach of implied warranty, which has since been dismissed without prejudice.

In the opinion, the District Court held that the MCBAs do not promise retirees vested, lifetime benefits that survive expiration of the MCBAs. Based on this ruling, Honeywell terminated the retirees healthcare coverage benefits altogether as of July 31, 2018. In response, the UAW filed a motion to enjoin Honeywell from completely terminating coverage as of July 31, 2018, arguing that the CAPS themselves are vested and that Honeywell must continue to provide retiree medical benefits at the capped level. On July 28, 2018, the District Court denied the UAW's motion and entered a final judgment consistent with its March 2018 ruling. The UAW has appealed this decision to the Sixth Circuit Court of Appeals. Honeywell believes the District Court's ruling will be upheld.

In the March 2018 opinion, the District Court also held that Honeywell is obligated under the MCBAs to pay the "full premium" for retiree healthcare rather than the capped amount. Based on this ruling, Honeywell would be required to pay monetary damages to retirees for any past years in which Honeywell paid less than the "full premium" of their healthcare coverage. Such damages would be limited, depending on the retiree group, to a two to three-year period ending when the 2016 MCBA expired, and Honeywell would have no ongoing obligation to continue funding healthcare coverage for subsequent periods. Honeywell has appealed the District Court's ruling on this "full premium" damages issue, and believes that the Sixth Circuit Court of Appeals will reverse the District Court on that issue. In the event the Sixth Circuit were to sustain the District Court's ruling on this issue, Honeywell would be liable for damages of at least $12 million.

Given the uncertainty inherent in litigation and investigations (including the specific matter referenced above), we do not believe it is possible to develop estimates of reasonably possible loss in excess of current accruals for these matters (other than as specifically set forth above). Considering our past experience and existing accruals, we do not expect the outcome of these matters, either individually or in the aggregate, to have a material adverse effect on our consolidated financial position. Because most contingencies are resolved over long periods of time, potential liabilities are subject to change due to new developments, changes in settlement strategy or the impact of evidentiary requirements, which could cause us to pay damage awards or settlements (or become subject to equitable remedies) that could have a material adverse effect on our results of operations or operating cash flows in the periods recognized or paid.

Warranties and Guarantees

In the normal course of business we issue product warranties and product performance guarantees. We accrue for the estimated cost of product warranties and performance guarantees based on contract terms and historical experience at the time of sale. Adjustments to initial obligations for warranties and guarantees are made as changes to the obligations become reasonably estimable. The following table summarizes information concerning our recorded obligations for product warranties and product performance guarantees.

	Years Ended December 31,		
	2018	**2017**	**2016**
Beginning of year	$ 408	$ 487	$ 416
Accruals for warranties/guarantees issued during the year	208	215	326
Adjustment of pre-existing warranties/ guarantees	(78)	(27)	(40)
Settlement of warranty/guarantee claims	(228)	(267)	(215)
End of year	$ 310	$ 408	$ 487

(Dollars in millions, except per share amounts)

Product warranties and product performance guarantees are included in the following balance sheet accounts:

	December 31,	
	2018	2017
Accrued liabilities	$ 243	$ 307
Other liabilities	67	101
	$ 310	$ 408

Note 21. Pension and Other Postretirement Benefits

We sponsor a number of both funded and unfunded U.S. and non-U.S. defined benefit pension plans. Pension benefits for many of our U.S. employees are provided through non-contributory, qualified and non-qualified defined benefit plans. All non-union hourly and salaried employees joining Honeywell for the first time after December 31, 2012, are not eligible to participate in Honeywell's U.S. defined benefit pension plans. We also sponsor defined benefit pension plans which cover non-U.S. employees who are not U.S. citizens, in certain jurisdictions, principally the UK, Netherlands, Germany, and Canada. Other pension plans outside of the U.S. are not material to the Company either individually or in the aggregate.

We also sponsor postretirement benefit plans that provide health care benefits and life insurance coverage mainly to U.S. eligible retirees. None of Honeywell's U.S. employees are eligible for a retiree medical subsidy from the Company. In addition, the vast majority of Honeywell's U.S. retirees either have no Company subsidy or have a fixed-dollar subsidy amount. This significantly limits our exposure to the impact of future health care cost increases. The retiree medical and life insurance plans are not funded. Claims and expenses are paid from our operating cash flow.

(Dollars in millions, except per share amounts)

The following tables summarize the balance sheet impact, including the benefit obligations, assets and funded status associated with our significant pension and other postretirement benefit plans.

	Pension Benefits			
	U.S. Plans		**Non-U.S. Plans**	
	2018	**2017**	**2018**	**2017**
Change in benefit obligation:				
Benefit obligation at beginning of year	$ 18,151	$ 17,414	$ 7,019	$ 6,483
Service cost	140	172	26	40
Interest cost	573	586	143	147
Plan amendments	—	—	30	(1)
Actuarial (gains) losses	(1,111)	1,234	(356)	(24)
Benefits paid	(1,137)	(1,146)	(264)	(253)
Settlements and curtailments	—	(109)	(9)	—
Foreign currency translation	—	—	(342)	614
Other	(475)	—	(65)	13
Benefit obligation at end of year	16,141	18,151	6,182	7,019
Change in plan assets:				

Fair value of plan assets at beginning of year	18,985	16,814	7,151	6,120
Actual return on plan assets	(303)	3,287	(173)	539
Company contributions	34	139	137	161
Benefits paid	(1,137)	(1,146)	(264)	(253)
Settlements and curtailments	—	(109)	—	—
Foreign currency translation	—	—	(378)	569
Other	(470)	—	8	15
Fair value of plan assets at end of year	17,109	18,985	6,481	7,151
Funded status of plans	$ 968	$ 834	$ 299	$ 132
Amounts recognized in Consolidated Balance Sheet consist of:				
Prepaid pension benefit cost(1)	$ 1,295	$ 1,205	$ 1,094	$ 944
Accrued pension liabilities—current(2)	(27)	(27)	(12)	(12)
Accrued pension liabilities—noncurrent(3)	(300)	(344)	(783)	(800)
Net amount recognized	$ 968	$ 834	$ 299	$ 132

(1) Included in Other assets on Consolidated Balance Sheet

(2) Included in Accrued liabilities on Consolidated Balance Sheet

(3) Included in Other liabilities on Consolidated Balance Sheet

(Dollars in millions, except per share amounts)

	Other Postretirement Benefits	
	2018	**2017**
Change in benefit obligation:		
Benefit obligation at beginning of year	$ 530	$ 492
Service cost	—	—
Interest cost	15	19
Plan amendments	(34)	91
Actuarial (gains) losses	(110)	(14)
Benefits paid	(37)	(58)
Benefit obligation at end of year	364	530
Change in plan assets:		
Fair value of plan assets at beginning of year	—	—
Actual return on plan assets	—	—
Company contributions	—	—
Benefits paid	—	—

Fair value of plan assets at end of year	—	—
Funded status of plans	$ (364)	$ (530)
Amounts recognized in Consolidated Balance Sheet consist of:		
Accrued liabilities	$ (62)	$ (62)
Postretirement benefit obligations other than pensions(1)	(302)	(468)
Net amount recognized	$ (364)	$ (530)

(1) Excludes non-U.S. plans of $42 million and $44 million in 2018 and 2017.

Amounts recognized in Accumulated other comprehensive (income) loss associated with our significant pension and other postretirement benefit plans at December 31, 2018 and 2017 are as follows:

	Pension Benefits			
	U.S. Plans		**Non-U.S. Plans**	
	2018	**2017**	**2018**	**2017**
Prior service (credit) cost	$ (218)	$ (268)	$ 20	$ (13)
Net actuarial loss	860	248	600	427
Net amount recognized	$ 642	$ (20)	$ 620	$ 414

	Other Postretirement Benefits	
	2018	**2017**
Prior service (credit)	$ (226)	$ (244)

Net actuarial (gain) loss	(4)	109
Net amount recognized	$ (230)	$ (135)

(Dollars in millions, except per share amounts)

The components of net periodic benefit (income) cost and other amounts recognized in Other comprehensive (income) loss for our significant pension and other postretirement benefit plans include the following components:

Net Periodic Benefit Cost	**Pension Benefits**					
	U.S. Plans			**Non-U.S. Plans**		
	2018	**2017**	**2016**	**2018**	**2017**	**2016**
Service cost	$ 140	$ 172	$ 191	$ 26	$ 40	$ 47
Interest cost	573	586	600	143	147	179
Expected return on plan assets	(1,426)	(1,262)	(1,226)	(443)	(411)	(377)
Amortization of prior service (credit) cost	(43)	(43)	(43)	(1)	(1)	(3)
Recognition of actuarial losses	—	41	27	37	46	246
Settlements and curtailments	—	18	—	(3)	—	(7)
Net periodic benefit (income) cost	$ (756)	$ (488)	$ (451)	$ (241)	$ (179)	$ 85

Other Changes in Plan Assets and Benefits Obligations Recognized in Other Comprehensive (Income) Loss	**U.S. Plans**			**Non-U.S. Plans**		
	2018	**2017**	**2016**	**2018**	**2017**	**2016**
Actuarial (gains) losses	$ 619	$ (792)	$ 121	$ 250	$ (153)	$ 447
Prior service cost (credit)	—	—	—	30	(1)	—

Prior service credit recognized during year	43	43	43	4	1	10
Actuarial losses recognized during year	—	(59)	(27)	(37)	(46)	(246)
Foreign currency translation	—	—	—	(34)	43	(83)
Total recognized in other comprehensive (income) loss	$ 662	$ (808)	$ 137	$ 213	$ (156)	$ 128
Total recognized in net periodic benefit (income) cost and other comprehensive (income) loss	$ (94)	$ (1,296)	$ (314)	$ (28)	$ (335)	$ 213

The estimated prior service (credit) for pension benefits that will be amortized from Accumulated other comprehensive (income) loss into net periodic benefit (income) cost in 2019 are expected to be ($42) million and $0 million for U.S. and non-U.S. pension plans.

	Other Postretirement Benefits		
Net Periodic Benefit Cost	**Years Ended December 31,**		
	2018	**2017**	**2016**
Service cost	$ —	$ —	$ —
Interest cost	15	19	20
Amortization of prior service (credit)	(52)	(58)	(76)
Recognition of actuarial losses	3	13	22
Net periodic benefit (income) cost	$ (34)	$ (26)	$ (34)

Years Ended December 31,

Other Changes in Plan Assets and Benefits Obligations Recognized in Other Comprehensive (Income) Loss	**2018**	**2017**	**2016**
Actuarial (gains) losses	$ (110)	$ (14)	$ (31)
Prior service cost (credit)	(34)	91	27
Prior service credit recognized during year	52	58	76
Actuarial losses recognized during year	(3)	(13)	(22)
Total recognized in other comprehensive (income) loss	$ (95)	$ 122	$ 50
Total recognized in net periodic benefit (income) cost and other comprehensive (income) loss	$ (129)	$ 96	$ 16

(Dollars in millions, except per share amounts)

The estimated net loss and prior service (credit) for other postretirement benefits that will be amortized from Accumulated other comprehensive (income) loss into net periodic benefit (income) cost in 2019 are expected to be $0 and ($62) million.

Major actuarial assumptions used in determining the benefit obligations and net periodic benefit (income) cost for our significant benefit plans are presented in the following table as weighted averages.

	Pension Benefits					
	U.S. Plans			Non-U.S. Plans		
	2018	2017	2016	2018	2017	2016
Actuarial assumptions used to determine benefit obligations as of December 31:						
Discount rate	4.35 %	3.68 %	4.20 %	2.63 %	2.36 %	2.51 %
Expected annual rate of compensation increase	3.25 %	4.50 %	4.50 %	2.46 %	0.73 %	2.17 %
Actuarial assumptions used to determine net periodic benefit (income) cost for years ended December 31:						
Discount rate—benefit obligation	3.68 %	4.20 %	4.46 %	2.36 %	2.51 %	3.49 %
Discount rate—service cost	3.77 %	4.42 %	4.69 %	2.20 %	2.14 %	2.92 %
Discount rate—interest cost	3.27 %	3.49 %	3.59 %	2.08 %	2.19 %	3.07 %
Expected rate of return on plan assets	7.75 %	7.75 %	7.75 %	6.23 %	6.43 %	6.65 %
Expected annual rate of compensation increase	4.50 %	4.50 %	4.48 %	2.49 %	2.17 %	2.11 %

	Other Postretirement Benefits		
	2018	**2017**	**2016**
Actuarial assumptions used to determine benefit obligations as of December 31:			
Discount rate	4.07 %	3.39 %	3.65 %
Actuarial assumptions used to determine net periodic benefit cost for years ended December 31:			
Discount rate(1)	3.39 %	3.60 %	3.80 %

(1) Discount rate was 3.65% for 1/1/17 through 2/28/17. Rate was changed to 3.60% for the remainder of 2017 due to Plan remeasurement as of 3/1/17.

The discount rate for our U.S. pension and other postretirement benefits plans reflects the current rate at which the associated liabilities could be settled at the measurement date of December 31. To determine discount rates for our U.S. pension and other postretirement benefit plans, we use a modeling process that involves matching the expected cash outflows of our benefit plans to a yield curve constructed from a portfolio of high quality, fixed-income debt instruments. We use the single weighted-average yield of this hypothetical portfolio as a discount rate benchmark. We utilize a full yield curve approach in the estimation of the service and interest cost components of net periodic pension benefit (income) for our significant pension plans. This approach applies the specific spot rates along the yield curve used in the determination of the pension benefit obligation to their underlying projected cash flows and provides a more precise measurement of service and interest costs by improving the correlation between projected cash flows and their corresponding spot rates. For our U.S. pension plans, the single weighted average spot rates used to determine service and interest costs for 2019 are 4.47% and 3.94%. The discount rate used to determine the other postretirement benefit obligation is lower principally due to a shorter expected duration of other postretirement plan obligations as compared to pension plan obligations.

(Dollars in millions, except per share amounts)

Our expected rate of return on U.S. plan assets of 6.75% at December 31, 2018 was down from 7.75% at December 31, 2017 reflecting a re-balancing of assets to more fixed income during 2018. Our asset return assumption is based on historical plan asset returns over varying long-term periods combined with current market conditions and broad asset mix considerations with a focus on long-term trends rather than short-term market conditions. We review the expected rate of return on an annual basis and revise it as appropriate.

For non-U.S. benefit plans actuarial assumptions reflect economic and market factors relevant to each country.

Pension Benefits

The following amounts relate to our significant pension plans with accumulated benefit obligations exceeding the fair value of plan assets.

	December 31,			
	U.S. Plans		Non-U.S. Plans	
	2018	2017	2018	2017
Projected benefit obligation	$ 327	$ 371	$ 1,668	$ 1,082
Accumulated benefit obligation	$ 321	$ 360	$ 1,604	$ 1,018
Fair value of plan assets	—	—	$ 873	$ 269

Accumulated benefit obligation for our U.S. defined benefit pension plans were $16.1 billion and $18.1 billion and for our Non-U.S. defined benefit pension plans were $6.1 billion and $6.9 billion at December 31, 2018 and 2017.

Our asset investment strategy for our U.S. pension plans focuses on maintaining a diversified portfolio using various asset classes in order to achieve our long-term investment objectives on a risk adjusted basis. During 2018, we began to employ a de-risking strategy which increases the matching characteristics of our assets relative to our obligation. Our long-term target allocations are as follows: 45%-70% fixed income securities and cash, 35%-50% equity securities, 5%-10% real estate investments, and 10%-20% other types of investments. Equity securities include publicly-traded stock of companies located both inside and outside the United States. Fixed income securities include corporate bonds of companies from diversified industries, mortgage-backed securities, and U.S. Treasuries. Real estate investments include direct investments in commercial properties and investments in real estate funds. Other types of investments include investments in private equity and hedge funds that follow several different strategies. We review our assets on a regular basis to ensure that we are within the targeted asset allocation ranges and, if necessary, asset balances are adjusted back within target allocations.

Our non-U.S. pension assets are typically managed by decentralized fiduciary committees with the Honeywell Corporate Investments group providing funding and investment guidance. Our non-U.S. investment policies are different for each country as local regulations, funding requirements, and financial and tax considerations are part of the funding and investment allocation process in each country.

In accordance with ASU 2015-07, "Fair Value Measurement (Topic 820)", certain investments that are measured at fair value using the net asset value (NAV) per share (or its equivalent) practical expedient have not been classified in the fair value hierarchy. The fair value amounts presented in the following tables are intended to permit reconciliation of the fair value hierarchy to the amounts presented for the total pension benefits plan assets.

(Dollars in millions, except per share amounts)

The fair values of both our U.S. and non-U.S. pension plans assets by asset category are as follows:

	U.S. Plans			
	December 31, 2018			
	Total	Level 1	Level 2	Level 3
Equities:				
Honeywell common stock	$ 2,438	$ 2,438	—	—
U.S. equities	1,365	1,365	—	—
Non-U.S. equities	753	753	—	—
Real estate investment trusts	244	244	—	—
Fixed income:				
Short term investments	877	877	—	—
Government securities	993	—	993	—
Corporate bonds	6,824	—	6,824	—
Mortgage/Asset-backed securities	1,032	—	1,032	—
Insurance contracts	8	—	8	—
Direct investments:				
Direct private investments	829	—	—	829
Real estate properties				

	657	—	—	657
Total	16,020	$ 5,677	$ 8,857	$ 1,486
Investments measured at NAV:				
Private funds	931			
Real estate funds	56			
Hedge funds	1			
Commingled Funds	101			
Total assets at fair value	$ 17,109			

	U.S. Plans			
	December 31, 2017			
	Total	**Level 1**	**Level 2**	**Level 3**
Equities:				
Honeywell common stock	$ 2,832	$ 2,832	$ —	$ —
U.S. equities	3,573	3,573	—	—
Non-U.S. equities	2,631	2,618	13	—
Real estate investment trusts	265	265	—	—
Fixed income:				
Short term investments	919	919	—	—

Government securities	428	—	428	—
Corporate bonds	5,052	—	5,052	—
Mortgage/Asset-backed securities	742	—	742	—
Insurance contracts	8	—	8	—
Direct investments:				
Direct private investments	752	—	—	752
Real estate properties	597	—	—	597
Total	17,799	$ 10,207	$ 6,243	$ 1,349
Investments measured at NAV:				
Private funds	901			
Real estate funds	84			
Hedge funds	20			
Commingled funds	181			
Total assets at fair value	$ 18,985			

(Dollars in millions, except per share amounts)

	Non-U.S. Plans			
	December 31, 2018			
	Total	Level 1	Level 2	Level 3
Equities:				
U.S. equities	$ 429	$ 297	132	—
Non-U.S. equities	1,356	44	1,312	—
Fixed income:				
Short-term investments	189	189	—	—
Government securities	2,572	—	2,572	—
Corporate bonds	1,468	—	1,468	—
Mortgage/Asset-backed securities	60	—	60	—
Insurance contracts	137	—	137	—
Investments in private funds:				
Private funds	46	—	12	34
Real estate funds	144	—	—	144
Total	6,401	$ 530	$ 5,693	$ 178
Investments measured at NAV:				

Private funds	26
Real estate funds	54
Total assets at fair value	$ 6,481

	Non-U.S. Plans			
	December 31, 2017			
	Total	Level 1	Level 2	Level 3
Equities:				
U.S. equities	$ 573	$ 420	$ 153	$ —
Non-U.S. equities	2,801	99	2,702	—
Fixed income:				
Short-term investments	238	238	—	—
Government securities	1,685	—	1,685	—
Corporate bonds	1,364	—	1,364	—
Mortgage/Asset-backed securities	47	—	47	—
Insurance contracts	157	—	157	—
Investments in private funds:				
Private funds	52	—	21	31
Real estate funds	149	—	—	149
Total				

	7,066	$ 757	$ 6,129	$ 180
Investments measured at NAV:				
Private funds	29			
Real estate funds	56			
Total assets at fair value	$ 7,151			

(Dollars in millions, except per share amounts)

The following table summarizes changes in the fair value of Level 3 assets for both U.S. and Non-U.S. plans:

	U.S. Plans		Non-U.S. Plans	
	Direct Private Investments	Real Estate Properties	Private Funds	Real Estate Funds
Balance at December 31, 2016	$ 609	$ 664	$ 23	$ 124
Actual return on plan assets:				
Relating to assets still held at year-end	33	2	5	26
Relating to assets sold during the year	51	31	—	—
Purchases	148	18	6	—
Sales and settlements	(89)	(118)	(3)	(1)
Balance at December 31, 2017	752	597	31	149
Actual return on plan assets:				
Relating to assets still held at year-end	36	33	1	(4)
Relating to assets sold during the year	65	2	—	—
Purchases	95	47	2	—
Sales and settlements	(119)	(22)	—	(1)

Balance at December 31, 2018	$ 829	$ 657	$ 34	$ 144

The Company enters into futures contracts to gain exposure to certain markets. Sufficient cash or cash equivalents are held by our pension plans to cover the notional value of the futures contracts. At December 31, 2018 and 2017, our U.S. plans had contracts with notional amounts of $2,808 million and $4,188 million. At December 31, 2018 and 2017, our non-U.S. plans had contracts with notional amounts of $111 million and $133 million. In both our U.S. and non-U.S. pension plans, the notional derivative exposure is related to outstanding equity and fixed income futures contracts.

Common stocks, preferred stocks, real estate investment trusts, and short-term investments are valued at the closing price reported in the active market in which the individual securities are traded. Corporate bonds, mortgages, asset-backed securities, and government securities are valued either by using pricing models, bids provided by brokers or dealers, quoted prices of securities with similar characteristics or discounted cash flows and as such include adjustments for certain risks that may not be observable such as credit and liquidity risks. Certain securities are held in collective trust funds which are valued using net asset values provided by the administrators of the funds. Investments in private equity, debt, real estate and hedge funds and direct private investments are valued at estimated fair value based on quarterly financial information received from the investment advisor and/or general partner. Investments in real estate properties are valued on a quarterly basis using the income approach. Valuation estimates are periodically supplemented by third party appraisals.

Our funding policy for qualified defined benefit pension plans is to contribute amounts at least sufficient to satisfy regulatory funding standards. In 2018, 2017, and 2016, we were not required to make contributions to our U.S. pension plans and no contributions were made. We are not required to make any contributions to our U.S. pension plans in 2019. In 2018, contributions of $115 million were made to our non-U.S. pension plans to satisfy regulatory funding requirements. In 2019, we expect to make contributions of cash and/or marketable securities of approximately $42 million to our non-U.S. pension plans to satisfy regulatory funding standards. Contributions for both our U.S. and non-U.S. pension plans do not reflect benefits paid directly from Company assets.

(Dollars in millions, except per share amounts)

Benefit payments, including amounts to be paid from Company assets, and reflecting expected future service, as appropriate, are expected to be paid as follows:

	U.S. Plans	Non-U.S. Plans
2019	$ 1,177	$ 254
2020	1,171	259
2021	1,167	266
2022	1,163	273
2023	1,160	280
2024-2028	5,564	1,519

Other Postretirement Benefits

	December 31,	
	2018	2017
Assumed health care cost trend rate:		
Health care cost trend rate assumed for next year	7.00 %	6.50 %
Rate that the cost trend rate gradually declines to	5.00 %	5.00 %
Year that the rate reaches the rate it is assumed to remain at	2029	2023

The assumed health care cost trend rate has a significant effect on the amounts reported. A one-percentage-point change in the assumed health care cost trend rate would have the following effects:

	1 percentage point	
	Increase	Decrease
Effect on total of service and interest cost components	$ 1	$ (1)
Effect on postretirement benefit obligation	$ 18	$ (14)

Benefit payments reflecting expected future service, as appropriate, are expected to be paid as follows:

	Without Impact of Medicare Subsidy	Net of Medicare Subsidy
2019	$ 52	$ 48
2020	48	44
2021	44	40
2022	40	37
2023	38	34
2024-2028	109	98

Note 22. Segment Financial Data

We globally manage our business operations through four reportable operating segments. Segment information is consistent with how management reviews the businesses, makes investing and resource allocation decisions and assesses operating performance.

Honeywell's senior management evaluates segment performance based on segment profit. Segment profit is measured as segment income (loss) before taxes excluding general corporate unallocated expense, other income (expense), interest and other financial charges, stock compensation expenses, pension and other postretirement benefits (expense), stock compensation expense and repositioning and other charges.

(Dollars in millions, except per share amounts)

	Years Ended December 31,		
	2018	**2017**	**2016**
Net Sales			
Aerospace			
Product	$ 10,415	$ 10,067	$ 9,926
Service	5,078	4,712	4,825
Total	15,493	14,779	14,751
Honeywell Building Technologies			
Product	7,868	8,396	8,250
Service	1,430	1,381	1,240
Total	9,298	9,777	9,490
Performance Materials and Technologies			
Product	8,589	8,521	8,725
Service	2,085	1,818	1,711
Total	10,674	10,339	10,436
Safety and Productivity Solutions			

Product	5,976	5,333	4,461
Service	361	306	164
Total	6,337	5,639	4,625
	$ 41,802	$ 40,534	$ 39,302
Depreciation and amortization			
Aerospace	$ 281	$ 279	$ 275
Honeywell Building Technologies	112	118	107
Performance Materials and Technologies	452	441	399
Safety and Productivity Solutions	216	219	188
Corporate	55	58	61
	$ 1,116	$ 1,115	$ 1,030
Segment Profit			
Aerospace	$ 3,503	$ 3,288	$ 2,991
Honeywell Building Technologies	1,608	1,650	1,621
Performance Materials and Technologies	2,328	2,206	2,112
Safety and Productivity Solutions	1,032	852	680
Corporate	(281)	(306)	(218)

	$ 8,190	$ 7,690	$ 7,186
Capital expenditures			
Aerospace	$ 308	$ 380	$ 331
Honeywell Building Technologies	125	88	92
Performance Materials and Technologies	254	303	473
Safety and Productivity Solutions	78	79	55
Corporate	63	181	144
	$ 828	$ 1,031	$ 1,095

	December 31,		
	2018	**2017**	**2016**
Total Assets			
Aerospace	$ 11,234	$ 11,769	$ 11,426
Honeywell Building Technologies	6,010	10,592	10,392
Performance Materials and Technologies	17,827	17,203	15,835
Safety and Productivity Solutions	9,886	9,456	8,951
Corporate	12,816	10,450	7,962
	$ 57,773	$ 59,470	$ 54,566

(Dollars in millions, except per share amounts)

A reconciliation of segment profit to consolidated income from continuing operations before taxes are as follows:

	Years Ended December 31,		
	2018	**2017**	**2016**
Segment Profit	$ 8,190	$ 7,690	$ 7,186
Interest and other financial charges	(367)	(316)	(338)
Stock compensation expense[(1)]	(175)	(176)	(184)
Pension ongoing income (expense)[(2)]	992	713	601
Pension mark-to-market expense[(2)]	(37)	(87)	(273)
Other postretirement income (expense)[(2)]	32	21	32
Repositioning and other charges[(3)]	(1,091)	(973)	(690)
Other[(4)]	(57)	78	118
Income before taxes	$ 7,487	$ 6,950	$ 6,452

(1) Amounts included in Selling, general and administrative expenses.

(2) Amounts included in Cost of products and services sold and Selling, general and administrative expenses (service costs) and Other income/expense (non-service cost components).

(3) Amounts included in Cost of products and services sold, Selling, general and administrative expenses, and Other income/expense.

(4) Amounts include the other components of Other income/expense not included within other categories in this reconciliation. Equity income/loss of affiliated companies is included in segment profit.

Note 23. Geographic Areas—Financial Data

	Net Sales[1]			Long-lived Assets[2]		
	Years Ended December 31,			December 31,		
	2018	2017	2016	2018	2017	2016
United States	$ 23,841	$ 22,722	$ 22,652	$ 3,601	$ 3,604	$ 3,744
Europe	10,066	10,400	9,966	571	927	741
Other International	7,895	7,412	6,684	1,124	1,395	1,308
	$ 41,802	$ 40,534	$ 39,302	$ 5,296	$ 5,926	$ 5,793

(1) Sales between geographic areas approximate market and are not significant. Net sales are classified according to their country of origin. Included in United States net sales are export sales of $5,293 million, $4,974 million and $5,290 million in 2018, 2017 and 2016.

(2) Long-lived assets are comprised of property, plant and equipment - net.

(Dollars in millions, except per share amounts)

Note 24. Supplemental Cash Flow Information

	Years Ended December 31,		
	2018	**2017**	**2016**
Net payments for repositioning and other charges:			
Severance and exit cost payments	$ (285)	$ (177)	$ (228)
Environmental payments	(218)	(212)	(228)
Indemnity receipts	67	—	—
Insurance receipts for asbestos related liabilities	38	27	43
Asbestos related liability payments	(254)	(266)	(212)
	$ (652)	$ (628)	$ (625)
Interest paid, net of amounts capitalized	$ 353	$ 306	$ 329
Income taxes paid, net of refunds	1,566	1,751	1,142
Non-cash investing and financing activities:			
Common stock contributed to savings plans	52	172	168
Marketable securities contributed to non-U.S. pension plans	99	89	106

Note 25. Unaudited Quarterly Financial Information

	2018				
	Mar. 31	**June 30**	**Sept. 30**	**Dec. 31**	**Year**
Net sales	$ 10,392	$ 10,919	$ 10,762	$ 9,729	$ 41,802
Gross profit	3,201	3,305	3,206	3,044	12,756
Net income attributable to Honeywell	1,439	1,267	2,338	1,721	6,765
Earnings per common share—basic(1)(4)	1.92	1.70	3.15	2.34	9.10
Earnings per common share—assuming dilution(1)(4)	1.89	1.68	3.11	2.31	8.98
Cash dividends per common share	0.745	0.745	0.745	0.820	3.055

	2017				
	Mar. 31	**June 30**	**Sept. 30**	**Dec. 31(3)**	**Year**
Net sales	$ 9,492	$ 10,078	$ 10,121	$ 10,843	$ 40,534
Gross profit	2,966	3,054	3,067	3,303	12,390
Net income (loss) attributable to Honeywell	1,328	1,391	1,345	(2,519)	1,545
Earnings (loss) per common share—basic(1)(4)	1.74	1.82	1.76	(3.32)	2.03
Earnings (loss) per common share—assuming dilution(1)(2)(4)	1.72	1.80	1.74	(3.32)	2.00
Cash dividends per common share	0.665	0.665	0.665	0.745	2.740

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(1) Total for the full year may differ from the sum of the individual quarters due to the requirement to use weighted average shares each quarter, which may

fluctuate with share repurchases and share issuances, and due to the impact of losses in a quarter.

(2) Due to a loss for the quarter ended December 31, 2017, no incremental shares were included because the effect would be antidilutive.

(3) For the quarter ended December 31, 2017 Net income (loss) attributable to Honeywell, Earnings (loss) per common share - basic and Earnings (loss) per common share - assuming dilution were impacted by U.S. Tax Reform.

(4) Earnings per Common Share and Net income attributable to Honeywell were revised for periods prior to Sept. 30, 2018 in connection with our change in accounting for Bendix asbestos-related liabilities for unasserted claims. See Note 20 Commitments and Contingencies for further details.

Report of Independent Registered Public Accounting Firm

To the Shareowners and the Board of Directors of Honeywell International Inc.

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated balance sheets of Honeywell International Inc. and subsidiaries (the "Company") as of December 31, 2018 and 2017, and the related consolidated statements of operations, comprehensive income, shareowners' equity, and cash flows, for each of the three years in the period ended December 31, 2018, and the related notes (collectively referred to as the "financial statements"). We also have audited the Company's internal control over financial reporting as of December 31, 2018, based on criteria established in *Internal Control—Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2018 and 2017, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2018, in conformity with accounting principles generally accepted in the United States of America. Also, in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2018, based on criteria established in *Internal Control—Integrated Framework (2013)* issued by COSO.

Change in Accounting Principle

As discussed in Note 1 to the financial statements, the accompanying 2017 and 2016 consolidated statements of operations have been retrospectively adjusted for the adoption of Accounting Standards Update 2017-07, *Compensation—Retirement Benefits (Topic 715): Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost*.

Basis for Opinions

The Company's management is responsible for these financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Report on Internal Control Over Financial Reporting. Our responsibility is to express an opinion on these financial statements and an opinion on the Company's internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the financial statements included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures to respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

Definition and Limitations of Internal Control over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ Deloitte & Touche LLP

Parsippany, New Jersey
February 8, 2019

We have served as the Company's auditor since 2014.

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure

Not Applicable.

Item 9A. Controls and Procedures

Honeywell management maintains disclosure controls and procedures designed to provide reasonable assurance that information required to be disclosed in reports filed under the Securities Exchange Act of 1934, as amended (Exchange Act) is recorded, processed, summarized and reported within the specified time periods and accumulated and communicated to our management, including our principal executive officer and principal financial officer, as appropriate to allow timely decisions regarding required disclosure. There have been no changes that have materially affected, or are reasonably likely to materially affect, Honeywell's internal control over financial reporting that have occurred during the quarter ended December 31, 2018.

Our management, with the participation of our CEO and CFO, evaluated the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15(e) or 15d-15(e) promulgated under the Exchange Act) at December 31, 2018. Based on these evaluations, our CEO and CFO concluded that our disclosure controls and procedures required by paragraph (b) of Rules 13a-15 or 15d-15 were effective as of December 31, 2018.

Management's Report on Internal Control Over Financial Reporting

Honeywell management is responsible for establishing and maintaining adequate internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting as defined in Rules 13a-15(f) and 15d-15(f) under the Securities Exchange Act of 1934. Honeywell's internal control over financial reporting is a process designed to provide reasonable assurance to our management and board of directors regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements.

Management assessed the effectiveness of Honeywell's internal control over financial reporting as of December 31, 2018. In making this assessment, management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in *Internal Control—Integrated Framework (2013)*.

Based on this assessment, management determined that Honeywell maintained effective internal control over financial reporting as of December 31, 2018.

The effectiveness of Honeywell's internal control over financial reporting as of December 31, 2018 has been audited by Deloitte & Touche LLP, an independent registered public accounting firm, as stated in their report which is included in Item 8. Financial Statements and Supplementary Data.

Item 9B. Other Information

Iran Threat Reduction and Syrian Human Rights Act of 2012

Under the Iran Threat Reduction and Syrian Human Rights Act of 2012, which added Section 13(r) of the Securities Exchange Act of 1934, Honeywell is required to disclose in its periodic reports if it or any of its affiliates knowingly engaged in certain activities, transactions or dealings relating to Iran or with entities or individuals designated pursuant to certain Executive Orders. All of our activities in Iran during the year ended December 31, 2018, including the activities disclosed below, were conducted by our non-U.S. subsidiaries (i) under General License H, (ii) under General License I, or (iii) under a specific license issued by U.S. Treasury's Office of Foreign Assets Control (OFAC), and otherwise in compliance with all applicable laws, including sanctions regulations administered by OFAC.

In the year ended December 31, 2018, the non-U.S. subsidiaries of our UOP business, part of Performance Materials and Technologies, engaged in the following activities related to Iran's oil, gas and/or petrochemical sectors:

- Delivered services to Iranian counterparties pursuant to new and existing contracts, which resulted in revenue of approximately $31.3 million.
- Sold non-U.S. origin products to non-U.S. third-parties for end-use in Iran pursuant to new and existing contracts, which resulted in revenue of approximately $14.0 million.

Following our completion of the wind-down activities authorized by OFAC after the United States' withdrawal from the Joint Comprehensive Plan of Action, we have now ceased doing business in Iran.

On February 4, 2019, Krishna Mikkilineni, the Company's Senior Vice President of Engineering and Information Technology, communicated his intention to retire from the Company effective as of April 30, 2019 (the "Retirement Date").

In consideration for Mr. Mikkilineni's agreement to (1) provide post-Retirement Date transition services through October 31, 2019, and (2) extend the time period of his existing non-solicitation and non-compete covenants from two years to three years, the Company and Mr. Mikkilineni entered into a Retirement Agreement that provides Mr. Mikkilineni with the following benefits notwithstanding his voluntary retirement: (i) the outstanding restricted stock units previously awarded to Mr. Mikkilineni that are unvested as of the Retirement Date and that would otherwise have vested before March 1, 2020 shall remain outstanding and continue to vest as scheduled pursuant to their existing terms and conditions, including the satisfaction of any applicable Company performance requirements, (ii) all outstanding stock options that are unvested as of the Retirement Date and that would otherwise have vested before March 1, 2020 shall continue to vest as scheduled, and (iii) Mr. Mikkilineni shall receive a $2,500,000 payout from the performance stock units ("PSUs") granted to him for the 2017–2019 PSU performance cycle (or the full payout of such PSUs if such payout is less than $2,500,000). All other unvested long-term incentive awards shall be forfeited as of the Retirement Date.

PART III.

Item 10. Directors and Executive Officers of the Registrant

Information relating to the Directors of Honeywell, as well as information relating to compliance with Section 16(a) of the Securities Exchange Act of 1934, will be contained in our definitive Proxy Statement involving the election of the Directors, which will be filed with the SEC pursuant to Regulation 14A not later than 120 days after December 31, 2018, and such information is incorporated herein by reference. Certain other information relating to the Executive Officers of Honeywell appears in Part I of this Annual Report on Form 10-K under the heading Executive Officers of the Registrant.

The members of the Audit Committee of our Board of Directors are: George Paz (Chair), Kevin Burke, Jaime Chico Pardo (*ex officio* member), D. Scott Davis, Linnet Deily, Judd Gregg and Robin L. Washington. The Board has determined that Mr. Paz, Mr. Chico Pardo, Mr. Davis and Ms. Washington are audit committee financial experts as defined by applicable SEC rules and that Mr. Paz, Mr. Burke, Mr. Davis, Ms. Deily and Ms. Washington satisfy the accounting or related financial management expertise criteria established by the NYSE. All members of the Audit Committee are independent as that term is defined in applicable SEC rules and NYSE listing standards.

Honeywell's corporate governance policies and procedures, including the Code of Business Conduct, Corporate Governance Guidelines and Charters of the Committees of the Board of Directors are available, free of charge, on our website under the heading Investor Relations (see Corporate Governance), or by writing to Honeywell, 115 Tabor Road, Morris Plains, New Jersey 07950, c/o Vice President and Corporate Secretary. Honeywell's Code of Business Conduct applies to all Honeywell directors, officers (including the Chief Executive Officer, Chief Financial Officer and Controller) and employees. Amendments to or waivers of the Code of Business Conduct granted to any of Honeywell's directors or executive officers will be published on our website within five business days of such amendment or waiver.

Item 11. Executive Compensation

Information relating to executive compensation is contained in the Proxy Statement referred to above in Item 10. Directors and Executive Officers of the Registrant, and such information is incorporated herein by reference.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters

Information relating to security ownership of certain beneficial owners and management and related stockholder matters is contained in the Proxy Statement referred to above in Item 10. Directors and Executive Officers of the Registrant, and such information is incorporated herein by reference.

EQUITY COMPENSATION PLANS

As of December 31, 2018 information about our equity compensation plans is as follows:

Plan category	Number of Shares to be Issued Upon Exercise of Outstanding Options, Warrants and Rights	Weighted-Average Exercise Price of Outstanding Options, Warrants and Rights	Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans (Excluding Securities Reflected in Column (a))
	(a)	**(b)**	**(c)**
Equity compensation plans approved by security holders	26,746,020 (1)	$ 97.83 (2)	42,792,180 (3)
Equity compensation plans not approved by security holders	328,003 (4)	N/A (5)	N/A (6)
Total	27,074,023	$ 97.83	42,792,180

(1) Equity compensation plans approved by shareowners which are included in column (a) of the table are the 2016 Stock Incentive Plan, the 2011 Stock Incentive Plan, and the 2006 Stock Incentive Plan (including 22,222,860 shares of Common Stock to be issued for options; 3,617,539 RSUs subject to continued employment; and 631,082 deferred RSUs); and the 2016 Stock Plan for Non-Employee Directors and the 2006 Stock Plan for Non-Employee Directors (including 255,721 shares of Common Stock to be issued for options; and 18,818 RSUs subject to continued services). RSUs included in column (a) of the table represent the full number of RSUs awarded and outstanding whereas the number of shares of Common Stock to be issued upon vesting will be lower than what is reflected on the table because the value of shares required to meet employee tax withholding requirements are not issued.

1,110,753 growth plan units were issued and remain outstanding for the performance cycle commencing January 1, 2016 and ended December 31, 2017 pursuant to the 2011 Stock Incentive Plan. The value of this growth plan award will be paid in cash and, thus, growth plan units are not included in the table above.

Because the number of future shares that may be distributed to employees participating in the Honeywell Global Stock Plan is unknown, no shares attributable to that plan are included in column (a) of the table above.

(2) Column (b) relates to stock options and does not include any exercise price for RSUs because an RSU's value is dependent upon attainment of certain performance goals or continued employment or service and they are settled for shares of Common Stock on a one-for-one basis.

(3) The number of shares that may be issued under the 2016 Stock Incentive Plan as of December 31, 2018 is 40,270,690 which includes the following additional shares that may again be available for issuance: shares that are settled for cash, expire, are canceled, or under similar prior plans, are tendered as option exercise price or tax withholding obligations, are reacquired with cash option exercise price or with monies attributable to any tax deduction to Honeywell upon the exercise of an option, or are under any outstanding awards assumed under any equity compensation plan of an entity acquired by Honeywell. No securities are available for future issuance under the 2011 Stock Incentive Plan or the 2006 Stock Incentive Plan.

The number of shares that may be issued under the Honeywell Global Stock Plan as of December 31, 2018 is 1,807,681. This plan is an umbrella plan for three plans described below maintained solely for eligible employees of participating non-U.S. countries.

- The UK Sharebuilder Plan allows an eligible UK employee to invest taxable earnings in Common Stock. The Company matches those shares and dividends paid are used to purchase additional shares of Common Stock. For the year ending December 31, 2018, 42,697 shares were credited to participants' accounts under the UK Sharebuilder Plan.
- The Honeywell Aerospace Ireland Share Participation Plan, the Honeywell Measurex (Ireland) Limited Group Employee Profit Sharing Plan, and the Honeywell International Technologies Limited Employee Share Ownership Plan

allow eligible Irish employees to contribute a percentage of base pay and/or bonus that is invested in Common Stock. For the year ending December 31, 2018, 4,139 shares of Common Stock were credited to participants' accounts under these plans. The Honeywell International Technologies Limited Employee Share Ownership Plan was part of the spinoff of the Transportation Systems business that occurred on October 1, 2018 and is no longer sponsored by Honeywell.

The remaining 893,809 shares included in column (c) are shares remaining under the 2016 Stock Plan for Non-Employee Directors.

Equity compensation plans not approved by shareowners included in the table refers to the Honeywell Excess Benefit Plan and Supplemental Savings Plan.

(4) The Honeywell Excess Benefit Plan and Supplemental Savings Plan for highly compensated employees is an unfunded, non-tax qualified plan that provides benefits equal to the employee deferrals and company matching allocations that would have been provided under Honeywell's U.S. tax-qualified savings plan if the Internal Revenue Code limitations on compensation and

contributions did not apply. The Company matching contribution is credited to participants' accounts in the form of notional shares of Common Stock. The notional shares are distributed in the form of actual shares of Common Stock. The number of shares to be issued under this plan based on the value of the notional shares as of December 31, 2018 is 328,003.

(5) Column (b) does not include any exercise price for notional shares allocated to employees under Honeywell's equity compensation plans not approved by shareowners because all of these shares are only settled for shares of Common Stock on a one-for-one basis.

(6) The amount of securities available for future issuance under the Honeywell Excess Benefit Plan and Supplemental Savings Plan is not determinable because the number of securities that may be issued under this plan depends upon the amount deferred to the plan by participants in future years.

Item 13. Certain Relationships and Related Transactions

Information relating to certain relationships and related transactions is contained in the Proxy Statement referred to above in Item 10. Directors and Executive Officers of the Registrant, and such information is incorporated herein by reference.

Item 14. Principal Accounting Fees and Services

Information relating to fees paid to and services performed by Deloitte & Touche LLP and our Audit Committee's pre-approval policies and procedures with respect to non-audit services are contained in the Proxy Statement referred to above in Item 10. Directors and Executive Officers of the Registrant, and such information is incorporated herein by reference.

PART IV.

Item 15. Exhibits and Financial Statement Schedules

	Page Number in Form 10-K
(a)(1.) Consolidated Financial Statements:	
Consolidated Statement of Operations for the years ended December 31, 2018, 2017 and 2016	36
Consolidated Statement of Comprehensive Income for the years ended December 31, 2018, 2017 and 2016	37
Consolidated Balance Sheet at December 31, 2018 and 2017	38
Consolidated Statement of Cash Flows for the years ended December 2018, 2017 and 2016	39
Consolidated Statement of Shareowners' Equity for the years ended December 31, 2018, 2017 and 2016	40
Notes to Consolidated Financial Statements	41
Report of Independent Registered Public Accounting Firm	94

	Page Number in Form 10-K
(a)(2.) Exhibits	
See the Exhibit Index of this Annual Report on Form 10-K	102

Item 16. Form 10-K Summary

None.

EXHIBIT INDEX

Exhibit No.	Description
3(i)	Amended and Restated Certificate of Incorporation of Honeywell International Inc., as amended April 23, 2018 (incorporated by reference to Exhibit 3(i) to Honeywell's Form 10-Q for the quarter ended June 30, 2018)
3(ii)	By-laws of Honeywell International Inc., as amended April 23, 2018 (incorporated by reference to Exhibit 3(ii) to Honeywell's 10-Q for the quarter ended June 30, 2018)
4	Honeywell International Inc. is a party to several long-term debt instruments under which, in each case, the total amount of securities authorized does not exceed 10% of the total assets of Honeywell and its subsidiaries on a consolidated basis. Pursuant to paragraph 4(iii)(A) of Item 601(b) of Regulation S-K, Honeywell agrees to furnish a copy of such instruments to the Securities and Exchange Commission upon request.
10.1*	Deferred Compensation Plan for Non-Employee Directors of Honeywell International Inc., as amended and restated (incorporated by reference to Exhibit 10.2 to Honeywell's Form 10-Q for

	quarter ended June 30, 2003)
10.2*	Amendment to Deferred Compensation Plan for Non-Employee Directors of Honeywell International Inc., as amended and restated (incorporated by reference to Exhibit 10.1 to Honeywell's Form 8-K filed December 21, 2004)
10.3*	Amendment to Deferred Compensation Plan for Non-Employee Directors of Honeywell International Inc., as amended and restated (incorporated by reference to Exhibit 10.2 to Honeywell's Form 10-K for the year ended December 31, 2005)
10.4*	Honeywell International Inc. Incentive Compensation Plan for Executive Employees, as amended and restated (filed herewith)
10.5*	Honeywell Excess Benefit Plan and Honeywell Supplemental Savings Plan, as amended and restated (incorporated by reference to Exhibit 10.2 to Honeywell's Form 10-Q for the quarter ended March 31, 2018)
10.6*	Honeywell International Inc. Severance Plan for Designated Officers, as amended and restated (incorporated by reference to Exhibit 10.6 to Honeywell's Form 10-K for the year ended December 31, 2013)
10.7*	Honeywell Deferred Incentive Compensation Plan, as amended and restated (incorporated by reference to Exhibit 10.3 to Honeywell's Form 10-Q

	for the quarter ended March 31, 2018)
10.8*	Honeywell International Inc. Supplemental Pension Plan, as amended and restated (incorporated by reference to Exhibit 10.10 to Honeywell's Form 10-K for the year ended December 31, 2008)
10.9*	Amendment to Honeywell International Inc. Supplemental Pension Plan, as amended and restated (incorporated by reference to Exhibit 10.10 to Honeywell's Form 10-K for the year ended December 31, 2009)
10.10*	Amendment to Honeywell International Inc. Supplemental Pension Plan, as amended and restated (incorporated by reference to Exhibit 10.7 to Honeywell's Form 10-K for the year ended December 31, 2015)
10.11*	Honeywell International Inc. Supplemental Executive Retirement Plan for Executives in Career Band 6 and Above, as amended and restated (incorporated by reference to Exhibit 10.12 to Honeywell's Form 10-K for the year ended December 31, 2008)
10.12*	Amendment to Honeywell International Inc. Supplemental Executive Retirement Plan for Executives in Career Band 6 and Above, as amended and restated (incorporated by reference to Exhibit 10.12 to Honeywell's Form 10-K for the year ended December 31, 2009)

Exhibit No.	Description
10.13*	Amendment to Honeywell International Inc. Supplemental Executive Retirement Plan for Executives in Career Band 6 and Above, as amended and restated (incorporated by reference to Exhibit 10.9 to Honeywell's Form 10-K for the year ended December 31, 2013)
10.14*	Amendment to Honeywell International Inc. Supplemental Executive Retirement Plan for Executives in Career Band 6 and Above, as amended and restated (incorporated by reference to Exhibit 10.8 to Honeywell's Form 10-K for the year ended December 31, 2015)
10.15*	Honeywell Supplemental Defined Benefit Retirement Plan, as amended and restated (incorporated by reference to Exhibit 10.13 to Honeywell's Form 10-K for the year ended December 31, 2008)
10.16*	Amendment to Honeywell Supplemental Defined Benefit Retirement Plan, as amended and restated (incorporated by reference to Exhibit 10.13 to Honeywell's Form 10-K for the year ended December 31, 2009)
10.17*	Amendment to Honeywell Supplemental Defined Benefit Retirement Plan, as amended and restated (incorporated by reference

	to Exhibit 10.9 to Honeywell's Form 10-K for the year ended December 31, 2015)
10.18*	Honeywell International Inc. Severance Plan for Corporate Staff Employees (Involuntary Termination Following a Change in Control), as amended and restated (incorporated by reference to Exhibit 10.12 to Honeywell's Form 10-K for the year ended December 31, 2013)
10.19*	Employment Agreement dated as of February 18, 2002 between Honeywell and David M. Cote (incorporated by reference to Exhibit 10.24 to Honeywell's Form 8-K filed March 4, 2002)
10.20*	Amendment to Employment Agreement dated as of February 18, 2002 between Honeywell and David M. Cote (incorporated by reference to Exhibit 10.3 to Honeywell's Form 10-Q for the quarter ended September 30, 2008)
10.21*	Amendment to Employment Agreement dated as of February 18, 2002 between Honeywell and David M. Cote (incorporated by reference to Exhibit 10.17 to Honeywell's Form 10-K for the year ended December 31, 2008)
10.22*	Amendment to Employment Agreement dated as of February 18, 2002 between Honeywell and David M. Cote (incorporated by reference to Exhibit 10.1 to Honeywell's Form 10-Q for the quarter ended March 31, 2013)

10.23*	Deferred Compensation Agreement dated August 4, 2006 between Honeywell and David M. Cote (incorporated by reference to Exhibit 10.22 to Honeywell's Form 10-K for the year ended December 31, 2006)
10.24*	Amendment to Deferred Compensation Agreement dated August 4, 2006 between Honeywell and David M. Cote (incorporated by reference to Exhibit 10.22 to Honeywell's Form 10-K for the year ended December 31, 2009)
10.25*	Honeywell Supplemental Retirement Plan (incorporated by reference to Exhibit 10.24 to Honeywell's Form 10-K for the year ended December 31, 2006)
10.26*	2006 Stock Incentive Plan of Honeywell International Inc. and Its Affiliates, as amended and restated (incorporated by reference to Exhibit 10.26 to Honeywell's Form 10-K for the year ended December 31, 2008)
10.27*	Amendment to the 2006 Stock Incentive Plan of Honeywell International Inc. and Its Affiliates, as amended and restated (incorporated by reference to Exhibit 10.1 to Honeywell's 10-Q for the quarter ended March 31, 2011)

Exhibit No.	Description
10.28*	2006 Stock Incentive Plan of Honeywell International Inc. and Its Affiliates—Form of Option Award Agreement (incorporated by reference to Exhibit 10.2 to Honeywell's Form 10-Q for the quarter ended March 31, 2009)
10.29*	2006 Stock Plan for Non-Employee Directors of Honeywell International Inc., as amended and restated (incorporated by reference to Exhibit 10.31 to Honeywell's Form 10-K for the year ended December 31, 2008)
10.30*	Amendment to 2006 Stock Plan for Non-Employee Directors of Honeywell International Inc., as amended and restated (incorporated by reference to Exhibit 10.27 to Honeywell's Form 10-K for the year ended December 31, 2011)
10.31*	Amendment to 2006 Stock Plan for Non-Employee Directors of Honeywell International Inc., as amended and restated (incorporated by reference to Exhibit 10.24 to Honeywell's Form 10-K for the year ended December 31, 2014)
10.32*	2006 Stock Plan for Non-Employee Directors of Honeywell International Inc.—Form of Option Agreement (incorporated by reference to Exhibit 10.3 to Honeywell's Form

	10-Q for the quarter ended March 31, 2012)
10.33*	2006 Stock Plan for Non-Employee Directors of Honeywell International Inc.—Form of Restricted Unit Agreement (incorporated by reference to Exhibit 10.4 to Honeywell's Form 10-Q for the quarter ended March 31, 2012)
10.34*	2007 Honeywell Global Employee Stock Plan (incorporated by reference to Honeywell's Proxy Statement, dated March 12, 2007, filed pursuant to Rule 14a-6 of the Securities Exchange Act of 1934)
10.35*	2006 Stock Incentive Plan of Honeywell International Inc. and Its Affiliates—Form of Option Award Agreement, Form 2 (incorporated by reference to Exhibit 10.37 to Honeywell's Form 10-K for the year ended December 31, 2010)
10.36*	Letter Agreement dated September 3, 2009 between Honeywell and Timothy Mahoney (incorporated by reference to Exhibit 10.38 to Honeywell's Form 10-K for the year ended December 31, 2010)
10.37*	Form of Honeywell International Inc. Noncompete Agreement for Senior Executives (incorporated by reference to Exhibit 10.39 to Honeywell's Form 10-K for the year ended December 31, 2010)
10.38*	2011 Stock Incentive Plan of Honeywell International Inc. and its Affiliates

	(incorporated by reference to Honeywell's Proxy Statement, dated March 10, 2011, filed pursuant to Rule 14a-6 of the Securities Exchange Act of 1934)
10.39*	Amendment to 2011 Stock Incentive Plan of Honeywell International Inc. and its Affiliates (incorporated by reference to Exhibit 10.36 to Honeywell's Form 10-K for the year ended December 31, 2012)
10.40*	Amendment to 2011 Stock Incentive Plan of Honeywell International Inc. and its Affiliates (incorporated by reference to Exhibit 10.1 to Honeywell's Form 10-Q for the quarter ended March 31, 2014)
10.41*	2011 Stock Incentive Plan of Honeywell International Inc. and its Affiliates—Form of Restricted Unit Agreement (incorporated by reference to Exhibit 10.2 to Honeywell's Form 10-Q for the quarter ended March 31, 2014)
10.42*	2011 Stock Incentive Plan of Honeywell International Inc. and its Affiliates—Form of Restricted Unit Agreement, Form 2 (incorporated by reference to Exhibit 10.3 to Honeywell's Form 10-Q for the quarter ended March 31, 2014)
10.43*	2011 Stock Incentive Plan of Honeywell International Inc. and Its Affiliates—Form of Stock Option Award Agreement (incorporated by reference to Exhibit 10.4 to Honeywell's Form 10-Q for

the quarter ended March 31, 2014)

Exhibit No.	Description
10.44*	2011 Stock Incentive Plan of Honeywell International Inc. and Its Affiliates—Form of Stock Option Award Agreement, Form 2 (incorporated by reference to Exhibit 10.39 to Honeywell's Form 10-K for the year ended December 31, 2014)
10.45*	2011 Stock Incentive Plan of Honeywell International Inc. and Its Affiliates—Form of Growth Plan Agreement (incorporated by reference to Exhibit 10.5 to Honeywell's Form 10-Q for the quarter ended March 31, 2014)
10.46*	2016 Stock Incentive Plan of Honeywell International Inc. and its Affiliates–Form of Performance Plan Grant Agreement (incorporated by reference to Exhibit 10.2 to Honeywell's Form 10-Q for the quarter ended March 31, 2017)
10.47*	Letter Agreement dated August 4, 2011 between Honeywell International Inc. and David M. Cote (incorporated by reference to Exhibit 10.1 to Honeywell's Form 10-Q for the quarter ended September 30, 2011)
10.48*	Letter Agreement dated April 7, 2014 between Honeywell International Inc. and Thomas A. Szlosek (incorporated by reference to Exhibit 10.10 to Honeywell's Form 10-Q

	for the quarter ended March 31, 2014)
10.49*	CEO Retention Agreement, as approved by the Board of Directors of Honeywell International Inc. on October 31, 2014 and agreed to by David M. Cote on December 11, 2014 (incorporated by reference to Exhibit 99.2 to Honeywell's Form 8-K filed December 12, 2014)
10.50*	Chief Executive Officer Business Continuity Agreement as approved by the Board of Directors of Honeywell International Inc. on June 28, 2016 (incorporated by reference to Exhibit 99.1 to Honeywell's Form 8-K filed June 28, 2016)
10.51*	Amendment to Chief Executive Officer Business Continuity Agreement as approved by the Board of Directors of Honeywell International Inc. on June 28, 2016 (incorporated by reference to Exhibit 10.1 to Honeywell's Form 10-Q for the quarter ended March 31, 2017)
10.52*	Letter Agreement dated February 24, 2012 between Honeywell and Darius Adamczyk (incorporated by reference to Exhibit 10.1 to Honeywell's Form 10-Q for the quarter ended March 31, 2016)
10.53*	Offer letter dated March 31, 2016 from Honeywell International Inc. to Darius Adamczyk (incorporated by reference to Exhibit 99.1 to Honeywell's Form 8-K filed April 6, 2016)

10.54*	Employment Offer Letter dated March 1, 2017 between Honeywell and Darius Adamczyk (incorporated by reference to Exhibit 99.1 to Honeywell's Form 8-K filed March 6, 2017)
10.55*	Offer letter dated March 11, 2013 from Honeywell International Inc. to Krishna Mikkilineni (incorporated by reference to Exhibit 10.43 to Honeywell's Form 10-K for the year ended December 31, 2016)
10.56*	2016 Stock Incentive Plan of Honeywell International Inc. and its Affiliates (incorporated by reference to Honeywell's Proxy Statement, dated March 10, 2016, filed pursuant to Rule 14a-6 of the Securities Exchange Act of 1934)
10.57*	2016 Stock Incentive Plan of Honeywell International Inc. and its Affiliates—Form of Restricted Unit Agreement (incorporated by reference to Exhibit 10.1 to Honeywell's Form 10-Q for the quarter ended June 30, 2016)
10.58*	2016 Stock Incentive Plan of Honeywell International Inc. and its Affiliates—Form of Restricted Unit Agreement, Form 2 (incorporated by reference to Exhibit 10.2 to Honeywell's Form 10-Q for the quarter ended June 30, 2016)

Exhibit No.	Description
10.59*	2016 Stock Incentive Plan of Honeywell International Inc. and its Affiliates—Form of Stock Option Award Agreement (incorporated by reference to Exhibit 10.3 to Honeywell's Form 10-Q for the quarter ended June 30, 2016)
10.60*	2016 Stock Plan for Non-Employee Directors (incorporated by reference to Honeywell's Proxy Statement, dated March 10, 2016, filed pursuant to Rule 14a-6 of the Securities Exchange Act of 1934)
10.61*	2016 Stock Plan for Non-Employee Directors of Honeywell International Inc.—Form of Stock Option Award Agreement (incorporated by reference to Exhibit 10.74 to Honeywell's Form 10-K for the year ended December 31, 2017)
10.62*	2016 Stock Plan for Non-Employee Directors of Honeywell International Inc.—Form of Restricted Unit Agreement (incorporated by reference to Exhibit 10.6 to Honeywell's Form 10-Q for the quarter ended June 30, 2016)
10.63*	UOP LLC Supplemental Pension Plan, as amended and restated (incorporated by reference to Exhibit 10.76 to Honeywell's 10-K

	for the year ended December 31, 2017)
10.64*	Letter Agreement dated April 1, 2016 between Honeywell and Rajeev Gautam (incorporated by reference to Exhibit 10.1 to Honeywell's Form 10-Q for the quarter ended March 31, 2018)
10.65*	Letter Agreement dated July 27, 2018 between Honeywell and Greg Lewis (incorporated by reference to Exhibit 99.1 to Honeywell's Form 8-K filed August 2, 2018)
10.66*	Retirement Agreement dated August 3, 2018 between Honeywell and Thomas A. Szlosek (incorporated by reference to Exhibit 99.2 to Honeywell's Form 8-K filed August 2, 2018)
10.67	364-Day Credit Agreement, dated as of February 16, 2018, among Honeywell International Inc., the banks, financial institutions and other institutional lenders parties thereto, JPMorgan Chase Bank, N.A., as administrative agent, Goldman Sachs Bank USA, as syndication agent, Bank of America, N.A., Barclays Bank PLC, Citibank, N.A., Deutsche Bank AG New York Branch, as documentation agents, and JPMorgan Chase Bank, N.A. and Goldman Sachs Bank USA, as joint lead arrangers and co-book managers (incorporated by reference to Exhibit 10.1 to Honeywell's Form 8-K filed February 20, 2018)

10.68	364-Day Credit Agreement, dated as of April 27, 2018, among Honeywell International Inc., the banks, financial institutions and other institutional lenders parties thereto, Citibank, N.A., as administrative agent, JPMorgan Chase Bank, N.A., as syndication agent, Bank of America, N.A., Barclays Bank PLC, Deutsche Bank Securities Inc., Goldman Sachs Bank USA, Morgan Stanley MUFG Loan Partners, LLC and Wells Fargo Bank, National Association, as documentation agents, and Citibank, N.A. and JPMorgan Chase Bank, N.A., as joint lead arrangers and co-book managers (incorporated by reference to Exhibit 10.1 to Honeywell's Form 8-K filed April 27, 2018)

Exhibit No.	Description
10.69	Amended and Restated Five-Year Credit Agreement, dated as of April 27, 2018, among Honeywell International Inc., the banks, financial institutions and other institutional lenders parties thereto, Citibank, N.A., as administrative agent, Citibank Europe PLC, UK Branch, as swing line agent, JPMorgan Chase Bank, N.A., as syndication agent, Bank of America, N.A., Barclays Bank PLC, Deutsche Bank Securities Inc., Goldman Sachs Bank USA, Morgan Stanley MUFG Loan Partners, LLC and Wells Fargo Bank, National Association, as documentation agents, and Citibank, N.A. and J.P. Morgan Chase Bank N.A., as joint lead arrangers and co-bookrunners (incorporated by reference to Exhibit 10.2 to Honeywell's Form 8-K filed April 27, 2018)
10.70	Indemnification and Reimbursement Agreement, dated September 12, 2018, by and among Honeywell ASASCO Inc., Honeywell ASASCO 2 Inc., and Honeywell International Inc. (incorporated by reference to Exhibit 2.1 to Honeywell's Form 8-K filed September 14, 2018)

10.71	Indemnification and Reimbursement Agreement dated October 14, 2018 by and among New HAPI Inc. and Honeywell International Inc. (incorporated by reference to Exhibit 2.1 to Honeywell's Form 8-K filed October 15, 2018)
10.72*	Retirement Agreement dated February 7, 2019 between Honeywell and Krishna Mikkilineni (filed herewith)
21	Subsidiaries of the Registrant (filed herewith)
23.1	Consent of Deloitte & Touche LLP (filed herewith)
24	Powers of Attorney (filed herewith)
31.1	Certification of Principal Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 (filed herewith)
31.2	Certification of Principal Financial Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 (filed herewith)
32.1	Certification of Principal Executive Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (filed herewith)
32.2	Certification of Principal Financial Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (filed herewith)
101.INS	XBRL Instance Document (filed herewith)

101.SCH	XBRL Taxonomy Extension Schema (filed herewith)
101.CAL	XBRL Taxonomy Extension Calculation Linkbase (filed herewith)
101.DEF	XBRL Taxonomy Extension Definition Linkbase (filed herewith)
101.LAB	XBRL Taxonomy Extension Label Linkbase (filed herewith)
101.PRE	XBRL Taxonomy Extension Presentation Linkbase (filed herewith)

The Exhibits identified above with an asterisk (*) are management contracts or compensatory plans or arrangements.

** Certain schedules and similar attachments have been omitted pursuant to Item 601(b)(2) of Regulation S-K. The registrant hereby undertakes to furnish copies of any of the omitted schedules and similar attachments upon request by the U.S. Securities and Exchange Commission.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

HONEYWELL INTERNATIONAL INC.

Date: February 8, 2019	By: /s/ John J. Tus
	John J. Tus Vice President and Controller (on behalf of the Registrant and as the Registrant's Principal Accounting Officer)

Pursuant to the requirements of the Securities Exchange Act of 1934, this annual report has been signed below by the following persons on behalf of the Registrant and in the capacities and on the date indicated:

Name	Name
*	*
Darius Adamczyk Chairman and Chief Executive Officer (Principal Executive Officer)	Linnet F. Deily Director
*	*

Duncan B. Angove
Director

Judd Gregg
Director

*

*

William S. Ayer
Director

Clive Hollick
Director

*

*

Kevin Burke
Director

Grace D. Lieblein
Director

*

*

Jaime Chico Pardo
Director

George Paz
Director

*

*

D. Scott Davis
Director

Robin L. Washington
Director

/s/ Gregory P. Lewis

/s/ John J. Tus

Gregory P. Lewis Senior Vice President and Chief Financial Officer (Principal Financial Officer)	John J. Tus Vice President and Controller (Principal Accounting Officer)

*By: /s/ Gregory P. Lewis

(Gregory P. Lewis
Attorney-in-fact)

February 8, 2019

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UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

Form 10-K

x ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d)
OF THE SECURITIES EXCHANGE ACT OF 1934
For the fiscal year ended December 31, 2017
OR
o TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d)
OF THE SECURITIES EXCHANGE ACT OF 1934
For the transition period from to
Commission file number 1-8974

Honeywell International Inc.

(Exact name of registrant as specified in its charter)

Delaware	22-2640650
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
115 Tabor Road Morris Plains, New Jersey	07950
(Address of principal executive offices)	(Zip Code)

Registrant’s telephone number, including area code (973) 455-2000

Securities registered pursuant to Section 12(b) of the Act:

Title of Each Class	Name of Each Exchange on Which Registered
Common Stock, par value $1 per share*	New York Stock Exchange
Floating Rate Senior Notes due 2018	New York Stock Exchange
0.650% Senior Notes due 2020	New York Stock Exchange
1.300% Senior Notes due 2023	New York Stock Exchange
2.250% Senior Notes due 2028	New York Stock Exchange

* The common stock is also listed on the London Stock Exchange.

Securities registered pursuant to Section 12(g) of the Act: None

Indicate by check mark if the Registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes x No o

Indicate by check mark if the Registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Exchange Act. Yes o No x

Indicate by check mark whether the Registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the Registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes x No o

Indicate by check mark whether the Registrant has submitted electronically and posted on its corporate Website, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes x No o

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of Registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. x

Indicate by check mark whether the Registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See definition of "accelerated filer," "large accelerated filer," and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check One):

Large accelerated filer x Accelerated filer o Non-accelerated filer o Smaller reporting company o

Emerging growth company o

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards pursuant to section 13(a) of the Exchange Act. o

Indicate by check mark whether the Registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes o No x

The aggregate market value of the voting stock held by nonaffiliates of the Registrant was approximately $101.4 billion at June 30, 2017.

There were 752,002,033 shares of Common Stock outstanding at January 26, 2018.

Documents Incorporated by Reference

Part III: Proxy Statement for Annual Meeting of Shareowners to be held April 23, 2018.

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PART I.

Item 1. Business

Honeywell International Inc. ("Honeywell" or "the Company") invents and commercializes technologies that address some of the world's most critical challenges around energy, safety, security, productivity and global urbanization. As a diversified technology and manufacturing company, we are uniquely positioned to blend physical products with software to serve customers worldwide with aerospace products and services, turbochargers, energy efficient products and solutions for homes, businesses and transportation, specialty chemicals, electronic and advanced materials, process technology for refining and petrochemicals, and productivity, sensing, safety and security technologies for buildings, homes and industries. Our products and solutions enable a safer, more comfortable and more productive world, enhancing the quality of life of people around the globe. Honeywell was incorporated in Delaware in 1985.

Our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and any amendments to those reports, are available free of charge on our website (www.honeywell.com) under the heading Investor Relations (see SEC Filings and Reports) immediately after they are filed with, or furnished to, the Securities and Exchange Commission (SEC). In addition, in this Annual Report on Form 10-K, the Company incorporates by reference certain information from parts of its Proxy Statement for the 2018 Annual Meeting of Stockholders, which we expect to file with the SEC on or about March 8, 2018, and which will also be available free of charge on our website.

Major Businesses

We globally manage our business operations through four segments: Aerospace, Home and Building Technologies, Performance Materials and Technologies, and Safety and Productivity Solutions. Financial information related to our segments is included in Note 21 Segment Financial Data of Notes to Consolidated Financial Statements. Effective October 2017, the Company realigned the Smart Energy business, previously part of the Home and Building Technologies segment, into the Process Solutions business within the Performance Materials and Technologies segment. The business descriptions below reflect that realignment.

The major products/services, customers/uses and key competitors of each of our segments are:

Aerospace

Aerospace is a leading global supplier of products, software and services for aircraft and vehicles that it sells to original equipment manufacturers (OEM) and other customers in a variety of end markets: air transport, regional, business and general aviation aircraft, airlines, aircraft operators, defense and space contractors and automotive and truck manufacturers. Aerospace is a leading provider of aircraft engines, integrated avionics, systems and service solutions, and related products and services for aircraft manufacturers, and turbochargers to improve the performance and efficiency of passenger cars and commercial vehicles. Aerospace also provides spare parts, repair, overhaul and maintenance services (principally to aircraft operators) for the aftermarket. Aerospace products and services include auxiliary power units, propulsion engines, environmental control systems, wireless connectivity services, electric power systems, engine controls, flight safety, communications, navigation hardware and software, radar and surveillance systems, aircraft lighting, management and technical services, advanced systems and instruments, satellite and space components, aircraft wheels and brakes, repair and overhaul services, turbochargers and thermal systems.

Home and Building Technologies

Home and Building Technologies is a leading global provider of products, software, solutions and technologies that help owners of homes stay connected and in control of their comfort, security and energy use; and enable commercial building owners and occupants to ensure their facilities are safe, energy efficient, sustainable and productive. Home and Building Technologies products and services include controls and displays for heating, cooling, indoor air quality, ventilation, humidification, combustion, lighting and home automation; advanced software applications for home/building control and optimization; sensors, switches, control systems and instruments for measuring pressure, air flow, temperature and electrical current; products, services and solutions for measurement, regulation, control and metering of gases and electricity; metering and communications systems for water utilities and industries; access control; video surveillance; fire products; remote patient monitoring systems; and installation, maintenance and upgrades of systems that keep buildings safe, comfortable and productive.

Performance Materials and Technologies

Performance Materials and Technologies is a global leader in developing and manufacturing advanced materials, process technologies and automation solutions. UOP provides process technology, products, including catalysts and adsorbents, equipment and consulting services that enable customers to efficiently produce gasoline, diesel, jet fuel, petrochemicals and renewable fuels for the petroleum refining, gas processing, petrochemical, and other industries. Process Solutions is a pioneer in automation control, instrumentation, advanced software and related services for the oil and gas, refining, pulp and paper, industrial power generation, chemicals and petrochemicals, biofuels, life sciences, and metals, minerals and mining industries. Through its metering business, Process Solutions also enables utilities and distribution companies to deploy advanced capabilities that transform operations, improve reliability and environmental sustainability, and better serve customers. Advanced Materials manufactures a wide variety of high-performance products, including fluorocarbons, hydrofluoroolefins, specialty films, waxes, additives, advanced fibers, customized research chemicals and intermediates, and electronic materials and chemicals.

Safety and Productivity Solutions

Safety and Productivity Solutions is a leading global provider of products, software and connected solutions to customers around the globe that improve productivity, workplace safety and asset performance. Safety products include personal protection equipment and footwear designed for work, play and outdoor activities. Productivity Solutions products and services include gas detection technology; mobile devices and software for computing, data collection and thermal printing; supply chain and warehouse automation equipment, software and solutions; custom-engineered sensors, switches and controls for sensing and productivity solutions; and software-based data and asset management productivity solutions.

Competition

We are subject to competition in substantially all product and service areas. Some of our key competitors are:

- Aerospace: Borg-Warner (automotive), Garmin, General Electric, Rockwell Collins, Thales and United Technologies

- Home and Building Technologies: Emerson Electric, Itron, Johnson Controls, Schneider and Siemens

- Performance Materials and Technologies: Albemarle, BASF, Dow, Dupont, Emerson and Sinopec

- Safety and Productivity Solutions: 3M, Mine Safety Appliances (MSA), Kion Group, TE Connectivity and Zebra Technologies

Our businesses compete on a variety of factors such as price, quality, reliability, delivery, customer service, performance, applied technology, product innovation and product recognition. Brand identity, service to customers and quality are important competitive factors for our products and services, and there is considerable price competition. Other competitive factors include breadth of product line, research and development efforts and technical and managerial capability. While our competitive position varies among our products and services, we believe we are a significant competitor in each of our major product and service classes. Many of our competitors have substantial financial resources and significant technological capabilities. In addition, some of our products compete with the captive component divisions of OEMs.

Aerospace Sales

Our Aerospace segment sales were 36%, 38% and 39% of our total sales in 2017, 2016 and 2015. Our sales to commercial aerospace OEMs were 6%, 6% and 8% of our total sales in 2017, 2016 and 2015. In addition, our sales to commercial aftermarket customers of aerospace products and services were 13%, 12% and 12% of our total sales in 2017, 2016 and 2015.

U.S. Government Sales

Sales to the U.S. Government (principally by Aerospace), acting through its various departments and agencies and through prime contractors, amounted to $3,203 million, $3,330 million and $3,743 million in 2017, 2016 and 2015, which included sales to the U.S. Department of Defense, as a prime contractor and subcontractor, of $2,546 million, $2,647 million and $2,680 million in 2017, 2016 and 2015. U.S. defense spending decreased in 2017 compared to 2016. We do not expect our overall operating results to be significantly affected by any proposed changes in 2018 federal defense spending due principally to the varied mix of the government programs which impact us (OEMs' production, engineering development programs, aftermarket spares and repairs and overhaul programs), as well as our diversified commercial businesses.

Backlog

Our total backlog at December 31, 2017 and 2016 was $17,690 million and $17,277 million. We anticipate that approximately $12,337 million of the 2017 backlog will be filled in 2018. We believe that backlog is not necessarily a reliable indicator of our future sales because a substantial portion of the orders constituting this backlog may be canceled at the customer's option. The 2016 backlog previously disclosed has been revised to apply the methodology used for the 2017 backlog and excludes certain previously included amounts that do not meet the criteria for inclusion.

International Operations

We are engaged in manufacturing, sales, service and research and development (R&D) globally. U.S. exports and non-U.S. manufactured products are significant to our operations. U.S. exports comprised 12% of our total sales in 2017, 13% in 2016 and 14% in 2015. Non-U.S. manufactured products and services, mainly in Europe and Asia, were 44% of our total sales in 2017, 43% in 2016 and 39% in 2015.

Manufactured Products and Systems and Performance of Services	**Year Ended December 31, 2017**			
	Aerospace	**Home and Building Technologies**	**Performance Materials and Technologies**	**Safety and Productivity Solutions**
	(% of Segment Sales)			

U.S. Exports	21 %	1 %	15 %	4 %
Non-U.S.	34 %	50 %	54 %	41 %

Information related to risks attendant to our foreign operations is included in Item 1A. Risk Factors under the caption "Macroeconomic and Industry Risks."

Raw Materials

The principal raw materials used in our operations are generally readily available. Although we occasionally experience disruption in raw materials supply, we experienced no significant problems in the purchase of key raw materials or commodities in 2017. We are not dependent on any one supplier for a material amount of our raw materials.

The costs of certain key raw materials, including R240, fluorspar, copper, ethylene and perchloroethylene in Performance Materials and Technologies and nickel, steel, titanium and other metals in Aerospace, are expected to continue to fluctuate. We will continue to attempt to offset raw material cost increases with formula or long-term supply agreements, price increases and hedging activities where feasible. We do not presently anticipate that a shortage of raw materials will cause any material adverse impacts during 2018.

Patents, Trademarks, Licenses and Distribution Rights

Our segments are not dependent upon any single patent or related group of patents, or any licenses or distribution rights. In our judgment, our intellectual property rights are adequate for the conduct of our business. We believe that, in the aggregate, the rights under our patents, trademarks and licenses are generally important to our operations, but we do not consider any individual patent, trademark or any licensing or distribution rights related to a specific process or product to be of material importance in relation to our total business.

Research and Development

The Company’s principal research and development activities are in the U.S., India, Europe, and China. Research and development expense totaled $1,835 million, $1,864 million and $1,856 million in 2017, 2016 and 2015. R&D expense was 5% of sales in each of 2017, 2016 and 2015. Customer-sponsored (principally by the U.S. Government) R&D activities amounted to an additional $876 million, $967 million and $998 million in 2017, 2016 and 2015.

Environment

We are subject to various federal, state, local and foreign government requirements regarding protection of human health and the environment. We believe that, as a general matter, our policies, practices and procedures are properly designed to prevent unreasonable risk of environmental damage, and of resulting financial liability, in connection with our business. Some risk of environmental damage is, however, inherent in some of our operations and products, as it is with other companies engaged in similar businesses.

We are and have been engaged in the handling, manufacturing, use and disposal of many substances classified as hazardous by one or more regulatory agencies. We believe that, as a general matter, our policies, practices and procedures are properly designed to prevent unreasonable risk of environmental damage and personal injury, and that our handling, manufacture, use and disposal of these substances are in accord with environmental and safety laws and regulations. It is also possible that future knowledge or other developments, such as improved capability to detect substances in the environment or increasingly strict environmental laws and standards and enforcement policies, could bring into question our current or past handling, manufacture, use or disposal of these substances.

Among other environmental requirements, we are subject to the federal Superfund and similar state and foreign laws and regulations, under which we have been designated as a potentially responsible party that may be liable for cleanup costs associated with current and former operating sites and various hazardous waste sites, some of which are on the U.S. Environmental Protection Agency’s National Priority List. Although there is a possibility that a responsible party might have to bear more than its proportional share of the cleanup costs if it is unable to obtain appropriate contribution from other responsible parties, we do not anticipate having to bear significantly more than our proportional share in multi-party situations taken as a whole.

We do not believe that existing or pending climate change legislation, regulation, or international treaties or accords are reasonably likely to have a material effect in the foreseeable future on the Company’s business or markets that it serves, nor on its results of operations, capital expenditures, earnings, competitive position or financial standing. We will continue to monitor emerging developments in this area.

Employees

We have approximately 131,000 employees at December 31, 2017, of whom approximately 46,000 are located in the United States.

Executive Officers of the Registrant

The executive officers of Honeywell, listed as follows, are elected annually by the Board of Directors. There are no family relationships among them.

Name, Age, Date First Elected an Executive Officer	**Business Experience**
Darius Adamczyk, 52 2017(a)	President and Chief Executive Officer since April 2017. Chief Operating Officer since from April 2016 to March 2017. President and Chief Executive Officer Performance Materials and Technologies from April 2014 to April 2016. President of Honeywell Process Solutions from April 2012 to April 2014. President of Honeywell Scanning & Mobility from July 2008 to April 2012.
Rajeev Gautam, 65 2016	President and Chief Executive Officer Performance Materials and Technologies since April 2016. President of Honeywell UOP from January 2009 to April 2016.
Mark R. James, 56 2007	Senior Vice President Human Resources, Procurement and Communications since November 2007.
Anne T. Madden, 53 2017	Senior Vice President and General Counsel since October 2017. Vice President of Corporate Development and Global M&A from January 2002 to October 2017.
Timothy O. Mahoney, 61 2009	President and Chief Executive Officer Aerospace since September 2009.
Gary S. Michel, 55 2017	President and Chief Executive Officer Home and Building Technologies since October 2017.
Krishna Mikkilineni, 58 2010	Senior Vice President Engineering, Operations and Information Technology since April 2013. Senior Vice President Engineering and Operations from April 2010 to April 2013 and President Honeywell Technology Solutions from January 2009 to April 2013.
Thomas A. Szlosek, 54 2014	Senior Vice President and Chief Financial Officer since April 2014. Vice President of Corporate Finance from April 2013 to April 2014. Chief Financial Officer of Automation and Control Solutions from February 2007 to April 2013.
John F. Waldron, 42 2016	President and Chief Executive Officer, Safety and Productivity Solutions since July 2016. President of Sensing and Productivity Solutions from July 2015 to

July 2016. President of Scanning and Mobility from April 2012 to July 2015. Vice President and General Manager of Americas Scanning and Mobility from January 2012 to April 2012.

(a) Also a Director.

Item 1A. Risk Factors

Cautionary Statement About Forward-Looking Statements

We describe many of the trends and other factors that drive our business and future results in Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations and in other parts of this report (including this Item 1A). Such discussions contain forward-looking statements within the meaning of Section 21E of the Securities Exchange Act of 1934.

Forward-looking statements are those that address activities, events or developments that management intends, expects, projects, believes or anticipates will or may occur in the future. They are based on management's assumptions and assessments in light of past experience and trends, current economic and industry conditions, expected future developments and other relevant factors. They are not guarantees of future performance, and actual results, developments and business decisions may differ significantly from those envisaged by our forward-looking statements, including with respect to any changes in or abandonment of the proposed spin-offs. We do not undertake to update or revise any of our forward-looking statements. Our forward-looking statements are also subject to risks and uncertainties that can affect our performance in both the near- and long-term. These forward-looking statements should be considered in light of the information included in this Form 10-K, including, in particular, the factors discussed below. These factors may be revised or supplemented in subsequent reports on Forms 10-Q and 8-K.

Risk Factors

Our business, operating results, cash flows and financial condition are subject to the principal risks and uncertainties set forth below, any one of which could cause our actual results to vary materially from recent results or from our anticipated future results.

Macroeconomic and Industry Risks

Industry and economic conditions may adversely affect the markets and operating conditions of our customers, which in turn can affect demand for our products and services and our results of operations.

- ***Aerospace***—Operating results of Aerospace are directly tied to cyclical industry and economic conditions, as well as changes in customer buying patterns of aftermarket parts, supplier stability, factory transitions and capacity constraints. The operating results of our Commercial Aviation business unit may be adversely affected by downturns in the global demand for air travel which impacts new aircraft production or the delay or cancellation of new aircraft orders, delays in launch schedules for new aircraft, the retirement of aircraft and global flying hours, which impact air transport, regional, business and general aviation aircraft utilization rates. Operating results could also be impacted by changes in overall trends related to end market demand for the product portfolio, as well as, new entrants and non-traditional players entering the market. Operating results in our Defense and Space business unit may be affected by the mix of U.S. and foreign government appropriations for defense and space programs and by compliance risks. Results may also be impacted by the potential introduction of counterfeit parts into our global supply chain. Operating results in our Transportation Systems business unit may be affected by the level of production and demand for automobiles and trucks equipped with turbochargers, regulatory changes regarding automobile and truck emissions and fuel economy, growing importance of automotive electrification, consumer demand and spending for automotive aftermarket products and delays in launch schedules for new automobile and truck platforms.

- ***Home and Building Technologies***—Operating results may be adversely impacted by downturns in the level of global residential and commercial construction activity (including retrofits and upgrades), lower capital spending and operating expenditures on building projects, less industrial plant expansion, changes in the competitive landscape including new market entrants and new technologies, and fluctuations in inventory levels in distribution channels.

- ***Performance Materials and Technologies***—Operating results may be adversely impacted by downturns in capacity utilization for chemical, industrial, refining, petrochemical and semiconductor plants, our customers' availability of capital for refinery construction and expansion, raw material demand and supply volatility, product commoditization, and our ability to maximize our facilities' production capacity and minimize downtime. In particular, the volatility in oil and natural gas prices have and will continue to impact our customers' operating levels and capital spending and thus demand for our products and services.

- ***Safety and Productivity Solutions***—Operating results may be adversely impacted by downturns in the level of global capital spending and operating expenditures, including in the oil and gas industry, reduced investments in process automation, safety monitoring, and plant capacity utilization initiatives, fluctuations in retail markets, lower customer demand due to the failure to anticipate and respond to overall trends related to end market demand, changes in the competitive landscape including new market entrants and technology that may lead to product commoditization, and adverse industry economic conditions, all of which could result in lower market share, reduced selling prices and lower margins.

An increasing percentage of our sales and operations is in non-U.S. jurisdictions and is subject to the economic, political, regulatory, foreign exchange and other risks of international operations.

Our international operations, including U.S. exports, represent more than half of the Company's sales. Risks related to international operations include exchange control regulations, wage and price controls, antitrust regulations, employment regulations, foreign investment laws, import, export and other trade restrictions (such as sanctions and embargoes), violations by our employees of anti-corruption laws (despite our efforts to mitigate these risks), changes in regulations regarding transactions with state-owned enterprises, nationalization of private enterprises, acts of terrorism, and our ability to hire and maintain qualified staff and maintain the safety of our employees in these regions. Instability and uncertainties arising from the global geopolitical environment, including the United Kingdom referendum in favor of exiting the European Union and the evolving international and domestic political, regulatory and economic landscape, the potential for changes in global trade policies including sanctions and trade barriers, trends such as populism, economic nationalism and negative sentiment toward multinational companies, and the cost of compliance with increasingly complex and often conflicting regulations worldwide can impair our flexibility in modifying product, marketing, pricing or other strategies for growing our businesses, as well as our ability to improve productivity and maintain acceptable operating margins.

Operating outside of the United States also exposes us to foreign exchange risk, which we monitor and seek to reduce through hedging activities. However, foreign exchange hedging activities bear a financial cost and may not always be available to us or be successful in eliminating such volatility. Finally, we generate significant amounts of cash outside of the United States that is invested with financial and non-financial counterparties. While we employ comprehensive controls regarding global cash management to guard against cash or investment loss and to ensure our ability to fund our operations and commitments, a material disruption to the counterparties with whom we transact business could expose Honeywell to financial loss.

Risks related to our defined benefit pension plans may adversely impact our results of operations and cash flow.

Significant changes in actual investment return on pension assets, discount rates, and other factors could adversely affect our results of operations and require cash pension contributions in future periods. Changes in discount rates and actual asset returns different than our anticipated asset returns can result in significant non-cash actuarial gains or losses which we record in the fourth quarter of each fiscal year, and, if applicable, in any quarter in which an interim re-measurement is triggered. With regard to cash pension contributions, funding requirements for our pension plans are largely dependent upon interest rates, actual investment returns on pension assets and the impact of legislative or regulatory changes related to pension funding obligations.

Operational Risks

Raw material price fluctuations, the ability of key suppliers to meet quality and delivery requirements, or catastrophic events can increase the cost of our products and services, impact our ability to meet commitments to customers and cause us to incur significant liabilities.

The cost of raw materials is a key element in the cost of our products, particularly in Performance Materials and Technologies (R240, fluorspar, copper, ethylene and perchloroethylene) and in

Aerospace (nickel, steel, titanium and other metals). Our inability to offset material price inflation through increased prices to customers, formula or long-term fixed price contracts with suppliers, productivity actions or through commodity hedges could adversely affect our results of operations.

Many major components, product equipment items and raw materials, particularly in Aerospace, are procured or subcontracted on a single or sole-source basis. Although we maintain a qualification and performance surveillance process and we believe that sources of supply for raw materials and components are generally adequate, it is difficult to predict what effects shortages or price increases may have in the future. Our ability to manage inventory and meet delivery requirements may be constrained by our suppliers' inability to scale production and adjust delivery of long-lead time products during times of volatile demand. Our inability to fill our supply needs would jeopardize our ability to fulfill obligations under commercial and government contracts, which could, in turn, result in reduced sales and profits, contract penalties or terminations, and damage to customer relationships.

We may be unable to successfully execute or effectively integrate acquisitions, and divestitures may not occur as planned.

We regularly review our portfolio of businesses and pursue growth through acquisitions and seek to divest non-core businesses. We may not be able to complete transactions on favorable terms, on a timely basis, or at all, and during integration we may discover cybersecurity and compliance issues. In addition, our results of operations and cash flows may be adversely impacted by (i) the failure of acquired businesses to meet or exceed expected returns, including risk of impairment; (ii) the failure to integrate multiple acquired businesses into Honeywell simultaneously and on schedule and/or to achieve expected synergies; (iii) the inability to dispose of non-core assets and businesses on satisfactory terms and conditions; and (iv) the discovery of unanticipated liabilities, labor relations difficulties or other problems in acquired businesses for which we lack contractual protections, insurance or indemnities, or with regard to divested businesses, claims by purchasers to whom we have provided contractual indemnification.

The proposed spin-offs of our Homes and Global Distribution business and of our Transportation Systems business into two stand-alone, publicly-traded companies are each contingent upon the satisfaction of a number of conditions, may not be completed on the currently contemplated timeline, or at all, and may not achieve the intended benefits.

On October 10, 2017, the Company announced its intention to separately spin-off our Homes and Global Distribution business, which is part of our Home and Building Technologies segment, and our Transportation Systems business, which is part of our Aerospace segment, into two stand-alone, publicly-traded companies. Completion of each proposed spin-off is subject to readiness of each spin-off to operate as an independent public company, finalization of the financial statements of the spun-off business, assurance that the separation will be tax-free to our shareowners for U.S. federal income tax purposes, finalization of the capital structure of the three corporations, the effectiveness of appropriate filings with the U.S. Securities and Exchange Commission, final approval of the Board of Directors, and other customary matters. Each proposed spin-off is complex in nature, and may be affected by unanticipated developments, credit and equity markets, or changes in market conditions. These or other unanticipated developments could delay or prevent the proposed spin-offs or cause the proposed spin-offs to occur on terms or conditions that are less favorable than anticipated, including without limitation, the failure to qualify as tax-free to our shareowners, and the inability of the two spun-off companies to incur sufficient indebtedness to allow for a distribution to Honeywell of proceeds concurrently with the consummation of the spin-offs or to make ongoing cash contributions towards the satisfaction of certain of our legacy asbestos and environmental remediation liabilities. Furthermore, if the spin-offs are completed, we cannot assure you that each will be successful in meeting its objectives. There is the potential for business disruption and significant separation costs. Any of these factors could have a material adverse effect on our business, financial condition, results of operations, cash flows and/or the price of our common stock.

Our future growth is largely dependent upon our ability to develop new technologies and introduce new products that achieve market acceptance in increasingly competitive markets with acceptable margins.

Our future growth rate depends upon a number of factors, including our ability to (i) identify and evolve with emerging technological and broader industry trends in our target end-markets, (ii) develop and maintain competitive products, (iii) defend our market share against an ever-expanding number of competitors including many new and non-traditional competitors, (iv) enhance our products by adding innovative features that differentiate our products from those of our competitors and prevent commoditization of our products, (v) develop, manufacture and bring compelling new products to market quickly and cost-effectively, (vi) monitor disruptive technologies and business models, (vii) achieve sufficient return on investment for new products introduced based on capital expenditures and research and development spending, (viii) respond to changes in overall trends related to end market demand, and (x) attract, develop and retain individuals with the requisite technical expertise and understanding of customers' needs to develop new technologies and introduce new products.

The failure of our technologies or products to gain market acceptance due to more attractive offerings by our competitors could significantly reduce our revenues and adversely affect our competitive standing and prospects.

Failure to increase productivity through sustainable operational improvements, as well as an inability to successfully execute repositioning projects or to effectively manage our workforce, may reduce our profitability or adversely impact our businesses.

Our profitability and margin growth are dependent upon our ability to drive sustainable improvements. In addition, we seek productivity and cost savings benefits through repositioning actions and projects, such as consolidation of manufacturing facilities, transitions to cost-competitive regions and product line rationalizations. Risks associated with these actions include delays in execution of the planned initiatives, additional unexpected costs, realization of fewer than estimated productivity improvements and adverse effects on employee morale. We may not realize the full operational or financial benefits we expect, the recognition of these benefits may be delayed and these actions may potentially disrupt our operations. In addition, organizational changes, attrition, labor relations difficulties, or workforce stoppage could have a material adverse effect on our business, reputation, financial position and results of operations.

As a supplier to the U.S. Government, we are subject to unique risks, such as the right of the U.S. Government to terminate contracts for convenience and to conduct audits and investigations of our operations and performance.

U.S. Government contracts are subject to termination by the government, either for the convenience of the government or for our failure to perform consistent with the terms of the applicable contract. Our contracts with the U.S. Government are also subject to government audits that may recommend downward price adjustments and other changes. When appropriate and prudent, we have made adjustments and paid voluntary refunds in the past and may do so in the future.

We are also subject to government investigations of business practices and compliance with government procurement regulations. If, as a result of any such investigation or other government investigations (including investigation of violations of certain environmental, employment or export laws), Honeywell or one of its businesses were found to have violated applicable law, then it could be suspended from bidding on or receiving awards of new government contracts, suspended from contract performance pending the completion of legal proceedings and/or have its export privileges suspended.

Our operations and the prior operations of predecessor companies expose us to the risk of material environmental liabilities.

Mainly because of past operations and operations of predecessor companies, we are subject to potentially material liabilities related to the remediation of environmental hazards and to claims of personal injuries or property damages that may be caused by hazardous substance releases and exposures. We continue to incur remedial response and voluntary clean-up costs for site contamination and are a party to lawsuits and claims associated with environmental and safety matters, including past production of products containing hazardous substances. Additional lawsuits, claims and costs involving environmental matters are likely to continue to arise in the future. Various federal, state, local and foreign governments regulate the discharge of materials into the environment and can impose substantial fines and criminal sanctions for violations, and require installation of costly equipment or operational changes to limit emissions and/or decrease the likelihood of accidental hazardous substance releases. In addition, changes in laws, regulations and enforcement of policies, the discovery of previously unknown contamination or new technology or information related to individual sites, the establishment of stricter state or federal toxicity standards with respect to certain contaminants, or the imposition of new clean-up requirements or remedial techniques could require us to incur additional costs in the future that would have a negative effect on our financial condition or results of operations.

Cybersecurity incidents could disrupt business operations, result in the loss of critical and confidential information, and adversely impact our reputation and results of operations.

Global cybersecurity threats and incidents can range from uncoordinated individual attempts to gain unauthorized access to information technology (IT) systems to sophisticated and targeted measures known as advanced persistent threats, directed at the Company, its products, its customers and/or its third party service providers, including cloud providers. Our customers, including the U.S. government, are increasingly requiring cybersecurity protections and mandating cybersecurity standards in our products, and we may incur additional costs to comply with such demands. While we have experienced, and expect to continue to experience, these types of threats and incidents, none of them to date have been material to the Company. We seek to deploy comprehensive measures to deter, prevent, detect, respond to and mitigate these threats, including identity and access controls, data protection, vulnerability assessments, product software designs which we believe are less susceptible to cyber attacks, continuous monitoring of our IT networks and systems and maintenance of backup and protective systems. Despite these efforts, cybersecurity incidents, depending on their nature and scope, could potentially result in the misappropriation, destruction, corruption or unavailability of critical data and confidential or proprietary information (our own or that of third parties) and the disruption of business operations. Cybersecurity incidents aimed at the software imbedded in our products could lead to third party claims that our product failures have caused a similar range of damages to our customers, and this risk is enhanced by the increasingly connected nature of our products. The potential consequences of a material cybersecurity incident include financial loss, reputational damage, litigation with third parties, theft of intellectual property, fines levied by the Federal Trade Commission, diminution in the value of our investment in research, development and engineering, and increased cybersecurity protection and remediation costs due to the increasing sophistication and proliferation of threats, which in turn could adversely affect our competitiveness and results of operations.

Data privacy, identity protection, and information security may require significant resources and presents certain risks.

We collect, store, have access to and otherwise process certain confidential or sensitive data, including proprietary business information, personal data and other information that is subject to privacy and security laws, regulations and/or customer-imposed controls. Despite our efforts to protect such data, we may be vulnerable to material security breaches, theft, misplaced or lost data, programming errors, or employee errors that could potentially lead to the compromising of such data, improper use of our systems, software solutions or networks, unauthorized access, use, disclosure, modification or destruction of information, defective products, production downtimes and operational disruptions. In addition, we operate in an environment in which there are different and potentially conflicting data privacy laws in effect in the various U.S. states and foreign jurisdictions in which we operate and we must understand and comply with each law and standard in each of these jurisdictions while ensuring the data is secure. Government enforcement actions can be costly and interrupt the regular operation of our business, and violations of data privacy laws can result in fines, reputational damage and civil lawsuits, any of which may adversely affect our business, reputation and financial statements.

A material disruption of our operations, particularly at our manufacturing facilities or within our information technology infrastructure, could adversely affect our business.

Our facilities, supply chains, distribution systems and information technology systems are subject to catastrophic loss due to natural disasters including hurricanes and floods, power outages, fires, explosions, terrorism, equipment failures, sabotage, adverse weather conditions, public health crises, labor disputes, critical supply failure, inaccurate downtime forecast, political disruption, and other reasons, which can result in undesirable consequences, including financial losses and damaged relationships with customers. We employ information technology systems and networks to support the business and rely on them to process, transmit and store electronic information, and to manage or support a variety of business processes and activities. Disruptions to our information technology infrastructure from system failures, shutdowns, power outages, telecommunication or utility failures, and other events, including disruptions at our cloud computing, server, systems and other third party IT service providers, could interfere with our operations, interrupt production and shipments, damage customer and business partner relationships, and negatively impact our reputation.

Legal and Regulatory Risks

Our U.S. and non-U.S. tax liabilities are dependent, in part, upon the distribution of income among various jurisdictions in which we operate.

Our future results of operations could be adversely affected by changes in the effective tax rate as a result of a change in the mix of earnings in countries with differing statutory tax rates, changes in tax laws, regulations and judicial rulings (or changes in the interpretation thereof), changes in generally accepted accounting principles, changes in the valuation of deferred tax assets and liabilities, changes in the amount of earnings permanently reinvested offshore, the results of audits and examinations of previously filed tax returns and continuing assessments of our tax exposures and various other governmental enforcement initiatives. Our tax expense includes estimates of tax reserves and reflects other estimates and assumptions, including assessments of future earnings of the Company which could impact the valuation of our deferred tax assets. Changes in tax laws or regulations, including further regulatory developments arising from U.S. tax reform legislation as well as multi-jurisdictional changes enacted in response to the action items provided by the Organization for Economic Co-operation and Development (OECD), will increase tax uncertainty and impact our provision for income taxes.

Changes in legislation or government regulations or policies can have a significant impact on our results of operations.

The sales and margins of each of our segments are directly impacted by government regulations including safety, performance and product certification regulations. Within Aerospace, the operating results of Commercial Original Equipment and Commercial Aftermarket may be impacted by, among other things, mandates of the Federal Aviation Administration and other similar international regulatory bodies requiring the installation of equipment on aircraft. Our Defense and

Space business unit may be affected by changes in government procurement regulations, while emissions, fuel economy and energy efficiency standards for motor vehicles can impact Transportation Systems. Within Home and Building Technologies, the demand for and cost of providing products, services and solutions can be impacted by fire, security, safety, health care, environmental and energy efficiency standards and regulations. Performance Materials and Technologies' results of operations can be impacted by environmental standards, regulations, and judicial determinations. Growth in all our businesses within emerging markets may be adversely impacted by the inability to acquire and retain qualified employees where local employment law mandates may be restrictive. Noncompliance with legislation and regulations can result in fines and penalties.

We cannot predict with certainty the outcome of litigation matters, government proceedings and other contingencies and uncertainties.

We are subject to a number of lawsuits, investigations and disputes (some of which involve substantial amounts claimed) arising out of the conduct of our business, including matters relating to commercial transactions, government contracts, product liability (including asbestos), prior acquisitions and divestitures, employment, employee benefits plans, intellectual property, antitrust, import and export, and environmental, health and safety matters. Our potential liabilities are subject to change over time due to new developments, changes in settlement strategy or the impact of evidentiary requirements, and we may become subject to or be required to pay damage awards or settlements that could have a material adverse effect on our results of operations, cash flows and financial condition. While we maintain insurance for certain risks, the amount of our insurance coverage may not be adequate to cover the total amount of all insured claims and liabilities. The incurrence of significant liabilities for which there is no or insufficient insurance coverage could adversely affect our results of operations, cash flows, liquidity and financial condition.

Item 1B. Unresolved Staff Comments

None

Item 2. Properties

We have approximately 1,287 locations, of which 296 are manufacturing sites. Our properties and equipment are in good operating condition and are adequate for our present needs. We do not anticipate difficulty in renewing existing leases as they expire or in finding alternative facilities.

Item 3. Legal Proceedings

We are subject to a number of lawsuits, investigations and claims (some of which involve substantial amounts) arising out of the conduct of our business. See a discussion of environmental, asbestos and other litigation matters in Note 19 Commitments and Contingencies of Notes to Consolidated Financial Statements.

Item 4. Mine Safety Disclosures

Not applicable.

Part II.

Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities

Honeywell's common stock is listed on the New York Stock Exchange. Market and dividend information for Honeywell's common stock is included in Note 24 Unaudited Quarterly Financial Information of Notes to Consolidated Financial Statements.

The number of record holders of our common stock at December 31, 2017 was 47,678.

Information regarding securities authorized for issuance under equity compensation plans is included in Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters under the caption "Equity Compensation Plans."

Honeywell purchased 10,300,000 shares of its common stock, par value $1 per share, in the quarter ending December 31, 2017. In December 2017, the Board of Directors authorized the repurchase of up to a total of $8 billion of Honeywell common stock, which included amounts remaining under and replaced the previously approved share repurchase program. $7.7 billion remained available as of as of December 31, 2017 for additional share repurchases. Honeywell presently expects to repurchase outstanding shares from time to time to generally offset the dilutive impact of employee stock based compensation plans, including option exercises, restricted unit vesting and matching contributions under our savings plans. Additionally, we seek to reduce share count via share repurchases as and when attractive opportunities arise. The amount and timing of future repurchases may vary depending on market conditions and the level of our operating, financing and other investing activities.

The following table summarizes Honeywell's purchase of its common stock for the three months ended December 31, 2017:

Issuer Purchases of Equity Securities

Period	**Total Number of Shares Purchased**	**Average Price Paid per Share**	**Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs**	**Approximate Dollar Value of Shares that May Yet be Purchased Under Plans or Programs (Dollars in millions)**
October 2017	—	—	—	—
November 2017	4,200,000	$ 146.89	4,200,000	$ 2,125
December 2017	6,100,000	$ 153.54	6,100,000	$ 7,737

Performance Graph

The following graph compares the five-year cumulative total return on our common stock to the total returns on the Standard & Poor's (S&P) 500 Stock Index and a composite of S&P's Industrial Conglomerates and Aerospace and Defense indices, on a 65%/35% weighted basis (the Composite Index). The weighting of the components of the Composite Index are based on our segments' relative contribution to total segment profit. The selection of the Industrial Conglomerates component of the Composite Index reflects the diverse and distinct range of non-aerospace businesses conducted by Honeywell. The annual changes for the five-year period shown in the graph are based on the assumption that $100 had been invested in Honeywell stock and each index on December 31, 2012 and that all dividends were reinvested.

COMPARISON OF CUMULATIVE FIVE YEAR TOTAL RETURN

HONEYWELL INTERNATIONAL INC.

This selected financial data should be read in conjunction with Honeywell's Consolidated Financial Statements and related Notes included elsewhere in this Annual Report as well as the section of this Annual Report titled Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations.

Item 6. Selected Financial Data

	Years Ended December 31,				
	2017(1)	**2016**	**2015**	**2014**	**2013**
	(Dollars in millions, except per share amounts)				
Results of Operations					
Net sales	$ 40,534	$ 39,302	$ 38,581	$ 40,306	$ 39,055
Net income attributable to Honeywell	1,655	4,809	4,768	4,239	3,924
Earnings Per Common Share					
Earnings from continuing operations:					
Basic	2.17	6.29	6.11	5.40	4.99
Assuming dilution	2.14	6.20	6.04	5.33	4.92
Dividends per share	2.74	2.45	2.15	1.87	1.68
Financial Position at Year-End					
Property, plant and equipment-net	5,926	5,793	5,789	5,383	5,278
Total assets	59,387	54,146	49,316	45,451	45,435
Short-term debt					

	5,309	3,593	6,514	2,637	2,028
Long-term debt	12,573	12,182	5,554	6,046	6,801
Total debt	17,882	15,775	12,068	8,683	8,829
Redeemable noncontrolling interest	5	3	290	219	167
Shareowners’ equity	17,439	19,547	18,418	17,784	17,579

(1) 2017 Net Income attributable to Honeywell and Earnings Per Common Share were impacted by the Tax Cuts and Jobs Act; see Note 5 Income Taxes of Notes to Consolidated Financial Statements for further details.

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

(Dollars in millions, except per share amounts)

The following Management's Discussion and Analysis of Financial Condition and Results of Operations is intended to help the reader understand the results of operations and financial condition of Honeywell International Inc. and its consolidated subsidiaries ("Honeywell" or "the Company") for the three years ended December 31, 2017. All references to Notes relate to Notes to Consolidated Financial Statements in Item 8. Financial Statements and Supplementary Data.

In October 2017, the Company announced the results of a comprehensive portfolio review which included the announcement of our intent to spin-off our Homes and Global Distribution business, as well as our Transportation Systems business, into two stand-alone, publicly traded companies.

Effective October 2017, we realigned the Smart Energy business, previously part of the Home and Building Technologies segment, into the Process Solutions business within the Performance Materials and Technologies segment. Effective July 2016, the Company realigned the business units comprising its Automation and Control Solutions segment by forming two new segments: Home and Building Technologies and Safety and Productivity Solutions. These realignments have no impact on the Company's historical consolidated financial position, results of operations or cash flows. Prior period amounts have been reclassified to conform to current period segment presentation.

On October 1, 2016, the Company completed the tax-free spin-off of its Resins and Chemicals business, part of Performance Materials and Technologies, into a standalone, publicly-traded company (named AdvanSix Inc. ("AdvanSix")) to Honeywell shareowners. The assets and liabilities associated with AdvanSix have been removed from the Company's Consolidated Balance Sheet as of the effective date of the spin-off. The results of operations for AdvanSix are included in the Consolidated Statement of Operations through the effective date of the spin-off.

On September 16, 2016, the Company completed the sale of the Aerospace government services business, Honeywell Technology Solutions Inc ("HTSI" or "government services business"). The assets and liabilities associated with HTSI have been removed from the Company's Consolidated Balance Sheet as of the effective date of the sale. The results of operations for HTSI are included in the Consolidated Statement of Operations through the effective date of the sale.

EXECUTIVE SUMMARY

During 2017, Honeywell continued to successfully deliver on its financial commitments while still creating long-term value for our shareowners. We grew net sales 3% to $40,534 million and grew income before taxes 7% to $6,902 million. The improvement in year over year income before taxes was attributable to both organic sales growth as well as operational improvements that increased operating margins. We believe our ability to consistently grow earnings derives from the consistent, rigorous deployment of the Honeywell Operating System as well as a long history of identifying and investing in productivity initiatives. We have made concerted efforts to revitalize our commercial excellence processes, such as Velocity Product Development ("VPD"), which enables higher organic revenue at better margins.

We are careful to not allow the attainment of short-term financial results imperil the creation of long-term, sustainable shareowner value. Hence, as part of the announcement in October 2017 of the results of our portfolio review, we affirmed our commitment to a strategy and investments that are intended to enable us to become one of the world’s leading software industrial companies. Our refocused strategy and investments are intended to take better advantage of our core technological and software strengths in high growth businesses that participate in six attractive industrial end markets. Each of these end markets is characterized by favorable global mega-trends including energy efficiency, infrastructure investment, urbanization and safety.

In 2017 we deployed capital of over $6 billion, including the following:

- ***Share Repurchases***—we continue to repurchase our shares with the goal of keeping share count flat by offsetting the dilutive impact of employee stock based compensation and savings plans. Additionally, we seek to reduce share count via share repurchases as and when attractive opportunities arise. In 2017, we repurchased 20.5 million shares for $2.9 billion.
- ***Dividend***—In 2017, we paid cash dividends of $2.1 billion and increased our annual dividend rate by 12%, as we seek to continue to grow the dividend faster than earnings. Since 2010, we have increased the dividend rate by 10% or more eight times.
- ***Capital Investment in Facilities***—we invested over $1 billion in capital expenditures focused on high return projects.

CONSOLIDATED RESULTS OF OPERATIONS

Net Sales

	2017	2016	2015
Net sales	$ 40,534	$ 39,302	$ 38,581
% change compared with prior period	3 %	2 %	

The change in net sales is attributable to the following:

	2017 Versus 2016	2016 Versus 2015
Volume	3%	(2)%
Price	1%	—
Acquisitions/Divestitures	(1)%	5%
Foreign Currency Translation	—	(1)%
	3%	2%

A discussion of net sales by segment can be found in the Review of Business Segments section of this MD&A.

The foreign currency translation impact in 2017 compared with 2016 was flat. The strengthening of the Euro was offset by the weakening of the British Pound against the U.S. Dollar.

The foreign currency translation impact in 2016 compared with 2015 is principally driven by the weakening of the British Pound, Chinese Renminbi and Canadian Dollar, partially offset by the strengthening of the Japanese Yen against the U.S. Dollar.

Cost of Products and Services Sold

	2017	2016	2015
Cost of products and services sold	$ 27,575	$ 27,150	$ 26,747
% change compared with prior period	2 %	2 %	
Gross Margin percentage	32.0 %	30.9 %	30.7 %

Cost of products and services sold increased in 2017 compared with 2016 principally due to increased direct material costs of approximately $290 million (driven by higher sales volume and acquisitions partially offset by divestitures and productivity, net of inflation), higher repositioning and other charges of approximately $260 million and higher depreciation and amortization of approximately $90 million, partially offset by higher pension and other postretirement benefits income, and lower pension mark-to-market expense, allocated to cost of products and services sold of approximately $110 million, and decreased indirect material costs of approximately $70 million.

Gross margin percentage increased in 2017 compared with 2016 principally due to higher gross margin in Aerospace and Performance Materials and Technologies (approximately 1.7 percentage point impact collectively) and higher pension and other postretirement benefits income and lower pension market to market expense allocated to cost of products and services sold (approximately 0.3 percentage point impact), partially offset by higher repositioning and other charges (approximately

0.6 percentage point impact) and by lower gross margin in Home and Building Solutions and Safety and Productivity Solutions (approximately 0.3 percentage point impact collectively).

Cost of products and services sold increased in 2016 compared with 2015 principally due to increased direct material costs of approximately $380 million (driven primarily by acquisitions, net of divestitures, partially offset by the favorable impact of productivity, net of inflation, and foreign currency translation), higher depreciation and amortization attributable to acquisitions of approximately $135 million and increased pension mark-to-market expense allocated to cost of products and services sold of $70 million, partially offset by higher pension and other postretirement benefits income allocated to cost of products and services sold of $200 million.

Gross margin percentage increased in 2016 compared with 2015 principally due to higher gross margin in Performance Materials and Technologies (approximately 0.2 percentage point impact) and higher pension and other postretirement benefits income allocated to cost of products and services sold (approximately 0.5 percentage point impact), partially offset by lower gross margin in Aerospace, Home and Building Technologies and Safety and Productivity Solutions an (approximately 0.3 percentage point impact collectively) and increased pension mark-to-market expense allocated to cost of products and services sold (approximately 0.2 percentage point impact).

Selling, General and Administrative Expenses

	2017	2016	2015
Selling, general and administrative expense	$ 5,808	$ 5,469	$ 5,006
% of sales	14.3 %	13.9 %	13.0 %

Selling, general and administrative expenses (SG&A) increased in 2017 compared with 2016 primarily due to increased labor costs (driven primarily by acquisitions, net of divestitures, investment for growth and merit increases), and higher repositioning charges, partially offset by decreased pension mark-to-market expense allocated to SG&A.

SG&A increased in 2016 compared with 2015 primarily due to increased labor costs (driven primarily by acquisitions, net of divestitures, investment for growth and merit increases), increased pension mark-to-market expense allocated to SG&A and higher repositioning charges, partially offset by the favorable impact from foreign currency translation and increased pension income allocated to SG&A.

Tax Expense

	2017	2016	2015
Tax expense			

	$ 5,204	$ 1,601	$ 1,739
Effective tax rate	75.4 %	24.8 %	26.4 %

On December 22, 2017, the U.S. enacted the Tax Cuts and Jobs Act (“Tax Act”) that instituted fundamental changes to the U.S. tax system. The Tax Act includes changes to the taxation of foreign earnings by implementing a dividend exemption system, expansion of the current anti-deferral rules, a minimum tax on low-taxed foreign earnings and new measures to deter base erosion. The Tax Act also permanently reduces the corporate tax rate from 35% to 21%, imposes a one-time mandatory transition tax on the historical earnings of foreign affiliates and implements a territorial style tax system. The impacts of these changes are reflected in the 2017 tax expense which resulted in a provisional charge of approximately $3.8 billion, which is subject to adjustment given the provisional nature of the charge. This resulted in an effective tax rate higher than the statutory rate in 2017.

The effective tax rates for 2016 and 2015 were lower than the U.S. statutory rate of 35% primarily due to lower tax rates on non-U.S. earnings.

The Company currently expects the effective tax rate for 2018 to be in the range of 22.0% and 23.0%. The effective tax rate may vary from quarter to quarter due to unusual or infrequently occurring items, the resolution of income tax audits, changes in tax laws, the tax impact from employee share-based payments, taxes incurred in connection to the territorial style tax system, or other items such as pension mark-to-market adjustments.

For further discussion of changes in the effective tax rate, see Note 5 Income Taxes of Notes to Consolidated Financial Statements.

Net Income Attributable to Honeywell

	2017	2016	2015
Net income attributable to Honeywell	$ 1,655	$ 4,809	$ 4,768
Earnings per share of common stock–assuming dilution	$ 2.14	$ 6.20	$ 6.04

Earnings per share of common stock–assuming dilution decreased in 2017 compared with 2016 primarily driven by additional income tax expense from the Tax Act, higher repositioning and other charges, partially offset by higher segment profit across all segments, lower pension mark-to-market expense and increased pension and other postretirement income.

Earnings per share of common stock–assuming dilution increased in 2016 compared with 2015 primarily driven by increased pension and other postretirement income, higher segment profit in Home and Building Technologies and Performance Materials and Technologies, the gain related to the Honeywell Technology Solutions, Inc. divestiture, a decrease in the weighted average shares outstanding and the tax benefit from adoption of the Financial Accounting Standards Board's (FASB) accounting standard related to employee share-based payment accounting, partially offset by lower segment profit in Aerospace and Safety and Productivity Solutions, increased pension mark-to-market expense and higher repositioning and other charges.

BUSINESS OVERVIEW

Our consolidated results are principally impacted by:

- Changes in global economic growth rates and industry conditions and demand in our key end markets;
- The impact of fluctuations in foreign currency exchange rates (in particular the Euro), relative to the U.S. Dollar;
- The extent to which cost savings from productivity actions are able to offset or exceed the impact of material and non-material inflation;
- The impact of the pension discount rate and asset returns on pension expense, including mark-to-market adjustments, and funding requirements; and
- The impact from the Tax Act.

Our 2018 areas of focus, most of which are applicable to each of our segments include:

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- Driving profitable organic growth through R&D and technological excellence to deliver innovative products that customers value and expansion and localization of our footprint in high growth regions;
- Executing on our strategy to become a software-industrial company, which for us means products and services that facilitate the connected plane, home, building and factory;
- Expanding margins by maintaining and improving the Company’s cost structure through manufacturing and administrative process improvements, repositioning, and other productivity actions;
- Executing disciplined, rigorous M&A and integration processes to deliver growth through acquisitions;
- Ensuring the successful completion of the proposed spin-offs of our Homes and Global Distribution business, as well as our Transportation Systems business, into two stand-alone, publicly traded companies;
- Controlling corporate costs, including costs incurred for asbestos and environmental matters, pension and other post-retirement benefits;
- Increasing availability of capital through strong cash flow conversion from effective working capital management and proactively managing debt levels to enable the Company to smartly

deploy capital for strategic acquisitions, dividends, share repurchases and capital expenditures; and

- Aligning our operating structure to benefit from the territorial tax system being implemented by the Tax Act.

Review of Business Segments

	Years Ended December 31,			% Change	
	2017	2016	2015	2017 Versus 2016	2016 Versus 2015
Aerospace Sales					
Commercial Aviation Original Equipment	$ 2,475	$ 2,525	$ 2,905	(2)%	(13)%
Commercial Aviation Aftermarket	5,103	4,796	4,656	6 %	3 %
Defense and Space	4,053	4,375	4,715	(7)%	(7)%
Transportation Systems	3,148	3,055	2,961	3 %	3 %
Total Aerospace Sales	14,779	14,751	15,237		
Home and Building Technologies Sales					
Home and Building Products	4,928	4,803	4,576	3 %	5 %
Home and Building Distribution	4,849	4,687	4,450	3 %	5 %
Total Home and Building Technologies Sales	9,777	9,490	9,026		

Performance Materials and Technologies Sales					
UOP	2,753	2,469	2,976	12 %	(17)%
Process Solutions	4,795	4,640	3,124	3 %	49 %
Advanced Materials	2,791	3,327	3,510	(16)%	(5)%
Total Performance Materials and Technologies Sales	10,339	10,436	9,610		
Safety and Productivity Solutions Sales					
Safety	2,169	2,075	2,135	5 %	(3)%
Productivity Solutions	3,470	2,550	2,573	36 %	(1)%
Total Safety and Productivity Solutions Sales	5,639	4,625	4,708		
Net Sales	$ 40,534	$ 39,302	$ 38,581		

Aerospace

	2017	2016	Change	2015	Change
Net sales	$ 14,779	$ 14,751	—	$ 15,237	(3)%

Cost of products and services sold	10,320	10,820		11,068	
Selling, general and administrative and other expenses	1,171	940		951	
Segment profit	$ 3,288	$ 2,991	10 %	$ 3,218	(7)%

Factors Contributing to Year-Over-Year Change	2017 vs. 2016		2016 vs. 2015	
	Sales	**Segment Profit**	**Sales**	**Segment Profit**
Organic growth/ Operational segment profit	2 %	11 %	(3)%	(6)%
Foreign currency translation	—	—	—	(1)%
Acquisitions, divestitures and other, net	(2)%	(1)%	—	—
Total % Change	—	10 %	(3)%	(7)%

2017 compared with 2016

Aerospace sales were flat due to organic sales growth, offset by the government services business divestiture.

- Commercial Original Equipment sales decreased 2% (decreased 2% organic) primarily due to lower shipments to business jet OEMs, partially offset by lower air transport and regional OEM incentives.
- Commercial Aftermarket sales increased 6% (increased 6% organic) primarily driven by higher repair and overhaul activities and increased spares shipments.
- Defense and Space sales decreased 7% (increased 1% organic) primarily due to the government services business divestiture and lower Space sales, partially offset by growth in U.S. defense.
- Transportation Systems sales increased 3% (increased 2% organic) primarily driven by higher commercial vehicle volumes, gas turbo penetration and the favorable impact from foreign currency translation, partially offset by lower diesel turbo volumes.

Aerospace segment profit increased due to an increase in operational segment profit, partially offset by the government services business divestiture. The increase in operational segment profit was driven primarily by productivity, net of inflation, including restructuring benefits, lower OEM incentives and higher organic sales volume, partially offset by the government services business divestiture. Cost of products and services sold decreased primarily driven by the government services business divestiture and productivity, net of inflation, partially offset by higher organic sales volume.

2016 compared with 2015

Aerospace sales decreased primarily due to higher OEM incentives, a decrease in organic sales volumes and the government services business divestiture, which was partially offset by growth from acquisitions.

- Commercial Original Equipment sales decreased by 13% (decreased 12% organic) primarily due to higher OEM incentives and decreased demand from business and general aviation original equipment manufacturers, partially offset by higher shipments to air transport OEMs.
- Commercial Aftermarket sales increased by 3% (increased 3% organic) primarily driven by higher repair and overhaul activities and increased spares shipments.
- Defense and Space sales decreased by 7% (decreased 6% organic) primarily due to declines in U.S. space and international defense programs, lower U.S. government services revenue, largely attributable to the impact of divestitures, and decreased demand from commercial helicopter OEMs, partially offset by sales from acquisitions.
- Transportation Systems sales increased by 3% (increased 4% organic) primarily driven by new platform launches and higher global turbo gas penetration.

Aerospace segment profit decreased primarily due to a 6% decrease in operational segment profit and a 1% unfavorable impact from foreign currency translation. The decrease in operational segment profit was primarily due to product mix, higher OEM incentives and lower sales volumes, partially offset by productivity and price, net of inflation. Cost of products and services sold decreased primarily driven by productivity, net of inflation, and lower sales volumes, partially offset by acquisitions, net of divestitures.

Home and Building Technologies

	2017	2016	Change	2015	Change
Net sales	$ 9,777	$ 9,490	3 %	$ 9,026	5 %
Cost of products and services sold	6,430	6,152		5,859	
Selling, general and administrative and other expenses	1,697	1,717		1,675	
Segment profit	$ 1,650	$ 1,621	2 %	$ 1,492	9 %

Factors Contributing to Year-Over-Year Change	2017 vs. 2016		2016 vs. 2015	
	Sales	Segment Profit	Sales	Segment Profit
Organic growth/ Operational segment profit	2 %	1 %	5 %	8 %
Foreign currency translation	—	1 %	(2)%	(2)%
Acquisitions and divestitures, net	1 %	—	2 %	3 %
Total % Change	3 %	2 %	5 %	9 %

2017 compared with 2016

Home and Building Technologies sales increased primarily due to an increase in organic sales, pricing, and acquisitions.

- Sales in Home and Building Products increased by 3% (increased 2% organic) due to an increase in organic sales growth and acquisitions. Organic sales growth was primarily attributable to sales volume in Environmental & Energy Solutions, and Security and Fire businesses.
- Sales in Home and Building Distribution increased by 3% (increased 3% organic) due to organic sales growth in the global distribution business and Building Solutions.

Home and Building Technologies segment profit increased due to an increase in operational segment profit and the favorable impact of foreign currency translation. The increase in operational segment profit was primarily driven by productivity, net of inflation, and pricing, partially offset by unfavorable product mix. Cost of products and services increased due to higher organic sales and acquisitions.

2016 compared with 2015

Home and Building Technologies sales increased primarily due to growth from organic sales growth and acquisitions partially offset by the unfavorable impact of foreign currency translation.

- Sales in Home and Building Products increased by 5% (increased 2% organic) principally driven by organic sales growth and acquisitions. Organic sales growth was primarily attributable to new product introductions in our Environmental and Energy Solutions business and volume growth in our Security and Fire business.
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Sales in Home and Building Distribution increased by 5% (increased 7% organic) principally due to organic sales growth partially offset by the unfavorable impact of foreign currency translation. Organic sales growth was primarily driven by volume in our global distribution business and Building Solutions.

Home and Building Technologies segment profit increased primarily due to an increase in operational segment profit and acquisition partially offset by the unfavorable impact of foreign currency translation. The increase in operational segment profit was primarily driven by productivity net of inflation and pricing. Cost of products and services increased due to growth from organic sales and acquisitions, partially offset by the favorable impact of foreign currency translation and productivity, net of inflation.

Performance Materials and Technologies

	2017	2016	Change	2015	Change
Net sales	$ 10,339	$ 10,436	(1)%	$ 9,610	9 %
Cost of products and services sold	6,764	6,978		6,516	
Selling, general and administrative and other expenses	1,369	1,346		1,084	
Segment profit	$ 2,206	$ 2,112	4 %	$ 2,010	5 %

Factors Contributing to Year-Over-Year Change	2017 vs. 2016		2016 vs. 2015	
	Sales	Segment Profit	Sales	Segment Profit
Organic growth/ Operational segment profit	8 %	10 %	(3)%	2 %
Foreign currency translation	—	—	(1)%	(2)%
Acquisitions and divestitures, net	(9)%	(6)%	13 %	5 %
Total % Change	(1)%	4 %	9 %	5 %

2017 compared with 2016

Performance Materials and Technologies sales decreased primarily due to divestitures, partially offset by organic sales growth.

- UOP sales increased by 12% (increased 12% organic) driven primarily by higher gas processing project revenues, increased catalyst volumes, increased equipment sales, and increased engineering revenues, partially offset by decreased licensing revenues.
- Process Solutions sales increased by 3% (increased 3% organic) driven primarily by higher revenue in smart energy, services, thermal solutions, and software, partially offset by lower field products sales.
- Advanced Materials sales decreased by 16% (increased 11% organic) driven primarily by the spin-off of the former resins and chemicals business, partially offset by increased volumes in fluorine products.

Performance Materials and Technologies segment profit increased primarily due to an increase in operational segment profit, partially offset by divestitures. The increase in operational segment profit is primarily due to productivity, net of inflation, higher organic sales volume and pricing, partially offset by unfavorable product mix and continued investments for growth. Cost of products and services sold decreased primarily due to divestitures and productivity, net of inflation, partially offset by higher organic sales volumes.

2016 compared with 2015

Performance Materials and Technologies sales increased due to growth from acquisitions, net of divestitures, partially offset by a decrease in organic sales volumes and the unfavorable impact of foreign currency translation.

- UOP sales decreased by 17% (decreased 16% organic) driven primarily by lower gas processing revenues due to a significant slowdown in customer projects and decreased catalyst volumes in the first nine months, partially offset by increased catalyst, licensing and equipment sales in the fourth quarter.
- Process Solutions sales increased by 49% (increased 4% organic) driven primarily by increased volumes driven by acquisitions, net of divestitures, and higher revenues in projects, partially offset by lower field products sales.
- Advanced Materials sales decreased by 5% (increased 3% organic) driven primarily by the impact of the October 1, 2016 spin-off of the former resins and chemicals business and lower market pricing, as well as lower raw material pass-through pricing in the former resins and chemicals business in the first nine months, partially offset by increased volumes in fluorine and specialty products.

Performance Materials and Technologies segment profit increased due to acquisitions, net of divestitures, and an increase in operational segment profit, partially offset by the unfavorable impact of foreign currency translation. The increase in operational segment profit is primarily due to productivity, net of inflation, partially offset by lower organic sales volumes and continued investments for growth. Cost of products and services sold increased primarily due to acquisitions, net of divestitures, partially offset by lower organic sales volumes, favorable foreign currency translation, and productivity, net of inflation.

Safety and Productivity Solutions

	2017	2016	Change	2015	Change
Net sales	$ 5,639	$ 4,625	22 %	$ 4,708	(2)%
Cost of products and services sold	3,714	3,001		3,020	
Selling, general and administrative and other expenses	1,073	944		942	
Segment profit	$ 852	$ 680	25 %	$ 746	(9)%

Factors Contributing to Year-Over-Year Change	2017 vs. 2016		2016 vs. 2015	
	Sales	Segment Profit	Sales	Segment Profit
Organic growth/ Operational segment profit	5 %	18 %	(7)%	(8)%
Foreign currency translation	—	—	(1)%	(2)%
Acquisitions and divestitures, net	17 %	7 %	6 %	1 %
Total % Change	22 %	25 %	(2)%	(9)%

2017 compared with 2016

Safety and Productivity Solutions sales increased primarily due to acquisitions and organic sales volume.

- Sales in Safety increased by 5% (increased 4% organic) due to increased sales volume in the Industrial Safety business, higher distribution in the Retail business, and the favorable impact of foreign currency translation.
-

- Sales in Productivity Solutions increased by 36% (increased 6% organic) principally due to growth from acquisitions (Intelligrated was acquired in August 2016).

Safety and Productivity Solutions segment profit increased due to an increase from operational segment profit and acquisitions. The increase in operational segment profit is driven by higher productivity, net of inflation, and sales volume. Cost of products and services increased primarily due to acquisitions and higher sales volume offset by productivity, net of inflation.

2016 compared with 2015

Safety and Productivity Solutions sales decreased primarily due to decreased sales volumes and the unfavorable impact of foreign currency translation, partially offset by growth from acquisitions.

- Sales in Safety decreased by 3% (decreased 2% organic) due to decreased sales volume in the Industrial Safety business, lower distribution in the Retail business, and the unfavorable impact of foreign currency translation.
- Sales in Productivity Solutions decreased by 1% (decreased 11% organic) principally due to declines in the Productivity Products business, partially offset by growth from acquisitions.

Safety and Productivity Solutions segment profit decreased due to a decrease in operational segment profit and the unfavorable impact of foreign currency translation, partially offset by growth from acquisitions. The decrease in operational segment profit is due to decreased sales volumes, partially offset by price and productivity, net of inflation, and growth from acquisitions. Cost of products and services decreased primarily due to productivity, net of inflation, decreased sales volumes, and the favorable impact of foreign currency translation partially offset by growth from acquisitions.

Repositioning Charges

See Note 3 Repositioning and Other Charges of Notes to Consolidated Financial Statements for a discussion of our repositioning actions and related charges incurred in 2017, 2016 and 2015. These repositioning actions are expected to generate incremental pre-tax savings of $300 million in 2018 compared with 2017 principally from planned workforce reductions. Cash spending related to our repositioning actions was $177 million, $228 million and $118 million in 2017, 2016 and 2015, and was funded through operating cash flows. In 2018, we expect cash spending for repositioning actions to be approximately $250 million and to be funded through operating cash flows.

LIQUIDITY AND CAPITAL RESOURCES

The Company continues to manage its businesses to maximize operating cash flows as the primary source of liquidity. In addition to our available cash and operating cash flows, additional sources of liquidity include committed credit lines, short-term debt from the commercial paper market, long-term borrowings, access to the public debt and equity markets and the ability to access non-U.S. cash as a result of the Tax Act. We continue to balance our cash and financing uses through investment in our existing core businesses, acquisition activity, share repurchases and dividends.

Cash Flow Summary

Our cash flows from operating, investing and financing activities, as reflected in the Consolidated Statement of Cash Flows, are summarized as follows:

	Years Ended December 31,		
	2017	**2016**	**2015**
Cash provided by (used for):			
Operating activities	$ 5,966	$ 5,498	$ 5,519
Investing activities	(3,574)	(3,342)	(6,514)
Financing activities	(3,516)	346	37
Effect of exchange rate changes on cash	340	(114)	(546)
Net (decrease) increase in cash and cash equivalents	$ (784)	$ 2,388	$ (1,504)

2017 compared with 2016

Cash provided by operating activities increased by $468 million primarily due to a $504 million increase in segment profit and a $294 million favorable impact from working capital (favorable accounts payable partially offset by inventory and accounts receivable), partially offset by higher cash tax payments of $609 million.

Cash used for investing activities increased by $232 million primarily due to (i) a net $2,056 million increase in investments, primarily short-term marketable securities, (ii) an increase of $500 million of settlement payments of foreign currency exchange contracts used as economic hedges on certain non-functional currency denominated monetary assets and liabilities and (iii) a decrease in proceeds from the sales of businesses of $296 million (most significantly Honeywell Technology Solutions

Inc. in 2016), partially offset by a decrease in cash paid for acquisitions of $2,491 million (most significantly Intelligrated in 2016).

Cash used for financing activities increased by $3,862 million primarily due to a decrease in the net proceeds from debt issuances of $2,827 million, an increase in net repurchases of common stock of $699 million and an increase in cash dividends paid of $204 million.

2016 compared with 2015

Cash provided by operating activities decreased by $21 million primarily due to a $725 million unfavorable impact from working capital, offset by (i) a $395 million improvement in customer advances and deferred income, (ii) a $171 million increase in net income before the non-cash pension mark-to-market adjustment (iii) the absence of $151 million in OEM incentive payments and (iv) lower cash tax payments of $50 million.

Cash used for investing activities decreased by $3,172 million primarily due to (i) a decrease in cash paid for acquisitions of $2,655 million, most significantly Elster in 2015, (ii) an increase in proceeds from the sales of businesses of $295 million (most significantly Honeywell Technology Solutions Inc.) and (iii) a $384 million favorable change in settlements of foreign currency exchange contracts used as economic hedges on certain non-functional currency denominated monetary assets and liabilities. The decreases were partially offset by a net $146 million increase in investments, primarily short-term marketable securities.

Cash provided by financing activities increased by $309 million primarily due to an increase in the net proceeds from debt issuances of $497 million, partially offset by an increase in cash dividends paid of $189 million including amounts paid to the former UOP Russell LLC noncontrolling shareholder.

Liquidity

Each of our businesses is focused on implementing strategies to increase operating cash flows through revenue growth, margin expansion and improved working capital turnover. Considering the current economic environment in which each of the businesses operate and their business plans and strategies, including the focus on growth, cost reduction and productivity initiatives, we believe that cash balances and operating cash flow will continue to be our principal source of liquidity. In addition to the available cash and operating cash flows, additional sources of liquidity include committed credit lines, short-term debt from the commercial paper markets, long-term borrowings, and access to the public debt and equity markets.

We monitor the third-party depository institutions that hold our cash and cash equivalents on a daily basis. Our emphasis is primarily safety of principal and secondarily maximizing yield of those funds. We diversify our cash and cash equivalents among counterparties to minimize exposure to any one of these entities.

A source of liquidity is our ability to issue short-term debt in the commercial paper market. Commercial paper notes are sold at a discount and have a maturity of not more than 365 days from date of issuance. Borrowings under the commercial paper program are available for general corporate purposes as well as for financing acquisitions. The weighted average interest rate on short-term borrowings and commercial paper outstanding as of December 31, 2017 was (0.17%) and as of December 31, 2016 was (0.13%).

Our ability to access the commercial paper market, and the related cost of these borrowings, is affected by the strength of our credit rating and market conditions. Our credit ratings are periodically reviewed by the major independent debt-rating agencies. As of December 31, 2017, Standard and Poor's (S&P), Fitch, and Moody's have ratings on our long-term debt of A, A and A2 and short-term debt of A-1, F1 and P1. S&P, Fitch and Moody's have Honeywell's rating outlook as "stable." To date, the Company has not experienced any limitations in our ability to access these sources of liquidity.

We also have a current shelf registration statement filed with the Securities and Exchange Commission under which we may issue additional debt securities, common stock and preferred stock that may be offered in one or more offerings on terms to be determined at the time of the offering. Net proceeds of any offering would be used for general corporate purposes, including repayment of existing indebtedness, share repurchases, capital expenditures and acquisitions.

See Note 2 Acquisitions and Divestitures and Note 12 Long-term Debt and Credit Agreements of Notes to Consolidated Financial Statements for additional discussion of items impacting our liquidity.

In 2017, the Company repurchased $2,889 million of outstanding shares to offset the dilutive impact of employee stock based compensation plans, including option exercises, restricted unit vesting and matching contributions under our savings plans. Additionally, we sought to reduce share count via share repurchases as and when attractive opportunities arose. In December 2017, the Board of Directors authorized the repurchase of up to a total of $8 billion of Honeywell common stock, of which $7.7

billion remained available as of December 31, 2017 for additional share repurchases. This authorization included amounts remaining under and replaced the previously approved share repurchase program. Honeywell presently expects to repurchase outstanding shares from time to time to generally offset the dilutive impact of employee stock based compensation plans, including option exercises, restricted unit vesting and matching contributions under our savings plans. We will continue to seek to reduce share count via share repurchases as and when attractive opportunities arise.

At December 31, 2017, a substantial portion of the Company’s cash and cash equivalents were held by foreign subsidiaries. As a result of the Tax Act, the Company no longer intends to permanently reinvest its historical foreign earnings and plans to repatriate at least $7 billion of such earnings to the U.S. over the next two years.

In addition to our normal operating cash requirements, our principal future cash requirements will be to fund capital expenditures, dividends, strategic acquisitions, share repurchases, employee benefit obligations, environmental remediation costs, asbestos claims, severance and exit costs related to repositioning actions and debt repayments.

Specifically, we expect our primary cash requirements in 2018 to be as follows:

- Capital expenditures—we expect to spend approximately $900 million for capital expenditures in 2018 primarily for growth, production and capacity expansion, cost reduction, maintenance, and replacement.
- Share repurchases—under the Company's share repurchase program, $7.7 billion is available as of December 31, 2017 for additional share repurchases. Honeywell presently expects to repurchase outstanding shares from time to time to offset the dilutive impact of employee stock-based compensation plans, including option exercises, restricted unit vesting and matching contributions under our savings plans. Additionally, we will seek to reduce share count via share repurchases as and when attractive opportunities arise. The amount and timing of future repurchases may vary depending on market conditions and our level of operating, financing and other investing activities.
- Dividends—we increased our quarterly dividend rate by 12% to $.745 per share of common stock effective with the fourth quarter 2017 dividend. The Company intends to continue to pay quarterly dividends in 2018.
- Asbestos claims—we expect our cash spending for asbestos claims and our cash receipts for related insurance recoveries to be approximately $350 million and $24 million in 2018.
- Pension contributions—in 2018, we are not required to make contributions to our U.S. pension plans. We plan to make contributions of cash and/or marketable securities of approximately $140 million ($99 million of marketable securities were contributed in January 2018) to our non-U.S. plans to satisfy regulatory funding standards. The timing and amount of contributions to both our U.S. and non-U.S. plans may be impacted by a number of factors, including the funded status of the plans.
- Repositioning actions—we expect that cash spending for severance and other exit costs necessary to execute repositioning actions will be approximately $250 million in 2018.
- Environmental remediation costs—we expect to spend approximately $225 million in 2018 for remedial response and voluntary clean-up costs.
- Spin-off separation costs—we expect to incur significant cash expenditures associated with the announced spin-off transactions, including third party professional services and tax costs, the amounts of which are still being determined.

We continuously assess the relative strength of each business in our portfolio as to strategic fit, market position, profit and cash flow contribution in order to upgrade our combined portfolio and identify business units that will most benefit from increased investment. We identify acquisition candidates that will further our strategic plan and strengthen our existing core businesses. We also identify businesses that do not fit into our long-term strategic plan based on their market position, relative profitability or growth potential. These businesses are considered for potential divestiture, restructuring or other repositioning actions subject to regulatory constraints. In 2016, we realized $565 million in cash proceeds from sales and a spin-off of non-strategic businesses.

Based on past performance and current expectations, we believe that our operating cash flows will be sufficient to meet our future operating cash needs. Our available cash, committed credit lines and access to the public debt and equity markets, provide additional sources of short-term and long-term liquidity to fund current operations, debt maturities, and future investment opportunities.

Contractual Obligations and Probable Liability Payments

Following is a summary of our significant contractual obligations and probable liability payments at December 31, 2017:

	Total(6)	Payments by Period			Thereafter
		2018	2019-2020	2021-2022	
Long-term debt, including capitalized leases(1)	$ 13,924	$ 1,351	$ 4,225	$ 2,310	$ 6,038
Interest payments on long-term debt, including capitalized leases	3,267	307	559	422	1,979
Minimum operating lease payments	1,126	295	387	218	226
Purchase obligations(2)	1,713	819	523	323	48
Estimated environmental liability payments(3)	595	226	271	89	9
Asbestos related liability payments(4)	1,523	350	731	407	35
Asbestos insurance recoveries(5)	(435)	(24)	(114)	(84)	(213)
	$ 21,713	$ 3,324	$ 6,582	$ 3,685	$ 8,122

(1) Assumes all long-term debt is outstanding until scheduled maturity.

(2) Purchase obligations are entered into with various vendors in the normal course of business and are consistent with our expected requirements.

(3) The payment amounts in the table only reflect the environmental liabilities which are probable and reasonably estimable as of December 31, 2017.

(4) These amounts are estimates of asbestos related cash payments for NARCO and Bendix based on our asbestos related liabilities which are probable and reasonably estimable as of December 31, 2017. See Asbestos Matters in Note 19 Commitments and Contingencies of Notes to Consolidated Financial Statements for additional information.

(5) These amounts represent our insurance recoveries that are deemed probable for asbestos related liabilities as of December 31, 2017. See Asbestos Matters in Note 19 Commitments and Contingencies of Notes to Consolidated Financial Statements for additional information.

(6) The table excludes tax liability payments, including those for unrecognized tax benefits. See Note 5 Income Taxes of Notes to Consolidated Financial Statements for additional information.

Environmental Matters

Accruals for environmental matters deemed probable and reasonably estimable were $287 million, $195 million and $194 million in 2017, 2016 and 2015. In addition, in 2017 and 2016 we incurred operating costs for ongoing businesses of approximately $82 million and $83 million relating to compliance with environmental regulations.

Spending related to known environmental matters was $212 million, $228 million and $273 million in 2017, 2016 and 2015 and is estimated to be approximately $225 million in 2018. We expect to fund expenditures for these environmental matters from operating cash flow. The timing of cash expenditures depends on several factors, including the timing of litigation and settlements of remediation liability, personal injury and property damage claims, regulatory approval of cleanup projects, execution timeframe of projects, remedial techniques to be utilized and agreement with other parties.

See Note 19 Commitments and Contingencies of Notes to Consolidated Financial Statements for further discussion of our environmental matters.

Financial Instruments

The following table illustrates the potential change in fair value for interest rate sensitive instruments based on a hypothetical immediate one percentage point increase in interest rates across all maturities and the potential change in fair value for foreign exchange rate sensitive instruments based on a 10% weakening of the U.S. Dollar versus local currency exchange rates across all maturities at December 31, 2017 and 2016.

	Face or Notional Amount	Carrying Value(1)	Fair Value(1)	Estimated Increase (Decrease) in Fair Value(2)
December 31, 2017				
Interest Rate Sensitive Instruments				
Long-term debt (including current maturities)	$ 13,924	$ (13,924)	$ (14,695)	$ (782)
Interest rate swap agreements	2,600	(8)	(8)	(233)
Foreign Exchange Rate Sensitive Instruments				
Foreign currency exchange contracts(3)	9,273	(53)	(53)	(58)
December 31, 2016				
Interest Rate Sensitive Instruments				
Long-term debt (including current maturities)	$ 12,409	$ (12,409)	$ (13,008)	$ (537)
Interest rate swap agreements	1,850	21	21	(112)
Foreign Exchange Rate Sensitive Instruments				
Foreign currency exchange contracts(3)	9,554	150	150	(195)

(1) Asset or (liability).

(2) A hypothetical immediate one percentage point decrease in interest rates across all maturities and a potential change in fair value of foreign exchange rate sensitive instruments based on a 10% strengthening of the U.S. dollar versus

local currency exchange rates across all maturities will result in a change in fair value equal to the inverse of the amount disclosed in the table.

(3) Changes in the fair value of foreign currency exchange contracts are offset by changes in the fair value, cash flows, or net investments of underlying hedged foreign currency transactions or foreign operations.

See Note 14 Financial Instruments and Fair Value Measures of Notes to Consolidated Financial Statements for further discussion on the agreements.

CRITICAL ACCOUNTING POLICIES

The preparation of our consolidated financial statements in accordance with generally accepted accounting principles is based on the selection and application of accounting policies that require us to make significant estimates and assumptions about the effects of matters that are inherently uncertain. We consider the accounting policies discussed below to be critical to the understanding of our financial statements. Actual results could differ from our estimates and assumptions, and any such differences could be material to our consolidated financial statements.

Contingent Liabilities—We are subject to a number of lawsuits, investigations and claims (some of which involve substantial dollar amounts) that arise out of the conduct of our global business operations or those of previously owned entities, including matters relating to commercial transactions, government contracts, product liability (including asbestos), prior acquisitions and divestitures, employee benefit plans, intellectual property, legal and environmental, health and safety matters. We continually assess the likelihood of any adverse judgments or outcomes to our contingencies, as well as potential amounts or ranges of probable losses, and recognize a liability, if any, for these contingencies based on a thorough analysis of each matter with the assistance of outside legal counsel and, if applicable, other experts. Such analysis includes making judgments concerning matters such as the costs associated with environmental matters, the outcome of negotiations, the number and cost of pending and future asbestos claims, and the impact of evidentiary requirements. Because most contingencies are resolved over long periods of time, liabilities may change in the future due to new developments (including new discovery of facts, changes in legislation and outcomes of similar cases through the judicial system), changes in assumptions or changes in our settlement strategy. See Note 19 Commitments and Contingencies of Notes to Consolidated Financial Statements for a discussion of management's judgment applied in the recognition and measurement of our environmental and asbestos liabilities which represent our most significant contingencies.

Asbestos Related Contingencies and Insurance Recoveries—Honeywell's involvement in asbestos related personal injury actions relates to two predecessor companies. Regarding North American Refractories Company ("NARCO") asbestos related claims, we accrued for pending claims based on terms and conditions in agreements with NARCO, its former parent company, and certain asbestos claimants, and an estimate of the unsettled claims pending as of the time NARCO filed for bankruptcy protection. We also accrued for the estimated value of future NARCO asbestos related claims expected to be asserted against the NARCO Trust. The estimate of future NARCO claims was prepared in 2002, in the same year NARCO filed for bankruptcy protection, using NARCO tort system litigation experience based on a commonly accepted methodology used by numerous bankruptcy courts addressing 524(g) trusts. Accordingly, the estimated value of future NARCO asbestos claims was prepared before there was data on claims filings and payment rates in the NARCO Trust under the Trust Distribution Procedures and also prepared when the stay of all NARCO asbestos claims was in effect (which remained in effect until NARCO emerged from Bankruptcy protection). Some critical assumptions underlying this commonly accepted methodology included claims filing rates, disease criteria and payment values contained in the Trust Distribution Procedures, estimated approval rates of claims submitted to the NARCO Trust and epidemiological studies estimating disease instances. The estimated value of the future NARCO liability reflects claims expected to be asserted against NARCO over a fifteen year period. This projection resulted in a range of estimated liability of $743 million to $961 million. We believe that no amount within this range is a better estimate than any other amount and accordingly, we have recorded the minimum amount in the range. Given the Trust's lack of sufficient claims processing experience since NARCO emerged from bankruptcy protection, it is not yet possible to reliably estimate future claim costs based on actual Trust experience. Regarding Bendix Friction Materials ("Bendix") asbestos related claims, we accrued for the estimated value of pending claims using average resolution values for the previous five years. We also accrued for the estimated value of future anticipated claims related to Bendix for the next five years based on historic claims filing experience and dismissal rates, disease classifications, and average resolution values in the tort system for the previous five years. In light of the uncertainties inherent in making long-term projections, as well as certain factors unique to friction product asbestos claims, we do not believe that we have a reasonable basis for estimating asbestos claims beyond the next five years.

In connection with the recognition of liabilities for asbestos related matters, we record asbestos related insurance recoveries that are deemed probable. In assessing the probability of insurance recovery, we make judgments concerning insurance coverage that we believe are reasonable and consistent with our historical dealings and our knowledge of any pertinent solvency issues surrounding insurers. While the substantial majority of our insurance carriers are solvent, some of our individual carriers are insolvent, which has been considered in our analysis of probable recoveries. Projecting future events is subject to various uncertainties that could cause the insurance recovery on asbestos related liabilities to be higher or lower than that projected and recorded. Given the inherent uncertainty in making future projections, we reevaluate our projections concerning our probable insurance recoveries in light of any changes to the projected liability, our recovery experience or other relevant factors that may impact future insurance recoveries.

See Note 19 Commitments and Contingencies of Notes to Consolidated Financial Statements for a discussion of management’s judgments applied in the recognition and measurement of our asbestos-related liabilities and related insurance recoveries.

Defined Benefit Pension Plans—We sponsor both funded and unfunded U.S. and non-U.S. defined benefit pension plans. For financial reporting purposes, net periodic pension (income) expense is calculated annually based upon a number of actuarial assumptions, including a discount rate for plan obligations and an expected long-term rate of return on plan assets. Changes in the discount rate and expected long-term rate of return on plan assets could materially affect the annual pension (income) expense amount. Annual pension (income) expense is comprised of service and interest cost, assumed return on plan assets, prior service amortization (Pension Ongoing (Income) Expense) and a potential mark-to-market adjustment (MTM Adjustment).

The key assumptions used in developing our 2017, 2016 and 2015 net periodic pension (income) expense for our U.S. plans included the following:

	2017	2016	2015
Discount Rate:			
Projected benefit obligation	4.20 %	4.46 %	4.08 %
Service cost(1)	4.42 %	4.69 %	N/A
Interest cost(1)	3.49 %	3.59 %	N/A
Assets:			
Expected rate of return	7.75 %	7.75 %	7.75 %
Actual rate of return	20.5 %	9.7 %	1.5 %
Actual 10 year average annual compounded rate of return	7.4 %	6.4 %	6.8 %

(1) N/A in 2015 as the discount rate methodology was changed in fourth quarter of 2015. See Note 20 Pension and Other Postretirement Benefits of Notes to Consolidated Financial Statements.

The MTM Adjustment represents the recognition of net actuarial gains or losses in excess of 10% of the greater of the fair value of plan assets or the plans' projected benefit obligation (the corridor). Net actuarial gains and losses occur when the actual experience differs from any of the various assumptions used to value our pension plans or when assumptions change. The primary factors contributing to actuarial gains and losses are changes in the discount rate used to value pension obligations as of the measurement date each year and the difference between expected and actual returns on plan assets. The mark-to-market accounting method results in the potential for volatile and difficult to forecast MTM Adjustments. MTM charges were $87 million, $273 million and $67 million in 2017, 2016 and 2015.

We determine the expected long-term rate of return on plan assets utilizing historical plan asset returns over varying long-term periods combined with our expectations of future market conditions and asset mix considerations (see Note 20 Pension and Other Postretirement Benefits of Notes to Consolidated Financial Statements for details on the actual various asset classes and targeted asset allocation percentages for our pension plans). We plan to continue to use an expected rate of return on plan assets of 7.75% for 2018 as this is a long-term rate based on historical plan asset returns over varying long term periods combined with our expectations of future market conditions and the asset mix of the plan's investments.

The discount rate reflects the market rate on December 31 (measurement date) for high-quality fixed-income investments with maturities corresponding to our benefit obligations and is subject to change each year. The discount rate can be volatile from year to year as it is determined based upon prevailing interest rates as of the measurement date. We used a 3.68% discount rate to determine benefit obligations as of December 31, 2017, reflecting the decrease in the market interest rate environment since the prior year-end.

In addition to the potential for MTM Adjustments, changes in our expected rate of return on plan assets and discount rate resulting from economic events also affects future pension ongoing (income) expense. The following table highlights the sensitivity of our U.S. pension obligations and ongoing (income) expense to changes in these assumptions, assuming all other assumptions remain constant. These estimates exclude any potential MTM Adjustment:

Change in Assumption	**Impact on 2018 Pension Ongoing Expense**	**Impact on PBO**
0.25 percentage point decrease in discount rate	Decrease $22 million	Increase $520 million
0.25 percentage point increase in discount rate	Increase $22 million	Decrease $510 million
0.25 percentage point decrease in expected rate of return on assets	Increase $47 million	—
0.25 percentage point increase in expected rate of return on assets	Decrease $46 million	—

Pension ongoing income for all of our pension plans is expected to be approximately $984 million in 2018 compared with pension ongoing income of $713 million in 2017. The expected increase is primarily due to higher asset returns in 2017 in our U.S. and UK plans. Also, if required, an MTM Adjustment will be recorded in the fourth quarter of 2018 in accordance with our pension accounting method as previously described. It is difficult to reliably forecast or predict whether there will be a MTM Adjustment in 2018, and if one is required, what the magnitude of such adjustment will be. MTM Adjustments are primarily driven by events and circumstances beyond the control of the Company such as changes in interest rates and the performance of the financial markets.

Long-Lived Assets (including Tangible and Finite-Lived Intangible Assets)—The determination of useful lives (for depreciation/amortization purposes) and whether or not tangible and intangible assets are impaired involves the use of accounting estimates and assumptions, changes in which could materially impact our financial condition or operating performance if actual results differ from such estimates and assumptions. We evaluate the recoverability of the carrying amount of our long-lived assets whenever events or changes in circumstances indicate that the carrying amount of a long-lived asset group may not be fully recoverable. The principal factors in considering when to perform an impairment review are as follows:

- Significant under-performance (i.e., declines in sales, earnings or cash flows) of a business or product line in relation to expectations;
- Annual operating plans or five-year strategic plans that indicate an unfavorable trend in operating performance of a business or product line;
- Significant negative industry or economic trends; or
- Significant changes or planned changes in our use of the assets.

Once it is determined that an impairment review is necessary, recoverability of assets is measured by comparing the carrying amount of the asset grouping to the estimated future undiscounted cash flows. If the carrying amount exceeds the estimated future undiscounted cash flows, the asset grouping is considered to be impaired. The impairment is then measured as the difference between the carrying amount of the asset grouping and its fair value. We endeavor to utilize the best information available to measure fair value, which is usually either market prices (if available), level 1 or level 2 of the fair value hierarchy, or an estimate of the future discounted cash flow, level 3 of the fair value hierarchy. The key estimates in our discounted cash flow analysis include assumptions as to expected industry and business growth rates, sales volume, selling prices and costs, cash flows, and the discount rate selected. These estimates are subject to changes in the economic environment, including market interest rates and expected volatility. Management believes the estimates of future cash flows and fair values are reasonable; however, changes in estimates due to variance from assumptions could materially affect the valuations.

Goodwill and Indefinite-Lived Intangible Assets Impairment Testing—Goodwill and intangible assets deemed to have indefinite lives are not amortized, but are subject to annual, or more frequent if necessary, impairment testing. In testing goodwill and indefinite-lived intangible assets, the fair value is estimated utilizing a discounted cash flow approach utilizing cash flow forecasts in our five year strategic and annual operating plans adjusted for terminal value assumptions. These impairment tests involve the use of accounting estimates and assumptions, changes in which could materially impact our financial condition or operating performance if actual results differ from such estimates and assumptions. To address this uncertainty we perform sensitivity analysis on key estimates and assumptions.

Income Taxes—On a recurring basis, we assess the need for a valuation allowance against our deferred tax assets by considering all available positive and negative evidence, such as past operating results, projections of future taxable income, enacted tax law changes and the feasibility and impact of tax planning initiatives. Our projections of future taxable income include a number of estimates and assumptions regarding our volume, pricing and costs, as well as the timing and amount of reversals of taxable temporary differences.

Sales Recognition on Long-Term Contracts—In 2017, we recognized approximately 16% of our total net sales using the percentage-of-completion method for long-term contracts. These long-term contracts are measured on the cost-to-cost basis for engineering-type contracts and the units-of-delivery basis for production-type contracts. Accounting for these contracts involves management judgment in estimating total contract revenue and cost. Contract revenues are largely determined by negotiated contract prices and quantities, modified by our assumptions regarding contract options, change orders, incentive and award provisions associated with technical performance and price adjustment clauses (such as inflation or index-based clauses). Contract costs are incurred over a period of time, which can be several years, and the estimation of these costs requires management judgment. Cost estimates are largely based on negotiated or estimated purchase contract terms, historical performance trends and other economic projections. Significant factors that influence these estimates include inflationary trends, technical and schedule risk, internal and subcontractor performance trends, business volume assumptions, asset utilization, and anticipated labor agreements. Revenue and cost estimates are regularly monitored and revised based on changes in circumstances. Anticipated losses on long-term contracts are recognized when such losses become evident. We maintain financial controls over the customer qualification, contract pricing and estimation processes to reduce the risk of contract losses.

OTHER MATTERS

Litigation

See Note 19 Commitments and Contingencies of Notes to Consolidated Financial Statements for a discussion of environmental, asbestos and other litigation matters.

Recent Accounting Pronouncements

See Note 1 Summary of Significant Accounting Policies of Notes to Consolidated Financial Statements for a discussion of recent accounting pronouncements.

Item 7A. Quantitative and Qualitative Disclosures About Market Risks

Information relating to market risks is included in Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations under the caption “Financial Instruments”.

ITEM 8. Financial Statements and Supplementary Data

HONEYWELL INTERNATIONAL INC.
CONSOLIDATED STATEMENT OF OPERATIONS

	Years Ended December 31,		
	2017	2016	2015
	(Dollars in millions, except per share amounts)		
Product sales	$ 32,317	$ 31,362	$ 30,695
Service sales	8,217	7,940	7,886
Net sales	40,534	39,302	38,581
Costs, expenses and other			
Cost of products sold	22,659	22,170	21,775
Cost of services sold	4,916	4,980	4,972
	27,575	27,150	26,747
Selling, general and administrative expenses	5,808	5,469	5,006
Other (income) expense	(67)	(102)	(68)
Interest and other financial charges	316	338	310
	33,632	32,855	31,995
Income before taxes	6,902	6,447	6,586

Tax expense	5,204	1,601	1,739
Net income	1,698	4,846	4,847
Less: Net income attributable to the noncontrolling interest	43	37	79
Net income attributable to Honeywell	$ 1,655	$ 4,809	$ 4,768
Earnings per share of common stock—basic	$ 2.17	$ 6.29	$ 6.11
Earnings per share of common stock—assuming dilution	$ 2.14	$ 6.20	$ 6.04
Cash dividends per share of common stock	$ 2.74	$ 2.45	$ 2.15

The Notes to Consolidated Financial Statements are an integral part of this statement.

HONEYWELL INTERNATIONAL INC.
CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

	Years Ended December 31,		
	2017	2016	2015
	(Dollars in millions)		
Net income	$ 1,698	$ 4,846	$ 4,847
Other comprehensive income (loss), net of tax			
Foreign exchange translation adjustment	(37)	(52)	(1,152)
Actuarial gains/(losses)	753	(443)	(464)
Prior service (cost) credit	(59)	(18)	446
Prior service credit recognized during year	(70)	(78)	(13)
Actuarial losses recognized during year	83	236	72
Settlements and curtailments	19	(5)	2
Foreign exchange translation and other	(49)	73	41
Pensions and other postretirement benefit adjustments	677	(235)	84
Effective portion of cash flow hedges recognized in other comprehensive income	(101)	103	91
Less: reclassification adjustment for (losses) gains included in net income	60	(5)	99
Changes in fair value of effective cash flow hedges	(161)	108	(8)

Other comprehensive income (loss), net of tax	479	(179)	(1,076)
Comprehensive income	2,177	4,667	3,771
Less: Comprehensive income attributable to the noncontrolling interest	51	29	73
Comprehensive income attributable to Honeywell	$ 2,126	$ 4,638	$ 3,698

The Notes to Consolidated Financial Statements are an integral part of this statement.

HONEYWELL INTERNATIONAL INC.
CONSOLIDATED BALANCE SHEET

	December 31,	
	2017	2016
	(Dollars in millions)	
ASSETS		
Current assets:		
Cash and cash equivalents	$ 7,059	$ 7,843
Short-term investments	3,758	1,520
Accounts receivable—net	8,866	8,177
Inventories	4,613	4,366
Other current assets	1,706	1,152
Total current assets	26,002	23,058
Investments and long-term receivables	667	587
Property, plant and equipment—net	5,926	5,793
Goodwill	18,277	17,707
Other intangible assets—net	4,496	4,634
Insurance recoveries for asbestos related liabilities	411	417

Deferred income taxes	236	347
Other assets	3,372	1,603
Total assets	$ 59,387	$ 54,146
LIABILITIES		
Current liabilities:		
Accounts payable	$ 6,584	$ 5,690
Commercial paper and other short-term borrowings	3,958	3,366
Current maturities of long-term debt	1,351	227
Accrued liabilities	6,968	7,048
Total current liabilities	18,861	16,331
Long-term debt	12,573	12,182
Deferred income taxes	2,894	486
Postretirement benefit obligations other than pensions	512	473
Asbestos related liabilities	1,173	1,014
Other liabilities	5,930	4,110
Redeemable noncontrolling interest	5	3
SHAREOWNERS' EQUITY		
Capital—common stock issued		

	958	958
—additional paid-in capital	6,212	5,781
Common stock held in treasury, at cost	(15,914)	(13,366)
Accumulated other comprehensive income (loss)	(2,235)	(2,714)
Retained earnings	28,255	28,710
Total Honeywell shareowners' equity	17,276	19,369
Noncontrolling interest	163	178
Total shareowners' equity	17,439	19,547
Total liabilities, redeemable noncontrolling interest and shareowners' equity	$ 59,387	$ 54,146

The Notes to Consolidated Financial Statements are an integral part of this statement.

HONEYWELL INTERNATIONAL INC.
CONSOLIDATED STATEMENT OF CASH FLOWS

	Years Ended December 31,		
	2017	2016	2015
	(Dollars in millions)		
Cash flows from operating activities:			
Net income	$ 1,698	$ 4,846	$ 4,847
Less: Net income attributable to the noncontrolling interest	43	37	79
Net income attributable to Honeywell	1,655	4,809	4,768
Adjustments to reconcile net income attributable to Honeywell to net cash provided by operating activities:			
Depreciation	717	726	672
Amortization	398	304	211
(Gain) loss on sale of non-strategic businesses and assets	7	(178)	1
Repositioning and other charges	1,021	695	546
Net payments for repositioning and other charges	(628)	(625)	(537)
Pension and other postretirement (income) expense	(647)	(360)	(323)
Pension and other postretirement benefit payments	(106)	(143)	(122)
Stock compensation expense	176	184	175

Deferred income taxes	2,294	76	315
Excess tax benefits from share based payment arrangements	—	—	(81)
Other	1,642	194	57
Changes in assets and liabilities, net of the effects of acquisitions and divestitures:			
Accounts receivable	(682)	(547)	201
Inventories	(259)	(18)	230
Other current assets	(568)	(106)	90
Accounts payable	924	254	(17)
Accrued liabilities	22	233	(667)
Net cash provided by operating activities	5,966	5,498	5,519
Cash flows from investing activities:			
Expenditures for property, plant and equipment	(1,031)	(1,095)	(1,073)
Proceeds from disposals of property, plant and equipment	86	21	15
Increase in investments	(6,743)	(3,954)	(6,714)
Decrease in investments	4,414	3,681	6,587
Cash paid for acquisitions, net of cash acquired	(82)	(2,573)	(5,228)
Proceeds from sales of businesses, net of fees paid	—	296	1

Other	(218)	282	(102)
Net cash used for investing activities	(3,574)	(3,342)	(6,514)
Cash flows from financing activities:			
Proceeds from issuance of commercial paper and other short-term borrowings	13,701	18,997	12,992
Payments of commercial paper and other short-term borrowings	(13,532)	(21,461)	(8,727)
Proceeds from issuance of common stock	520	409	186
Proceeds from issuance of long-term debt	1,238	9,245	60
Payments of long-term debt	(292)	(2,839)	(880)
Excess tax benefits from share based payment arrangements	—	—	81
Repurchases of common stock	(2,889)	(2,079)	(1,884)
Cash dividends paid	(2,119)	(1,915)	(1,726)
Payments to purchase the noncontrolling interest	—	(238)	—
AdvanSix pre-separation funding	—	269	—
AdvanSix pre-spin borrowing	—	38	—
AdvanSix cash at spin-off	—	(38)	—
Other	(143)	(42)	(65)
Net cash (used for) provided by financing activities	(3,516)	346	37

Effect of foreign exchange rate changes on cash and cash equivalents	340	(114)	(546)
Net (decrease) increase in cash and cash equivalents	(784)	2,388	(1,504)
Cash and cash equivalents at beginning of period	7,843	5,455	6,959
Cash and cash equivalents at end of period	$ 7,059	$ 7,843	$ 5,455

The Notes to Consolidated Financial Statements are an integral part of this statement.

HONEYWELL INTERNATIONAL INC.
CONSOLIDATED STATEMENT OF SHAREOWNERS' EQUITY

	Years Ended December 31,					
	2017		2016		2015	
	Shares	$	Shares	$	Shares	$
	(in millions)					
Common stock, par value	957.6	958	957.6	958	957.6	958
Additional paid-in capital						
Beginning balance		5,781		5,377		5,038
Issued for employee savings and option plans		255		183		164
Stock-based compensation expense		176		171		175
Other owner changes		—		50		—
Ending balance		6,212		5,781		5,377
Treasury stock						
Beginning balance	(196.8)	(13,366)	(187.2)	(11,664)	(175.4)	(9,995)
Reacquired stock or repurchases of common stock	(20.5)	(2,889)	(19.3)	(2,079)	(18.8)	(1,884)
Issued for employee savings and option plans	10.6	341	9.7	377	6.7	215

Other owner changes	—	—	—	—	0.3	—
Ending balance	(206.7)	(15,914)	(196.8)	(13,366)	(187.2)	(11,664)
Retained earnings						
Beginning balance		28,710		26,147		23,115
Net income attributable to Honeywell		1,655		4,809		4,768
Dividends on common stock		(2,101)		(1,883)		(1,686)
AdvanSix spin-off		(9)		(362)		—
Redemption value adjustment		—		(1)		(50)
Ending balance		28,255		28,710		26,147
Accumulated other comprehensive income (loss)						
Beginning balance		(2,714)		(2,535)		(1,459)
Foreign exchange translation adjustment		(37)		(52)		(1,152)
Pensions and other postretirement benefit adjustments		677		(235)		84
Changes in fair value of effective cash flow hedges		(161)		108		(8)
Ending balance		(2,235)		(2,714)		(2,535)

Noncontrolling interest						
Beginning balance		178		135		127
Acquisitions		—		1		3
Net income attributable to noncontrolling interest		43		37		35
Foreign exchange translation adjustment		8		(8)		(6)
Dividends paid		(55)		(17)		(26)
Other owner changes		(11)		30		2
Ending balance		163		178		135
Total shareowners' equity	750.9	17,439	760.8	19,547	770.4	18,418

The Notes to Consolidated Financial Statements are an integral part of this statement.

HONEYWELL INTERNATIONAL INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(Dollars in millions, except per share amounts)

Note 1. Summary of Significant Accounting Policies

Accounting Principles—The financial statements and accompanying notes are prepared in accordance with accounting principles generally accepted in the United States of America. The following is a description of Honeywell's significant accounting policies.

Principles of Consolidation—The consolidated financial statements include the accounts of Honeywell International Inc. and all of its subsidiaries and entities in which a controlling interest is maintained. Our consolidation policy requires equity investments that we exercise significant influence over but do not control the investee and are not the primary beneficiary of the investee's activities to be accounted for using the equity method. Investments through which we are not able to exercise significant influence over the investee and which we do not have readily determinable fair values are accounted for under the cost method. All intercompany transactions and balances are eliminated in consolidation.

Property, Plant and Equipment—Property, plant and equipment are recorded at cost, including any asset retirement obligations, less accumulated depreciation. For financial reporting, the straight-line method of depreciation is used over the estimated useful lives of 10 to 50 years for buildings and improvements and 2 to 16 years for machinery and equipment. Recognition of the fair value of obligations associated with the retirement of tangible long-lived assets is required when there is a legal obligation to incur such costs. Upon initial recognition of a liability, the cost is capitalized as part of the related long-lived asset and depreciated over the corresponding asset's useful life.

Goodwill and Indefinite-Lived Intangible Assets—Goodwill and indefinite-lived intangible assets are subject to impairment testing annually as of March 31, and whenever events or changes in circumstances indicate that the carrying amount may not be fully recoverable. This testing compares carrying values to fair values and, when appropriate, the carrying value of these assets is reduced to fair value. We completed our annual goodwill impairment test as of March 31, 2017 and determined that there was no impairment as of that date.

Other Intangible Assets with Determinable Lives—Other intangible assets with determinable lives consist of customer lists, technology, patents and trademarks and other intangibles and are amortized over their estimated useful lives, ranging from 2 to 24 years.

Sales Recognition—Product and service sales are recognized when persuasive evidence of an arrangement exists, product delivery has occurred or services have been rendered, pricing is fixed or determinable, and collection is reasonably assured. Service sales, principally representing repair, maintenance and engineering activities are recognized over the contractual period or as services are rendered. Sales under long-term contracts are recorded on a percentage-of-completion method measured on the cost-to-cost basis for engineering-type contracts and the units-of-delivery basis for production-type contracts. Provisions for anticipated losses on long-term contracts are recorded in full when such losses become evident. Revenues from contracts with multiple element arrangements are recognized as each element is earned based on the relative fair value of each element provided the delivered elements have value to customers on a standalone basis. Amounts allocated to each element are based on its objectively determined fair value, such as the sales price for the product or service when it is sold separately or competitor prices for similar products or services.

Environmental—We accrue costs related to environmental matters when it is probable that we have incurred a liability related to a contaminated site and the amount can be reasonably estimated. For additional information, see Note 19 Commitments and Contingencies.

Asbestos Related Contingencies and Insurance Recoveries—We recognize a liability for any asbestos related contingency that is probable of occurrence and reasonably estimable. In connection with the recognition of liabilities for asbestos related matters, we record asbestos related insurance recoveries that are deemed probable. For additional information, see Note 19 Commitments and Contingencies.

Aerospace Sales Incentives—We provide sales incentives to commercial aircraft manufacturers and airlines in connection with their selection of our aircraft equipment, predominately wheel and braking system hardware, avionics, and auxiliary power units, for installation on commercial aircraft. These incentives consist of free or deeply discounted products, credits for future purchases of product and upfront cash payments. These costs are recognized in the period incurred as cost of products sold or as a reduction to sales, as appropriate.

Research and Development—Research and development costs for company-sponsored research and development projects are expensed as incurred. Such costs are principally included in cost of products sold and were $1,835 million, $1,864 million and $1,856 million in 2017, 2016 and 2015. The 2016 research and development costs previously disclosed have been revised to reflect the amounts recorded in the 2016 Consolidated Statement of Operations and had no impact on the results of operations.

Stock-Based Compensation Plans—The principal awards issued under our stock-based compensation plans, which are described in Note 18 Stock-Based Compensation Plans, are non-qualified stock options and restricted stock units. The cost for such awards is measured at the grant date based on the fair value of the award. The value of the portion of the award that is ultimately expected to vest is recognized as expense over the requisite service periods (generally the vesting period of the equity award) and is included in selling, general and administrative expenses. Forfeitures are estimated at the time of grant to recognize expense for those awards that are expected to vest and are based on our historical forfeiture rates.

Pension Benefits—We recognize net actuarial gains or losses in excess of 10% of the greater of the fair value of plan assets or the plans' projected benefit obligation (the corridor) annually in the fourth quarter each year (MTM Adjustment), and, if applicable, in any quarter in which an interim remeasurement is triggered. The remaining components of pension (income) expense, primarily service and interest costs and assumed return on plan assets, are recognized on a quarterly basis (Pension ongoing (income) expense).

Foreign Currency Translation—Assets and liabilities of subsidiaries operating outside the United States with a functional currency other than U.S. Dollars are translated into U.S. Dollars using year-end exchange rates. Sales, costs and expenses are translated at the average exchange rates in effect during the year. Foreign currency translation gains and losses are included as a component of Accumulated other comprehensive income (loss). For subsidiaries operating in highly inflationary environments, inventories and property, plant and equipment, including related expenses, are remeasured at the exchange rate in effect on the date the assets were acquired, while monetary assets and liabilities are remeasured at year-end exchange rates. Remeasurement adjustments for these subsidiaries are included in earnings.

Derivative Financial Instruments—We minimize our risks from interest and foreign currency exchange rate fluctuations through our normal operating and financing activities and, when deemed appropriate through the use of derivative financial instruments. Derivative financial instruments are used to manage risk and are not used for trading or other speculative purposes. We do not use leveraged derivative financial instruments. Derivative financial instruments that qualify for hedge accounting must be designated and effective as a hedge of the identified risk exposure at the inception of the contract. Accordingly, changes in fair value of the derivative contract must be highly correlated with changes in fair value of the underlying hedged item at inception of the hedge and over the life of the hedge contract.

All derivatives are recorded on the balance sheet as assets or liabilities and measured at fair value. For derivatives designated as hedges of the fair value of assets or liabilities, the changes in fair values of both the derivatives and the hedged items are recorded in current earnings. For derivatives designated as cash flow hedges, the effective portion of the changes in fair value of the derivatives are recorded in Accumulated other comprehensive income (loss) and subsequently recognized in earnings when the hedged items impact earnings. Cash flows of such derivative financial instruments are classified consistent with the underlying hedged item. For derivative instruments that are designated and qualify as a net investment hedge, the effective portion of the derivative's gain or loss is reported as a component of Other comprehensive income (loss) and recorded in Accumulated other comprehensive income (loss). The gain or loss will be subsequently reclassified into net earnings when the hedged net investment is either sold or substantially liquidated.

Income Taxes—Significant judgment is required in evaluating tax positions. We establish additional reserves for income taxes when, despite the belief that tax positions are fully supportable, there remain certain positions that do not meet the minimum recognition threshold. The approach for evaluating certain and uncertain tax positions is defined by the authoritative guidance which determines when a tax position is more likely than not to be sustained upon examination by the applicable taxing authority. In the normal course of business, the Company and its subsidiaries are examined by various federal, state and foreign tax authorities. We regularly assess the potential outcomes of these examinations and any future examinations for the current or prior years in determining the adequacy of our provision for income taxes. We continually assess the likelihood and amount of potential adjustments and adjust the income tax provision, the current tax liability and deferred taxes in the period in which the facts that give rise to a change in estimate become known.

Cash and cash equivalents—Cash and cash equivalents include cash on hand and highly liquid investments having an original maturity of three months or less.

Earnings Per Share—Basic earnings per share is based on the weighted average number of common shares outstanding. Diluted earnings per share is based on the weighted average number of common shares outstanding and all dilutive potential common shares outstanding.

Reclassifications—Certain prior year amounts have been reclassified to conform to the current year presentation.

Recent Accounting Pronouncements—We consider the applicability and impact of all Accounting Standards Updates (ASUs) issued by the Financial Accounting Standards Board (FASB). ASUs not listed below were assessed and determined to be either not applicable or are expected to have minimal impact on our consolidated results of operations, financial position and cash flows (consolidated financial statements).

In May 2014, and in following related amendments, the FASB issued guidance on revenue from contracts with customers that supersedes upon adoption previous revenue recognition guidance, including industry-specific guidance. The underlying principle requires an entity to recognize revenue for the transfer of goods or services to customers at an amount that the entity expects to be entitled to in exchange for those goods or services. The guidance provides a five-step analysis of transactions to determine when and how revenue is recognized. Other major provisions include capitalization of certain contract costs, consideration of time value of money in the transaction price, and in certain circumstances, allowing estimates of variable consideration to be recognized before contingencies are resolved. The guidance also requires enhanced disclosures regarding the nature, amount, timing and uncertainty of revenue and cash flows arising from an entity's contracts with customers.

The Company has completed its evaluation of the new standard and has assessed the impacts of adoption on the Consolidated Financial Statements and disclosures. Based on the evaluation of our current contracts and revenue streams, revenue recognition is mostly consistent under both the previous and new standard, with the exception of two key revenue streams within our Aerospace segment, which are described below.

First, the previous accounting policy for costs incurred for nonrecurring engineering and development activities of our Aerospace products with commercial customers was generally to record the expense as incurred. Any customer funding received for such efforts was recognized when earned as a reduction of cost of sales. Upon adoption of the new standard, the customer funding is generally classified as revenue and not as a reduction of cost of sales. Such revenues are deferred and subsequently recognized as products are delivered to the customers. Additionally, under the new guidance, expenses incurred, up to the customer agreed funded amount, are deferred as an asset and subsequently recognized as cost of sales as products are delivered to the customer. As a result of these changes, both deferred costs (assets) and deferred revenue (liability) increased by approximately $1,090 million effective January 1, 2018. The aforementioned change in classification within the Consolidated Statement of Operations and timing difference in recognition is expected to have a minor impact on our gross margin percentage but no change to gross profit.

Second, the accounting for revenues for our mechanical service programs at our Aerospace segment are impacted. Our previous policy was to recognize revenue over time as costs were incurred (input method). Upon adoption, we continue to recognize revenue over time, but recognition is based on a series of distinct services using the output method. At adoption, this change results in unbilled receivables and deferred revenue being eliminated through retained earnings.

We adopted the new standard effective January 1, 2018 using the modified retrospective transition method. The cumulative effect recorded to the opening balance of retained earnings of the above impacted revenue streams is $75 million.

The disclosures in our notes to Consolidated Financial Statements related to revenue recognition will be significantly expanded under the new standard, specifically around the quantitative and qualitative information about performance obligations, changes in contract assets and liabilities, and disaggregation of revenue.

In February 2016, the FASB issued guidance on accounting for leases which requires lessees to recognize most leases on their balance sheets for the rights and obligations created by those leases. The guidance requires enhanced disclosures regarding the amount, timing, and uncertainty of cash flows arising from leases that will be effective for interim and annual periods beginning after December 15, 2018, with early adoption permitted. We expect to adopt the requirements of the new standard effective January 1, 2019. The guidance requires the use of a modified retrospective approach. We are currently evaluating our lease portfolio to assess overall financial statement impact and planning for adoption and implementation of this standard. We will continue to evaluate the adoption impact of this standard on our consolidated financial position, results of operations, and related notes to financial statements.

In October 2016, the FASB issued an accounting standard update which requires an entity to recognize the income tax consequences of an intra-entity transfer of an asset, other than inventory, at the time the entity transfer occurs rather than when the asset is ultimately transferred to a third party, as required under current U.S. GAAP. The guidance is intended to reduce diversity in practice, particularly for transfers involving intellectual property. Subsequent to 2017 fiscal year, we adopted the accounting standard update as of January 1, 2018. The guidance requires application on a modified retrospective basis. The adoption of this guidance increases our deferred tax assets by approximately $340 million with a cumulative-effect adjustment to retained earnings of the same amount.

In March 2017, the FASB issued guidance on presentation of net periodic pension cost and net periodic postretirement benefit cost. The new standard requires that an employer disaggregate the service cost component of net benefit cost. The employer is required to report the service cost component in the same line item or items in the statement of operations as other compensation costs arising from services rendered by the pertinent employees during the period. The other components of net benefit cost are required to be presented in the statement of operations separately from the service cost component, such as in other income and expense. The guidance is effective for fiscal years beginning after December 15, 2017. Subsequent to 2017 fiscal year, we adopted the accounting standard update as of January 1, 2018. This guidance impacts the presentation of our Consolidated Financial Statements. Our current presentation of the service cost component is consistent with the requirements of the new standard. We will present the other components within Other (income) expense (we currently present the other components within Cost of products and services sold and

Selling, general, and administrative expenses). All components will continue to be excluded from Segment Profit (see Note 20 Pension and Other Postretirement Benefits for components of net period benefit cost).

In August 2017, the FASB issued amendments to hedge accounting guidance. These amendments are intended to better align a company's risk management strategies and financial reporting for hedging relationships. Under the new guidance, more hedging strategies will be eligible for hedge accounting and the application of hedge accounting is simplified. In addition, the new guidance amends presentation and disclosure requirements. The guidance is effective for fiscal years beginning after December 15, 2018 with early adoption permitted, including the interim periods within those years. The guidance requires the use of a modified retrospective approach. We are currently evaluating whether to early adopt the new guidance and the impact of this amendment on our consolidated financial position, results of operations, and related notes to financial statements.

Note 2. Acquisitions and Divestitures

During 2017 there were no significant acquisitions individually or in aggregate. During 2016, we acquired businesses for an aggregate cost (net of cash and debt assumed) of $2,538 million.

In August 2016, the Company acquired Intelligrated, a leading provider of supply chain and warehouse automation technologies, for an aggregate value, net of cash acquired, of $1,488 million. Intelligrated is part of Safety and Productivity Solutions. In the third quarter of 2017, we completed our evaluation of the fair value of all of the assets and liabilities acquired. Management recorded goodwill and intangible assets acquired of, $1,121 million and $507 million, respectively. The Intelligrated identifiable intangible assets primarily include customer relationships, technology, and trade name that are being amortized over their estimated lives ranging from 1 to 15 years using straight line and accelerated amortization methods. The goodwill is non-deductible for tax purposes.

In April 2016, the Company completed the acquisition of Xtralis International Holdings Limited ("Xtralis"), a leading global provider of aspiration smoke detection and perimeter security technologies, for an aggregate cost, net of cash acquired and debt assumed, of $515 million. Xtralis is part of Home and Building Technologies.

In February 2016, the Company acquired 100 percent of the issued and outstanding shares of COM DEV International ("COM DEV"), a leading satellite and space components provider, for an aggregate value, net of cash acquired and debt assumed, of $347 million. COM DEV is part of Aerospace.

In January 2016, the Company acquired the remaining 30 percent noncontrolling interest in UOP Russell LLC, which develops technology and manufactures modular equipment to process natural gas, for $240 million. UOP Russell LLC is part of Performance Materials and Technologies.

In December 2015, the Company completed the acquisition of the Elster Division of Melrose Industries plc ("Elster"), for an aggregate value, net of cash acquired, of $4,899 million. Elster had 2015 revenues of $1,670 million and has been integrated into Home and Building Technologies and

(Dollars in millions, except per share amounts)

Performance Materials and Technologies. The following table summarizes the fair value of the acquired Elster assets and liabilities.

Current assets	$ 519
Intangible assets	2,163
Other noncurrent assets	193
Current liabilities	(566)
Noncurrent liabilities	(973)
Net assets acquired	1,336
Noncontrolling interest	(2)
Goodwill	3,565
Purchase Price	$ 4,899

The Elster identifiable intangible assets primarily include customer relationships, trade names and technology that are being amortized over their estimated lives ranging from 1 to 20 years using straight line and accelerated amortization methods. The goodwill is non-deductible for tax purposes.

On October 1, 2016, the Company completed the tax-free spin-off of its Resins and Chemicals business, part of Performance Materials and Technologies, into a standalone, publicly-traded company (named AdvanSix Inc. (“AdvanSix”)) to Honeywell shareowners. The assets and liabilities associated with AdvanSix have been removed from the Company’s Consolidated Balance Sheet. The results of operations for AdvanSix are included in the Consolidated Statement of Operations through the effective date of the spin-off.

Honeywell shareowners of record as of the close of business on September 16, 2016 received one share of AdvanSix common stock for every 25 shares of Honeywell common stock. Immediately prior to the effective date of the spin-off, AdvanSix incurred debt to make a cash distribution of $269 million to the Company. At the same time, AdvanSix also incurred $38 million of borrowings in order to fund its post spin-off working capital.

In 2016 in connection with the spin-off, the Company entered into certain agreements with AdvanSix to effect our legal and structural separation including a transition services agreement with AdvanSix to provide certain administrative and other services for a limited time. As of the end of 2017, most of those agreements have ended.

On September 16, 2016, the Company completed the sale of Honeywell Technology Solutions Inc. for a sale price of $300 million. The Company recognized a pre-tax gain of $176 million, which was recorded in Other (income) expense. The Honeywell Technology Solutions Inc. business was part of Aerospace.

(Dollars in millions, except per share amounts)

Note 3. Repositioning and Other Charges

A summary of repositioning and other charges follows:

	Years Ended December 31,		
	2017	**2016**	**2015**
Severance	$ 305	$ 283	$ 197
Asset impairments	142	43	13
Exit costs	60	43	6
Reserve adjustments	(16)	(109)	(53)
Total net repositioning charge	491	260	163
Asbestos related litigation charges, net of insurance	207	222	189
Probable and reasonably estimable environmental liabilities	287	195	194
Other	36	18	—
Total net repositioning and other charges	$ 1,021	$ 695	$ 546

The following table summarizes the pre-tax distribution of total net repositioning and other charges by classification:

	Years Ended December 31,		
	2017	**2016**	**2015**
Cost of products and services sold	$ 784	$ 522	$ 483
Selling, general and administrative expenses			

	187	126	63
Other (income) expense	50	47	—
	$ 1,021	$ 695	$ 546

The following table summarizes the pre-tax impact of total net repositioning and other charges by segment:

	Years Ended December 31,		
	2017	**2016**	**2015**
Aerospace	$ 296	$ 298	$ 211
Home and Building Technologies	78	28	43
Performance Materials and Technologies	102	101	40
Safety and Productivity Solutions	51	1	34
Corporate	494	267	218
	$ 1,021	$ 695	$ 546

In 2017, we recognized repositioning charges totaling $507 million including severance costs of $305 million related to workforce reductions of 7,096 manufacturing and administrative positions across our segments. The workforce reductions were primarily related to cost savings actions taken in connection with our productivity and ongoing functional transformation initiatives and with site transitions, in each of our segments, to more cost-effective locations. The repositioning charge included asset impairments of $142 million principally in our Corporate segment related to the write-down of legacy properties and certain equipment in connection with their planned disposition and the write-down of a research and development facility in connection with a planned exit from such facility. The repositioning charge included exit costs of $60 million principally for closure obligations associated with site transitions in each of our segments and for lease exit obligations in our Corporate segment.

In 2016, we recognized repositioning charges totaling $369 million including severance costs of $283 million related to workforce reductions of 6,585 manufacturing and administrative positions across our segments. The workforce reductions were primarily related to cost savings actions taken in connection with our productivity and ongoing functional transformation initiatives; the separation of the former Automation and Control Solutions reporting segment into two new reporting segments; site transitions in each of our segments to more cost-effective locations; and achieving acquisition-related synergies. The repositioning charge included asset impairments of $43 million principally related to the write-off of certain intangible assets in connection with the sale of a Performance Materials and Technologies business. The repositioning charge included exit costs of $43 million principally for expenses related to the spin-off of our AdvanSix business and closure obligations associated with site transitions. Also, $109 million of previously established accruals, primarily for severance, were returned to income as a result of higher attrition than anticipated in prior severance programs resulting in lower required severance payments, lower than expected severance costs in certain repositioning actions, and changes in scope of previously announced repositioning actions.

(Dollars in millions, except per share amounts)

In 2015, we recognized repositioning charges totaling $216 million including severance costs of $197 million related to workforce reductions of 6,405 manufacturing and administrative positions across our segments. The workforce reductions were primarily related to cost savings actions taken in connection with our productivity and ongoing functional transformation initiatives. Also, $53 million of previously established accruals, primarily for severance, were returned to income due principally to higher attrition than anticipated in prior severance programs resulting in lower required severance payments, and changes in scope of previously announced repositioning actions.

The following table summarizes the status of our total repositioning reserves:

	Severance Costs	Asset Impairments	Exit Costs	Total
Balance at December 31, 2014	$ 285	$ —	$ 30	$ 315
2015 charges	197	13	6	216
2015 usage—cash	(109)	—	(9)	(118)
2015 usage—noncash	—	(13)	—	(13)
Acquisitions	16	—	—	16
Adjustments	(49)	—	(4)	(53)
Foreign currency translation	(11)	—	(2)	(13)

Balance at December 31, 2015	329	—	21	350
2016 charges	283	43	43	369
2016 usage—cash	(203)	—	(25)	(228)
2016 usage—noncash	(6)	(43)	—	(49)
Adjustments	(106)	—	(3)	(109)
Foreign currency translation	1	—	(3)	(2)
Balance at December 31, 2016	298	—	33	331
2017 charges	305	142	60	507
2017 usage—cash	(163)	—	(14)	(177)
2017 usage—noncash	—	(142)	—	(142)
Adjustments and reclassifications	(13)	—	(10)	(23)
Foreign currency translation	15	—	2	17
Balance at December 31, 2017	$ 442	$ —	$ 71	$ 513

(Dollars in millions, except per share amounts)

Certain repositioning projects in each of our reportable operating segments in 2017, 2016 and 2015 included exit or disposal activities, the costs related to which will be recognized in future periods when the actual liability is incurred. Such exit and disposal costs were not significant.

Note 4. Other (Income) Expense

	Years Ended December 31,		
	2017	2016	2015
Equity (income) loss of affiliated companies	$ (39)	$ (31)	$ (30)
(Gain) loss on sale of non-strategic businesses and assets	7	(178)	1
Interest income	(151)	(106)	(104)
Foreign exchange	18	12	43
Other, net	98	201	22
	$ (67)	$ (102)	$ (68)

Refer to Note 2 Acquisitions and Divestitures and Note 12 Long-term Debt and Credit Agreements for further details of transactions recognized in 2016 within Other (income) expense.

Note 5. Income Taxes

Income before taxes

	Years Ended December 31,		
	2017	2016	2015
U.S.	$ 2,825	$ 2,976	$ 3,361

Non-U.S.	4,077	3,471	3,225
	$ 6,902	$ 6,447	$ 6,586

Tax expense (benefit)

	Years Ended December 31,		
	2017	2016	2015
Tax expense (benefit) consists of			
Current:			
U.S. Federal	$ 2,061	$ 869	$ 786
U.S. State	62	97	78
Non-U.S.	787	559	560
	$ 2,910	$ 1,525	$ 1,424
Deferred:			
U.S. Federal	$ 39	$ 38	$ 196
U.S. State	132	17	49
Non-U.S.	2,123	21	70
	2,294	76	315
	$ 5,204	$ 1,601	$ 1,739

(Dollars in millions, except per share amounts)

	Years Ended December 31,		
	2017	**2016**	**2015**
The U.S. federal statutory income tax rate is reconciled to our effective income tax rate as follows:			
U.S. federal statutory income tax rate	35.0 %	35.0 %	35.0 %
Taxes on non-U.S. earnings below U.S. tax rate(1)	(12.9)	(8.0)	(8.0)
U.S. state income taxes(1)	1.4	1.1	1.2
Manufacturing incentives	(0.7)	(0.7)	(1.5)
Employee stock ownership plan dividend tax benefit	(0.4)	(0.5)	(0.4)
Tax credits	(0.9)	(0.7)	(1.0)
Reserves for tax contingencies	1.6	1.2	0.7
Employee share-based payments	(2.9)	(2.0)	—
U.S. Tax Cuts and Jobs Act enactment	54.4	—	—
All other items—net	0.8	(0.6)	0.4
	75.4 %	24.8 %	26.4 %

(1) Net of changes in valuation allowance

The effective tax rate increased by 50.6 percentage points in 2017 compared to 2016. The increase was primarily attributable to the provisional impact of U.S. tax reform (see “The Tax Cuts and Jobs Act” further below), partially offset by increased tax benefits from foreign tax credits and for employee share-based payments. The Company's non-U.S. effective tax rate was 71.4%, an increase of approximately 54.7 percentage points compared to 2016. The year-over-year increase in the non-U.S. effective tax rate was primarily driven by the Company's change in assertion regarding foreign unremitted earnings, increased expense for reserves in various jurisdictions and increased withholding taxes, partially offset by higher earnings in low tax rate jurisdictions.

The effective tax rate decreased by 1.6 percentage points in 2016 compared to 2015. The decrease was primarily attributable to excess tax benefits from employee share-based payments arising from adoption of the FASB's amended guidance related to employee share-based payment accounting, partially offset by increased tax reserves in various jurisdictions and lower tax benefits from manufacturing incentives. The Company's non-U.S effective tax rate was 16.7%, a decrease of approximately 2.8 percentage points compared to 2015. The year-over-year decrease in the non-U.S. effective tax rate was primarily driven by higher earnings in lower tax rate jurisdictions and a decrease in the tax impact of restructuring and divestitures. The effective tax rate was lower than the U.S. federal statutory rate of 35% primarily due to overall non-U.S. earnings taxed at lower rates.

(Dollars in millions, except per share amounts)

Deferred tax assets (liabilities)

The tax effects of temporary differences and tax carryforwards which give rise to future income tax benefits and payables are as follows:

	December 31,	
Deferred tax assets:	**2017**	**2016**
Pension	$ —	$ 411
Postretirement benefits other than pensions	177	262
Asbestos and environmental	325	471
Employee compensation and benefits	218	418
Other accruals and reserves	376	765
Net operating and capital losses	632	669
Tax credit carryforwards	510	206
Gross deferred tax assets	2,238	3,202
Valuation allowance	(663)	(621)
Total deferred tax assets	$ 1,575	$ 2,581
Deferred tax liabilities:		
Pension	$ (40)	$ —

Property, plant and equipment	(439)	(560)
Intangibles	(1,326)	(1,843)
Unremitted earnings of foreign subsidiaries	(2,151)	(43)
Other asset basis differences	(210)	(231)
Other	(67)	(43)
Total deferred tax liabilities	(4,233)	(2,720)
Net deferred tax liability	$ (2,658)	$ (139)

As discussed further below under “The Tax Cuts and Jobs Act,” the Company no longer intends to reinvest the historical earnings of its foreign subsidiaries as of December 31, 2017 and has recorded a provisional deferred tax liability mainly comprised of non-U.S. withholding taxes of approximately $2.1 billion.

Our gross deferred tax assets include $794 million related to non-U.S. operations comprised principally of net operating losses, capital loss and tax credit carryforwards (mainly in Canada, France, Germany, Luxembourg and the United Kingdom) and deductible temporary differences. We maintain a valuation allowance of $660 million against a portion of the non-U.S. gross deferred tax assets. The change in the valuation allowance resulted in increases of $4 million, $69 million and $114 million to income tax expense in 2017, 2016 and 2015. In the event we determine that we will not be able to realize our net deferred tax assets in the future, we will reduce such amounts through an increase to income tax expense in the period such determination is made. Conversely, if we determine that we will be able to realize net deferred tax assets in excess of the carrying amounts, we will decrease the recorded valuation allowance through a reduction to income tax expense in the period that such determination is made.

(Dollars in millions, except per share amounts)

As of December 31, 2017, our net operating loss, capital loss and tax credit carryforwards were as follows:

Jurisdiction	Expiration Period	Net Operating and Capital Loss Carryforwards	Tax Credit Carryforwards
U.S. Federal	2037	$ 16	$ 332
U.S. State	2037	508	24
Non-U.S.	2037	607	159
Non-U.S.	Indefinite	2,211	—
		$ 3,342	$ 515

Many jurisdictions impose limitations on the timing and utilization of net operating loss and tax credit carryforwards. In those instances, whereby there is an expected permanent limitation on the utilization of the net operating loss or tax credit carryforward, the deferred tax asset and amount of the carryforward have been reduced.

	2017	2016	2015
Change in unrecognized tax benefits:			
Balance at beginning of year	$ 877	$ 765	$ 659
Gross increases related to current period tax positions	94	96	56
Gross increases related to prior periods tax positions	153	88	175
Gross decreases related to prior periods tax positions	(91)	(33)	(72)

Decrease related to resolutions of audits with tax authorities	(76)	(3)	(11)
Expiration of the statute of limitations for the assessment of taxes	(54)	(10)	(13)
Foreign currency translation	44	(26)	(29)
Balance at end of year	$ 947	$ 877	$ 765

As of December 31, 2017, 2016, and 2015 there were $947 million, $877 million and $765 million of unrecognized tax benefits that if recognized would be recorded as a component of Tax expense.

The following table summarizes tax years that remain subject to examination by major tax jurisdictions as of December 31, 2017:

Jurisdiction	**Open Tax Years Based on Originally Filed Returns**	
	Examination in progress	**Examination not yet initiated**
U.S. Federal	2013 – 2016	2015 – 2017
U.S. State	2011 – 2016	2012 – 2017
Australia	N/A	2016 – 2017
Canada(1)	2012 – 2014, 2016	2015 – 2017
China	2003 – 2017	N/A
France	2012 – 2017	2006 – 2011
Germany(1)	2008 – 2015	2016 – 2017
India	1999 – 2015	2016 – 2017

Switzerland(1)	2012 – 2016	2017
United Kingdom	2013 – 2015	2016 – 2017

(1) Includes provincial or similar local jurisdictions, as applicable.

Based on the outcome of these examinations, or as a result of the expiration of statute of limitations for specific jurisdictions, it is reasonably possible that certain unrecognized tax benefits for tax positions taken on previously filed tax returns will materially change from those recorded as liabilities in our financial statements. In addition, the outcome of these examinations may impact the valuation of certain deferred tax assets (such as net operating losses) in future periods.

Unrecognized tax benefits for examinations in progress were $487 million, $398 million and $349 million, as of December 31, 2017, 2016, and 2015. Estimated interest and penalties related to the underpayment of income taxes are classified as a component of Tax expense in the Consolidated Statement of Operations and totaled $28 million, $18 million and $11 million for the years ended December 31, 2017, 2016, and 2015. Accrued interest and penalties were $423 million, $395 million and $336 million, as of December 31, 2017, 2016, and 2015.

The Tax Cuts and Jobs Act

On December 22, 2017, the U.S. enacted the Tax Cuts and Jobs Act ("Tax Act") that instituted fundamental changes to the taxation of multinational corporations. The Tax Act includes changes to the taxation of foreign earnings by implementing a dividend exemption system, expansion of the current anti-deferral rules, a minimum tax on low-taxed foreign earnings and new measures to deter base erosion. The Tax Act also includes a permanent reduction in the corporate tax rate to 21%, repeal of the corporate alternative minimum tax, expensing of capital investment, and limitation of the deduction for interest expense. Furthermore, as part of the transition to the new tax system, a one-time transition tax is imposed on a U.S. shareholder's historical undistributed earnings of foreign affiliates. Although the Tax Act is generally effective January 1, 2018, GAAP requires recognition of the tax effects of new legislation during the reporting period that includes the enactment date, which was December 22, 2017.

As a result of the impacts of the Tax Act, the SEC provided guidance that allows the Company to record provisional amounts for those impacts, with the requirement that the accounting be completed in a period not to exceed one year from the date of enactment. As of December 31, 2017, the Company has not completed the accounting for the tax effects of the Tax Act. Therefore, we have recorded provisional amounts for the effects of the Tax Act. The primary impacts of the Tax Act relate to the re-measurement of deferred tax assets and liabilities resulting from the change in the corporate tax rate ("Corporate Tax Rate Change"); the one-time mandatory transition tax on undistributed earnings of foreign affiliates ("Mandatory Transition Tax"); and deferred taxes in connection with a change in the Company's intent to permanently reinvest the historical undistributed earnings of its foreign affiliates ("Undistributed Foreign Earnings").

Corporate Tax Rate Change—For the year ended December 31, 2017, we recorded a tax benefit of approximately $235 million due to the decrease in the corporate tax rate from 35% to 21%.

At the date of enactment, the Company had a deferred tax liability for the excess of its net book value over its tax basis of its U.S. assets and liabilities that will generate future taxable income in excess of book income. Due to the Tax Act, this additional taxable income will be subject to tax at a lower corporate tax rate, consequently reducing the Company's deferred tax liability as of the date of enactment.

Mandatory Transition Tax—For the year ended December 31, 2017, we recorded a provisional tax charge of approximately $1.9 billion due to the imposition of the mandatory transition tax ("MTT") on the deemed repatriation of undistributed foreign earnings.

The Tax Act imposes a one-time tax on undistributed and previously untaxed post-1986 foreign earnings and profits (E&P), as determined in accordance with U.S. tax principles, of certain foreign corporations owned by U.S. shareholders. In general, we have estimated $20 billion of E&P related to our foreign affiliates that is subject to the MTT. The MTT is imposed at a rate of 15.5% to the extent of the cash and cash equivalents that are held by the foreign affiliates at certain testing dates; the remaining E&P is taxed at a rate of 8.0%. In accordance with the Tax Act, the Company will elect to pay the MTT liability over a period of eight years, with the first installment of $144 million due in 2018; the remainder of the balance is recorded in Other liabilities (noncurrent). As of December 31, 2017, the Company has recorded a provisional amount because certain information related to the computation of E&P is not readily available, some of the testing dates to determine taxable amounts have not yet occurred, and there is limited information from federal and state taxing authorities regarding the application and interpretation of the recently enacted legislation. The Company will disclose the impact to the provisional amount in the reporting period in which the accounting is completed, which will not exceed one year from the date of enactment of the Tax Act.

Undistributed Foreign Earnings—For the year ended December 31, 2017, we recorded a provisional tax charge of approximately $2.1 billion due to the Company's intent to no longer permanently reinvest the historical undistributed earnings of its foreign affiliates.

We previously considered substantially all of the earnings in our non-U.S. subsidiaries to be permanently reinvested and, accordingly, recorded no deferred income taxes on such earnings. As a result of the fundamental changes to the taxation of multinational corporations created by the Tax Act, the Company no longer intends to permanently reinvest the historical undistributed earnings of its foreign affiliates, which amounted to approximately $20 billion as of December 31, 2017 (including current year earnings). GAAP requires recognition of a deferred tax liability in the reporting period in which its intent to no longer permanently reinvest its historical undistributed foreign earnings is made. Although no U.S. federal taxes will be imposed on such future distributions of foreign earnings, in many cases the cash transfer will be subject to foreign withholding and other local taxes. Accordingly, at December 31, 2017 the Company has included a provisional deferred tax liability, mostly related to non-U.S. withholding taxes. The Company has recorded a provisional amount because certain information related to the computation of E&P, distributable reserves and foreign exchange gains and losses is not readily available. The Company will disclose the impact to the provisional amount in the reporting period in which the accounting is completed, which will not exceed one year from the date of enactment of the Tax Act. The provisional amount is based on the Company's current legal ownership structure which may change in the future. Any future tax impacts resulting from changes to the legal ownership structure will not be considered changes to the provisional amount and will be recorded in the reporting period in which a plan to modify the legal structure is adopted, which may exceed one year from the date of enactment of the Tax Act.

Global Intangible Low Taxed Income—In addition to the changes described above, the Tax Act imposes a U.S. tax on global intangible low taxed income ("GILTI") that is earned by certain foreign affiliates owned by a U.S. shareholder. The computation of GILTI is still subject to interpretation and additional clarifying guidance is expected, but is generally intended to impose tax on the earnings of a foreign corporation that are deemed to exceed a certain threshold return relative to the underlying business investment. In accordance with guidance issued by FASB, the Company has made a policy election to treat future taxes related to GILTI as a current period expense in the reporting period in which the tax is incurred.

Note 6. Earnings Per Share

The details of the earnings per share calculations for the years ended December 31, 2017, 2016 and 2015 are as follows:

Basic	Years Ended December 31, 2017	2016	2015
Net income attributable to Honeywell	$ 1,655	$ 4,809	$ 4,768
Weighted average shares outstanding	762.1	764.3	779.8
Earnings per share of common stock	$ 2.17	$ 6.29	$ 6.11

(Dollars in millions, except per share amounts)

Assuming Dilution	**Years Ended December 31,**		
	2017	**2016**	**2015**
Net income attributable to Honeywell	$ 1,655	$ 4,809	$ 4,768
Average Shares			
Weighted average shares outstanding	762.1	764.3	779.8
Dilutive securities issuable—stock plans	10.0	11.0	9.5
Total weighted average diluted shares outstanding	772.1	775.3	789.3
Earnings per share of common stock—assuming dilution	$ 2.14	$ 6.20	$ 6.04

The diluted earnings per share calculations exclude the effect of stock options when the options' assumed proceeds exceed the average market price of the common shares during the period. In 2017, 2016, and 2015 the weighted number of stock options excluded from the computations were 2.8 million, 7.5 million, and 7.1 million. These stock options were outstanding at the end of each of the respective periods.

Note 7. Accounts Receivable

	December 31,	
	2017	**2016**
Trade	$ 9,068	$ 8,449
Less—Allowance for doubtful accounts	(202)	(272)
	8,866	8,177

Trade Receivables includes $1,853 million and $1,626 million of unbilled balances under long-term contracts as of December 31, 2017 and December 31, 2016. These amounts are billed in accordance with the terms of customer contracts to which they relate.

Note 8. Inventories

	December 31,	
	2017	2016
Raw materials	$ 1,193	$ 1,104
Work in process	790	775
Finished products	2,669	2,552
	4,652	4,431
Reduction to LIFO cost basis	(39)	(65)
	$ 4,613	$ 4,366

Inventories valued at LIFO amounted to $324 million and $296 million at December 31, 2017 and 2016. Had such LIFO inventories been valued at current costs, their carrying values would have been approximately $39 million and $65 million higher at December 31, 2017 and 2016.

(Dollars in millions, except per share amounts)

Note 9. Property, Plant and Equipment—Net

	December 31, 2017	December 31, 2016
Land and improvements	$ 287	$ 363
Machinery and equipment	10,762	9,956
Buildings and improvements	3,463	3,248
Construction in progress	675	940
	15,187	14,507
Less—Accumulated depreciation	(9,261)	(8,714)
	$ 5,926	$ 5,793

Depreciation expense was $717 million, $726 million and $672 million in 2017, 2016 and 2015.

Note 10. Goodwill and Other Intangible Assets—Net

The following table summarizes the change in the carrying amount of goodwill for the years ended December 31, 2017 and 2016 by segment. Certain prior period balances have been recast due to a business realignment; Refer to Note 21 Segment Financial Data.

	December 31, 2016	Acquisitions/ Divestitures	Currency Translation Adjustment	December 31, 2017
Aerospace	$ 2,441	$ 2	$ 25	$ 2,468
Home and Building Technologies				

	5,807	(32)	185	5,960
Performance Materials and Technologies	4,924	34	284	5,242
Safety and Productivity Solutions	4,535	(8)	80	4,607
	$ 17,707	$ (4)	$ 574	$ 18,277

Other intangible assets are comprised of:

	December 31, 2017			December 31, 2016		
	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
Determinable life intangibles:						
Patents and technology	$ 1,990	$ (1,272)	$ 718	$ 1,841	$ (1,141)	$ 700
Customer relationships	3,911	(1,366)	2,545	3,816	(1,098)	2,718
Trademarks	328	(189)	139	284	(156)	128
Other	353	(304)	49	359	(284)	75
	6,582	(3,131)	3,451	6,300	(2,679)	3,621
Indefinite life intangibles:						
Trademarks	1,045	—	1,045	1,013	—	1,013
	$ 7,627	$ (3,131)	$ 4,496	$ 7,313	$ (2,679)	$ 4,634

Intangible assets amortization expense was $398 million, $304 million, and $211 million in 2017, 2016, 2015. Estimated intangible asset amortization expense for each of the next five years approximates $403 million in 2018, $399 million in 2019, $359 million in 2020, $319 million in 2021, and $293 million in 2022.

(Dollars in millions, except per share amounts)

Note 11. Accrued Liabilities

	December 31,	
	2017	2016
Customer advances and deferred income	$ 2,198	$ 2,151
Compensation, benefit and other employee related	1,420	1,489
Asbestos related liabilities	350	546
Repositioning	508	322
Product warranties and performance guarantees	307	351
Environmental costs	226	252
Income taxes	134	430
Accrued interest	94	97
Other taxes	277	290
Insurance	199	172
Other (primarily operating expenses)	1,255	948
	$ 6,968	$ 7,048

Note 12. Long-term Debt and Credit Agreements

	December 31,	
	2017	2016
Two year floating rate Euro notes due 2018	$ 1,199	$ 1,054
1.40% notes due 2019	1,250	1,250
Three year floating rate notes due 2019	250	250
Two year floating rate notes due 2019	450	—
1.80% notes due 2019	750	—
0.65% Euro notes due 2020	1,199	1,054
4.25% notes due 2021	800	800
1.85% notes due 2021	1,500	1,500
1.30% Euro notes due 2023	1,499	1,317
3.35% notes due 2023	300	300
2.50% notes due 2026	1,500	1,500
2.25% Euro notes due 2028	900	790
5.70% notes due 2036	441	550
5.70% notes due 2037	462	600
5.375% notes due 2041	417	600
3.812% notes due 2047	445	—

Industrial development bond obligations, floating rate maturing at various dates through 2037	22	30
6.625% debentures due 2028	201	216
9.065% debentures due 2033	51	51
Other (including capitalized leases and debt issuance costs), 0.4% weighted average maturing at various dates through 2023	288	547
	13,924	12,409
Less: current portion	(1,351)	(227)
	$ 12,573	$ 12,182

(Dollars in millions, except per share amounts)

The schedule of principal payments on long-term debt is as follows:

	December 31, 2017
2018	$ 1,351
2019	2,835
2020	1,390
2021	2,306
2022	4
Thereafter	6,038
	13,924
Less-current portion	(1,351)
	$ 12,573

In November of 2017, the Company issued $445 million 3.812% Senior Notes due 2047 (the "Exchange Notes"). The Exchange Notes are senior unsecured and unsubordinated obligations of Honeywell and rank equally with all of Honeywell's existing and future senior unsecured debt and senior to all of Honeywell's subordinated debt. The Exchange Notes were issued in partial exchange for the 6.625% Debentures due 2028, the 5.70% Notes due 2036, the 5.70% Notes due 2037 and the 5.375% Notes due 2041. The Company paid $133 million to bondholders in connection with the partial exchange.

In the October of 2017, the Company issued $450 million Floating Rate Senior Notes due 2019 and $750 million 1.80% Senior Notes due 2019 (collectively, the "2017 Notes"). The 2017 Notes are senior unsecured and unsubordinated obligations of Honeywell and rank equally with all of Honeywell's existing and future senior unsecured debt and senior to all of Honeywell's subordinated debt. The offering resulted in gross proceeds of $1,200 million, offset by $5 million in discount and closing costs related to the offering.

In the fourth quarter of 2016, the Company repurchased the entire outstanding principal amount of its $400 million 5.30 % Senior Notes due 2017, $900 million 5.30% Senior Notes due 2018 and $900 million 5.00% Senior Notes due 2019. The cost related to the early redemption, including the "make whole premium", was $126 million which was recorded in Other (income) expense.

In October 2016, the Company issued $1,250 million 1.40% Senior Notes due 2019, $250 million Floating Rate Senior Notes due 2019, $1,500 million 1.85% Senior Notes due 2021 and $1,500 million 2.50% Senior Notes due 2026 (collectively, the "Notes"). The Notes are senior unsecured and unsubordinated obligations of Honeywell and rank equally with all of Honeywell's existing and future senior unsecured debt and senior to all of Honeywell's subordinated debt. The offering resulted in gross proceeds of $4,500 million, offset by $27 million in discount and closing costs related to the offering.

In February 2016, the Company issued €1,000 million Floating Rate Senior Notes due 2018, €1,000 million 0.65% Senior Notes due 2020, €1,250 million 1.30% Senior Notes due 2023 and €750 million 2.25% Senior Notes due 2028 (collectively, the "Euro Notes"). The Euro Notes are senior unsecured and unsubordinated obligations of Honeywell and rank equally with all of Honeywell's existing and future senior unsecured debt and senior to all of Honeywell's subordinated debt. The offering resulted in gross proceeds of $4,438 million, offset by $23 million in discount and closing costs related to the offering.

For the issuances described above, unless otherwise noted, all debt issuance costs are deferred and recognized as a direct deduction to the related debt liability and are amortized to interest expense over the debt term.

(Dollars in millions, except per share amounts)

On April 28, 2017, the Company entered into Amendment No. 3 (Amendment) to the Amended and Restated $4 billion Credit Agreement dated as of July 10, 2015, as amended by Amendment No. 1 dated as of September 30, 2015 and Amendment No. 2 dated as of April 29, 2016 (as so amended, the "Credit Agreement"), with a syndicate of banks. The Credit Agreement is maintained for general corporate purposes. Commitments under the Credit Agreement can be increased pursuant to the terms of the Credit Agreement to an aggregate amount not to exceed $4.5 billion. The Amendment, among other things, extends the Credit Agreement's termination date from July 10, 2021 to April 28, 2022.

On April 28, 2017, the Company entered into a $1.5 billion 364-Day Credit Agreement (364-Day Credit Agreement) with a syndicate of banks. The 364-Day Credit Agreement is maintained for general corporate purposes.

There have been no borrowings under any of the credit agreements previously described.

Note 13. Lease Commitments

Future minimum lease payments under operating leases having initial or remaining noncancellable lease terms in excess of one year are as follows:

	At December 31, 2017
2018	$ 295
2019	226
2020	161
2021	121
2022	97
Thereafter	226
	$ 1,126

Rent expense was $385 million, $387 million and $390 million in 2017, 2016 and 2015.

Note 14. Financial Instruments and Fair Value Measures

Credit and Market Risk—Financial instruments, including derivatives, expose us to counterparty credit risk for nonperformance and to market risk related to changes in interest and currency exchange rates. We manage our exposure to counterparty credit risk through specific minimum credit standards, diversification of counterparties, and procedures to monitor concentrations of credit risk. Our counterparties in derivative transactions are substantial investment and commercial banks with significant experience using such derivative instruments. We monitor the impact of market risk on the fair value and cash flows of our derivative and other financial instruments considering reasonably possible changes in interest rates and currency exchange rates and restrict the use of derivative financial instruments to hedging activities.

We continually monitor the creditworthiness of our customers to which we grant credit terms in the normal course of business. The terms and conditions of our credit sales are designed to mitigate or eliminate concentrations of credit risk with any single customer. Our sales are not materially dependent on a single customer or a small group of customers.

Foreign Currency Risk Management—We conduct our business on a multinational basis in a wide variety of foreign currencies. Our exposure to market risk for changes in foreign currency exchange rates arises from international financing activities between subsidiaries, foreign currency denominated monetary assets and liabilities and transactions arising from international trade. Our primary objective is to preserve the U.S. Dollar value of foreign currency denominated cash flows and earnings. We attempt to hedge currency exposures with natural offsets to the fullest extent possible and, once these opportunities have been exhausted, through foreign currency exchange forward and option contracts (foreign currency exchange contracts) with third parties.

(Dollars in millions, except per share amounts)

We hedge monetary assets and liabilities denominated in non-functional currencies. Prior to conversion into U.S. dollars, these assets and liabilities are remeasured at spot exchange rates in effect on the balance sheet date. The effects of changes in spot rates are recognized in earnings and included in other (income) expense. We partially hedge forecasted sales and purchases, which occur in the next twelve months and are denominated in non-functional currencies, with foreign currency exchange contracts. Changes in the forecasted non-functional currency cash flows due to movements in exchange rates are substantially offset by changes in the fair value of the foreign currency exchange contracts designated as hedges. Market value gains and losses on these contracts are recognized in earnings when the hedged transaction is recognized. Open foreign currency exchange contracts mature in the next twelve months. At December 31, 2017 and 2016, we had contracts with notional amounts of $9,273 million and $9,554 million to exchange foreign currencies, principally the U.S. Dollar, Euro, British Pound, Canadian Dollar, Chinese Renminbi, Indian Rupee, Mexican Peso, and Singapore Dollar.

We have also designated foreign currency debt and certain derivative contracts as hedges against portions of our net investment in foreign operations during the year ended December 31, 2017. Gains or losses on the effective portion of the foreign currency debt designated as a net investment hedge are recorded in the same manner as foreign currency translation adjustments. The Company did not have ineffectiveness related to net investment hedges during the year ended December 31, 2017.

Interest Rate Risk Management—We use a combination of financial instruments, including long-term, medium-term and short-term financing, variable-rate commercial paper, and interest rate swaps to manage the interest rate mix of our total debt portfolio and related overall cost of borrowing. At December 31, 2017 and 2016, interest rate swap agreements designated as fair value hedges effectively changed $2,600 million and $1,850 million of fixed rate debt at rates of 2.93% and 3.39% to LIBOR based floating rate debt. Our interest rate swaps mature at various dates through 2026.

Fair Value of Financial Instruments—The FASB's accounting guidance defines fair value as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date (exit price).

Financial and nonfinancial assets and liabilities are classified in their entirety based on the lowest level of input that is significant to the fair value measurement. The following table sets forth the Company's financial assets and liabilities that were accounted for at fair value on a recurring basis as of December 31, 2017 and 2016:

	December 31,	
	2017	2016

Assets:		
Foreign currency exchange contracts	$ 17	$ 152
Available for sale investments	3,916	1,670
Interest rate swap agreements	44	69
Liabilities:		
Foreign currency exchange contracts	$ 70	$ 2
Interest rate swap agreements	52	48

The foreign currency exchange contracts and interest rate swap agreements are valued using broker quotations, or market transactions in either the listed or over-the-counter markets. As such, these derivative instruments are classified within level 2. The Company also holds investments in commercial paper, certificates of deposits, and time deposits that are designated as available for sale and are valued using published prices based off observable market data. As such, these investments are classified within level 2. The Company also holds available for sale investments in U.S.

(Dollars in millions, except per share amounts)

government and corporate debt securities valued utilizing published prices based on quoted market pricing, which are classified within level 1.

The carrying value of cash and cash equivalents, trade accounts and notes receivables, payables, commercial paper and short-term borrowings contained in the Consolidated Balance Sheet approximates fair value. The following table sets forth the Company's financial assets and liabilities that were not carried at fair value:

	December 31, 2017		December 31, 2016	
	Carrying Value	Fair Value	Carrying Value	Fair Value
Assets				
Long-term receivables	$ 296	$ 289	$ 280	$ 273
Liabilities				
Long-term debt and related current maturities	$ 13,924	$ 14,695	$ 12,409	$ 13,008

The Company determined the fair value of the long-term receivables by discounting based upon the terms of the receivable and counterparty details including credit quality. As such, the fair value of these receivables is considered level 2. The Company determined the fair value of the long-term debt and related current maturities utilizing transactions in the listed markets for identical or similar liabilities. As such, the fair value of the long-term debt and related current maturities is considered level 2 as well.

Interest rate swap agreements are designated as hedge relationships with gains or losses on the derivative recognized in interest and other financial charges offsetting the gains and losses on the underlying debt being hedged. Losses on interest rate swap agreements recognized in earnings were $29 million and $71 million in the years ended December 31, 2017 and 2016 and were $2 million in the year ended December 31, 2015. Gains and losses are fully offset by losses and gains on the underlying debt being hedged.

We also economically hedge our exposure to changes in foreign exchange rates principally with forward contracts. These contracts are marked-to-market with the resulting gains and losses recognized in earnings offsetting the gains and losses on the non-functional currency denominated monetary assets and liabilities being hedged. We recognized $207 million of expense and $232 million of income in Other (income) expense in the years ended December 31, 2017 and 2016. We recognized $86 million of expense in Other (income) expense in the year ended December 31, 2015. See Note 4 Other (Income) Expense for further details of the net impact of these economic foreign currency hedges.

Note 15. Other Liabilities

	Years Ended December 31,	
	2017	2016
Pension and other employee related	$ 1,986	$ 2,084
Income taxes	2,898	1,041
Environmental	369	259
Insurance	233	253
Product warranties and performance guarantees	101	136
Asset retirement obligations	82	63
Deferred income	76	81
Other	185	193
	$ 5,930	$ 4,110

(Dollars in millions, except per share amounts)

Note 16. Capital Stock

We are authorized to issue up to 2,000,000,000 shares of common stock, with a par value of $1. Common shareowners are entitled to receive such dividends as may be declared by the Board of Directors, are entitled to one vote per share, and are entitled, in the event of liquidation, to share ratably in all the assets of Honeywell which are available for distribution to the common shareowners. Common shareowners do not have preemptive or conversion rights. Shares of common stock issued and outstanding or held in the treasury are not liable to further calls or assessments. There are no restrictions on us relative to dividends or the repurchase or redemption of common stock.

In December 2017, the Board of Directors authorized the repurchase of up to $8 billion of Honeywell common stock, which replaces the previously approved share repurchase program. Approximately $7.7 billion remained available as of December 31, 2017. This authorization included amounts remaining under and replaced the previously approved share repurchase program. Under that previous share repurchase plan announced in April 2016 the Board of Directors authorized the repurchase of up to $5 billion of Honeywell common stock and $4.1 billion remained available as of December 31, 2016.

For the year ended December 31, 2017, we repurchased approximately 20.5 million shares of our common stock for $2,889 million.

For the year ended December 31, 2016, we repurchased approximately 19.3 million shares of our common stock for $2,079 million.

We are authorized to issue up to 40,000,000 shares of preferred stock, without par value, and can determine the number of shares of each series, and the rights, preferences and limitations of each series. At December 31, 2017, there was no preferred stock outstanding.

Note 17. Accumulated Other Comprehensive Income (Loss)

The changes in Accumulated other comprehensive income (loss) are provided in the tables below. Comprehensive income (loss) attributable to noncontrolling interest consists predominantly of net income.

	Pre-tax	Tax	After-Tax
Year Ended December 31, 2017			
Foreign exchange translation adjustment	$ (37)	$ —	$ (37)
Pensions and other postretirement benefit adjustments	847	(170)	677

Changes in fair value of effective cash flow hedges	(194)	33	(161)
	$ 616	$ (137)	$ 479
Year Ended December 31, 2016			
Foreign exchange translation adjustment	$ (52)	$ —	$ (52)
Pensions and other postretirement benefit adjustments	(336)	101	(235)
Changes in fair value of effective cash flow hedges	134	(26)	108
	$ (254)	$ 75	$ (179)
Year Ended December 31, 2015			
Foreign exchange translation adjustment	$ (1,152)	$ —	$ (1,152)
Pensions and other postretirement benefit adjustments	129	(45)	84
Changes in fair value of effective cash flow hedges	(11)	3	(8)
	$ (1,034)	$ (42)	$ (1,076)

(Dollars in millions, except per share amounts)

Components of Accumulated Other Comprehensive Income (Loss)

	December 31, 2017	December 31, 2016
Cumulative foreign exchange translation adjustment	$ (1,981)	$ (1,944)
Pensions and other postretirement benefit adjustments	(202)	(879)
Fair value of available for sale investments	—	—
Fair value of effective cash flow hedges	(52)	109
	$ (2,235)	$ (2,714)

Changes in Accumulated Other Comprehensive Income (Loss) by Component

	Foreign Exchange Translation Adjustment	Pension and Other Postretirement Adjustments	Changes in Fair Value of Effective Cash Flow Hedges	Total
Balance at December 31, 2015	$ (1,892)	$ (644)	$ 1	$ (2,535)
Other comprehensive income (loss) before reclassifications	(52)	(388)	103	(337)
Amounts reclassified from accumulated other comprehensive income (loss)	—	153	5	158
Net current period other comprehensive income (loss)	(52)	(235)	108	(179)

Balance at December 31, 2016	$ (1,944)	$ (879)	$ 109	$ (2,714)
Other comprehensive income (loss) before reclassifications	(37)	645	(101)	507
Amounts reclassified from accumulated other comprehensive income	—	32	(60)	(28)
Net current period other comprehensive income (loss)	(37)	677	(161)	479
Balance at December 31, 2017	$ (1,981)	$ (202)	$ (52)	$ (2,235)

Reclassifications Out of Accumulated Other Comprehensive Income (Loss)

	Year Ended December 31, 2017 Affected Line in the Consolidated Statement of Operations				
	Product Sales	**Cost of Products Sold**	**Cost of Services Sold**	**Selling, General and Administrative Expenses**	**Total**
Amortization of Pension and Other Postretirement Items:					
Actuarial losses recognized	$ —	$ 79	$ 15	$ 16	$ 110
Prior service (credit) recognized	—	(74)	(14)	(15)	(103)
Settlements and curtailments	—	17	3	4	24
Losses (gains) on cash flow hedges	(15)	(22)	(4)	(28)	(69)
Total before tax	$ (15)	$ —	$ —	$ (23)	$ (38)
Tax expense (benefit)					10

Total reclassifications for the period, net of tax	$ (28)

(Dollars in millions, except per share amounts)

	Year Ended December 31, 2016 Affected Line in the Consolidated Statement of Operations				
	Product Sales	**Cost of Products Sold**	**Cost of Services Sold**	**Selling, General and Administrative Expenses**	**Total**
Amortization of Pension and Other Postretirement Items:					
Actuarial losses recognized	$ —	$ 214	$ 44	$ 46	$ 304
Prior service (credit) recognized	—	(87)	(18)	(18)	(123)
Settlements and curtailments	—	(4)	(1)	(1)	(6)
Losses (gains) on cash flow hedges	3	16	3	(5)	17
Total before tax	$ 3	$ 139	$ 28	$ 22	$ 192
Tax expense (benefit)					(34)
Total reclassifications for the period, net of tax					$ 158

Note 18. Stock-Based Compensation Plans

The 2016 Stock Incentive Plan of Honeywell International Inc. and its Affiliates (2016 Plan) and 2016 Stock Plan for Non-Employee Directors of Honeywell International Inc (2016 Directors Plan) were both approved by the shareowners at the Annual Meeting of Shareowners effective on April 25, 2016. Following approval of both plans, we have not and will not grant any new awards under any previously existing stock-based compensation plans. At December 31, 2017, there were 42,025,990, and 924,694 shares of Honeywell common stock available for future grants under terms of the 2016 Plan and 2016 Directors Plan, respectively.

Stock Options—The exercise price, term and other conditions applicable to each option granted under our stock plans are generally determined by the Management

Development and Compensation Committee of the Board. The exercise price of stock options is set on the grant date and may not be less than the fair market value per share of our stock on that date. The fair value is recognized as an expense over the employee's requisite service period (generally the vesting period of the award). Options generally vest over a four-year period and expire after ten years.

The fair value of each option award is estimated on the date of grant using the Black-Scholes option-pricing model. Expected volatility is based on implied volatilities from traded options on our common stock and historical volatility of our common stock. We used a Monte Carlo simulation model to derive an expected term which represents an estimate of the time options are expected to remain outstanding. Such model uses historical data to estimate option exercise activity and post-vest termination behavior. The risk-free rate for periods within the contractual life of the option is based on the U.S. treasury yield curve in effect at the time of grant.

The following table summarizes the impact to the Consolidated Statement of Operations from stock options:

	Years Ended December 31,		
	2017	**2016**	**2015**
Compensation expense	$ 79	$ 87	$ 78
Future income tax benefit recognized	17	29	26

(Dollars in millions, except per share amounts)

The following table sets forth fair value per share information, including related weighted-average assumptions, used to determine compensation cost.

	Years Ended December 31,		
	2017	**2016**	**2015**
Weighted average fair value per share of options granted during the year(1)	$ 16.68	$ 15.59	$ 17.21
Assumptions:			
Expected annual dividend yield	2.81 %	2.92 %	1.98 %
Expected volatility	18.96 %	23.07 %	21.55 %
Risk-free rate of return	2.02 %	1.29 %	1.61 %
Expected option term (years)	5.04	4.97	4.96

(1) Estimated on date of grant using Black-Scholes option-pricing model.

The following table summarizes information about stock option activity for the three years ended December 31, 2017:

	Number of Options	Weighted Average Exercise Price
Outstanding at December 31, 2014	29,495,612	61.80
Granted	5,967,256	103.87
Exercised	(4,190,298)	53.40

Lapsed or canceled	(703,132)	84.31
Outstanding at December 31, 2015	30,569,438	70.76
Granted	6,281,053	103.51
Exercised	(7,075,852)	57.41
Lapsed or canceled	(1,107,339)	96.81
Outstanding at December 31, 2016	28,667,300	79.57
Granted	5,098,569	125.16
Exercised	(8,840,019)	62.34
Lapsed or canceled	(1,516,557)	109.04
Outstanding at December 31, 2017	23,409,293	$ 94.16
Vested and expected to vest at December 31, 2017(1)	21,979,487	$ 92.58
Exercisable at December 31, 2017	12,288,854	$ 78.35

(1) Represents the sum of vested options of 12.3 million and expected to vest options of 9.7 million. Expected to vest options are derived by applying the pre-vesting forfeiture rate assumption to total outstanding unvested options of 11.2 million.

(Dollars in millions, except per share amounts)

The following table summarizes information about stock options outstanding and exercisable at December 31, 2017:

Range of Exercise prices	Options Outstanding				Options Exercisable		
	Number Outstanding	Weighted Average Life(1)	Weighted Average Exercise Price	Aggregate Intrinsic Value	Number Exercisable	Weighted Average Exercise Price	Aggregate Intrinsic Value
\$28.19–\$64.99	4,204,045	3.38	\$ 54.75	\$ 415	4,204,045	\$ 54.75	\$ 415
\$65.00–\$89.99	2,402,025	5.17	69.59	201	2,401,220	69.59	201
\$90.00–\$99.99	3,189,936	6.16	93.41	191	2,239,440	93.41	134
\$100.00–\$114.99	8,974,559	7.71	103.45	448	3,427,616	103.37	172
\$115.00–\$134.00	4,638,728	9.17	125.15	131	16,533	124.20	—
	23,409,293	6.75	94.16	\$ 1,386	12,288,854	78.35	\$ 922

(1) Average remaining contractual life in years.

There were 15,536,961, and 17,202,377 options exercisable at weighted average exercise prices of \$63.39 and \$55.11 at December 31, 2016 and 2015.

The following table summarizes the financial statement impact from stock options exercised:

Options Exercised	Years Ended December 31,		
	2017	2016	2015
Intrinsic value(1)	\$ 620	\$ 395	\$ 210
Tax benefit realized	221	137	73

(1) Represents the amount by which the stock price exceeded the exercise price of the options on the date of exercise.

At December 31, 2017 there was $108 million of total unrecognized compensation cost related to non-vested stock option awards which is expected to be recognized over a weighted-average period of 2.32 years. The total fair value of options vested during 2017, 2016 and 2015 was $87 million, $76 million and $73 million.

Restricted Stock Units—Restricted stock unit (RSU) awards entitle the holder to receive one share of common stock for each unit when the units vest. RSUs are issued to certain key employees and directors as compensation at fair market value at the date of grant. RSUs typically become fully vested over periods ranging from three to seven years and are payable in Honeywell common stock upon vesting.

(Dollars in millions, except per share amounts)

The following table summarizes information about RSU activity for the three years ended December 31, 2017:

	Number of Restricted Stock Units	Weighted Average Grant Date Fair Value Per Share
Non-vested at December 31, 2014	5,899,194	70.32
Granted	1,190,406	103.04
Vested	(1,681,342)	56.38
Forfeited	(426,670)	77.73
Non-vested at December 31, 2015	4,981,588	82.18
Granted	1,364,469	110.49
Vested	(1,486,173)	68.58
Forfeited	(392,541)	88.88
Non-vested at December 31, 2016	4,467,343	94.17
Granted	1,274,791	129.71
Vested	(1,289,892)	81.37
Forfeited	(505,415)	103.06

Non-vested at December 31, 2017	3,946,827	$ 108.60

As of December 31, 2017, there was approximately $210 million of total unrecognized compensation cost related to non-vested RSUs granted under our stock plans which is expected to be recognized over a weighted-average period of 3.15 years.

The following table summarizes the impact to the Consolidated Statement of Operations from RSUs:

	Years Ended December 31,		
	2017	**2016**	**2015**
Compensation expense	$ 97	$ 97	$ 97
Future income tax benefit recognized	19	30	29

Note 19. Commitments and Contingencies

Environmental Matters

We are subject to various federal, state, local and foreign government requirements relating to the protection of the environment. We believe that, as a general matter, our policies, practices and procedures are properly designed to prevent unreasonable risk of environmental damage and personal injury and that our handling, manufacture, use and disposal of hazardous substances are in accordance with environmental and safety laws and regulations. However, mainly because of past operations and operations of predecessor companies, we, like other companies engaged in similar businesses, have incurred remedial response and voluntary cleanup costs for site contamination and are a party to lawsuits and claims associated with environmental and safety matters, including past production of products containing hazardous substances. Additional lawsuits, claims and costs involving environmental matters are likely to continue to arise in the future.

With respect to environmental matters involving site contamination, we continually conduct studies, individually or jointly with other potentially responsible parties, to determine the feasibility of various remedial techniques. It is our policy to record appropriate liabilities for environmental matters when remedial efforts or damage claim payments are probable and the costs can be reasonably estimated. Such liabilities are based on our best estimate of the undiscounted future costs required to complete the remedial work. The recorded liabilities are adjusted periodically as remediation efforts progress or as additional technical, regulatory or legal information becomes available. Given the uncertainties regarding the status of laws, regulations, enforcement policies, the impact of other potentially responsible parties, technology and information related to individual sites, we do not believe it is possible to develop an estimate of the range of reasonably possible environmental loss in excess of our recorded liabilities. We expect to fund expenditures for these matters from operating cash flow. The timing of cash expenditures depends on a number of factors, including the timing of remedial investigations and feasibility studies, the timing of litigation and settlements of remediation liability, personal injury and property damage claims, regulatory approval of cleanup projects, remedial techniques to be utilized and agreements with other parties.

(Dollars in millions, except per share amounts)

The following table summarizes information concerning our recorded liabilities for environmental costs:

	Years Ended December 31,		
	2017	**2016**	**2015**
Beginning of year	$ 511	$ 518	$ 591
Accruals for environmental matters deemed probable and reasonably estimable	287	195	194
Environmental liability payments	(212)	(228)	(273)
Other	9	26	6
End of year	$ 595	$ 511	$ 518

Environmental liabilities are included in the following balance sheet accounts:

	December 31,	
	2017	**2016**
Accrued liabilities	$ 226	$ 252
Other liabilities	369	259

	$ 595	$ 511

We do not currently possess sufficient information to reasonably estimate the amounts of environmental liabilities to be recorded upon future completion of studies, litigation or settlements, and neither the timing nor the amount of the ultimate costs associated with environmental matters can be determined although they could be material to our consolidated results of operations and operating cash flows in the periods recognized or paid. However, considering our past experience and existing reserves, we do not expect that environmental matters will have a material adverse effect on our consolidated financial position.

Onondaga Lake, Syracuse, NY—In 2016, we largely completed a dredging/capping remedy of Onondaga Lake pursuant to a consent decree approved by the United States District Court for the Northern District of New York in January 2007. Some additional long-term monitoring and maintenance activities will continue, as required by the consent decree. Honeywell is also conducting remedial investigations and activities at other sites in Syracuse. We have recorded reserves for these investigations and activities where appropriate, consistent with the accounting policy described above.

Honeywell and the federal and New York State natural resource trustees have submitted a consent decree to the federal court requesting approval for a negotiated settlement of natural resource damages claims for this site.

HONEYWELL INTERNATIONAL INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)
(Dollars in millions, except per share amounts)

Asbestos Matters

Honeywell is a defendant in asbestos related personal injury actions related to two predecessor companies:

- North American Refractories Company ("NARCO"), which was sold in 1986, produced refractory products (bricks and cement used in high temperature applications). Claimants consist largely of individuals who allege exposure to NARCO asbestos-containing refractory products in an occupational setting.
- Bendix Friction Materials ("Bendix") business, which was sold in 2014, manufactured automotive brake parts that contained chrysotile asbestos in an encapsulated form. Claimants consist largely of individuals who allege exposure to asbestos from brakes from either performing or being in the vicinity of individuals who performed brake replacements.

The following tables summarize information concerning NARCO and Bendix asbestos related balances:

Asbestos Related Liabilities

	Year Ended December 31,			Year Ended December 31,			Year Ended December 31		
	2017			2016			2015		
	Bendix	NARCO	Total	Bendix	NARCO	Total	Bendix	NARCO	T
Beginning of year	$ 641	$ 919	$ 1,560	$ 622	$ 921	$ 1,543	$ 623	$ 929	
Accrual for update to estimated liability	199	31	230	203	9	212	180	8	
Change in estimated cost of future claims	(4)	—	(4)	13	—	13	11	—	
Update of expected resolution values for pending claims	3	—	3	4	—	4	1	—	
Asbestos related	(223)	(43)	(266)	(201)	(11)	(212)	(193)	(16)	

liability payments								
End of year	$ 616	$ 907	$ 1,523	$ 641	$ 919	$ 1,560	$ 622	$ 921

Insurance Recoveries for Asbestos Related Liabilities

	Year Ended December 31, 2017			Year Ended December 31, 2016			Year Ended December 31, 2015		
	Bendix	NARCO	Total	Bendix	NARCO	Total	Bendix	NARCO	Total
Beginning of year	$ 121	$ 319	$ 440	$ 124	$ 325	$ 449	$ 135	$ 350	$ 48
Probable insurance recoveries related to estimated liability	22	—	22	26	—	26	21	—	21
Insurance receipts for asbestos related liabilities	(20)	(7)	(27)	(37)	(6)	(43)	(33)	(30)	(6
Insurance receivables settlements and write offs	—	—	—	7	—	7	1	6	7
Other	—	—	—	1	—	1	—	(1)	(1
End of year	$ 123	$ 312	$ 435	$ 121	$ 319	$ 440	$ 124	$ 325	$ 44

(Dollars in millions, except per share amounts)

NARCO and Bendix asbestos related balances are included in the following balance sheet accounts:

	December 31,	
	2017	2016
Other current assets	$ 24	$ 23
Insurance recoveries for asbestos related liabilities	411	417
	$ 435	$ 440
Accrued liabilities	$ 350	$ 546
Asbestos related liabilities	1,173	1,014
	$ 1,523	$ 1,560

NARCO Products—In connection with NARCO's emergence from bankruptcy on April 30, 2013, a federally authorized 524(g) trust (NARCO Trust) was established for the evaluation and resolution of all existing and future NARCO asbestos claims. Both Honeywell and NARCO are protected by a permanent channeling injunction barring all present and future individual actions in state or federal courts and requiring all asbestos related claims based on exposure to NARCO asbestos-containing products to be made against the NARCO Trust. The NARCO Trust reviews submitted claims and determines award amounts in accordance with established Trust Distribution Procedures approved by the Bankruptcy Court which set forth the criteria claimants must meet to qualify for compensation including, among other things, exposure and medical criteria that determine the award amount. In addition, Honeywell provided, and continues to provide, input to the design of control procedures for processing NARCO claims, and has on-going audit rights to review and monitor the claims processor's adherence to the established requirements of the Trust Distribution Procedures.

Honeywell is obligated to fund NARCO asbestos claims submitted to the NARCO Trust which qualify for payment under the Trust Distribution Procedures (Annual Contribution Claims), subject to annual caps of $140 million in 2018 and $145 million for each year thereafter. However, the initial $100 million of claims processed through the NARCO Trust (the Initial Claims Amount) will not count against the annual cap and any unused portion of the Initial Claims Amount will roll over to subsequent years until fully utilized. In 2015, Honeywell filed suit against the NARCO Trust in Bankruptcy Court alleging breach of certain provisions of the Trust Agreement and Trust Distribution Procedures. The parties agreed to dismiss the proceeding without prejudice pursuant to an 18 month Standstill Agreement. Claims processing continued during this period as the parties attempted to resolve disputed issues. The Standstill Agreement expired on October 12, 2017. Notwithstanding its expiration, claims processing continues, and Honeywell continues to negotiate and attempt to resolve remaining disputed issues (that is, instances where Honeywell believes the Trust is not processing claims in accordance with established Trust Distribution Procedures). Honeywell reserves its right to seek judicial intervention should negotiations fail or prove futile. As of December 31, 2017, Honeywell has not made any payments to the NARCO Trust for Annual Contribution Claims.

Honeywell is also responsible for payments due to claimants pursuant to settlement agreements reached during the pendency of the NARCO bankruptcy proceedings that provide for the right to submit claims to the NARCO Trust subject to qualification under the terms of the settlement agreements and Trust Distribution Procedures criteria (Pre-established Unliquidated Claims), which amounts are estimated at $150 million and are expected to be paid during the initial years of trust operations ($5 million of which has been paid since the effective date of the NARCO Trust). Such payments are not subject to the annual cap described above.

Our consolidated financial statements reflect an estimated liability for Pre-established Unliquidated Claims ($145 million), as well as unsettled claims pending as of the time NARCO filed for bankruptcy protection and operating and legal costs related to the Trust (collectively $19 million) and for the estimated value of future NARCO asbestos claims expected to be asserted against the NARCO Trust

($743 million). The estimate of future NARCO claims was prepared in 2002, in the same year NARCO filed for bankruptcy protection, using NARCO tort system litigation experience based on a commonly accepted methodology used by numerous bankruptcy courts addressing 524(g) trusts. Accordingly, the estimated value of future NARCO asbestos claims was prepared before there was data on claims filings and payment rates in the NARCO Trust under the Trust Distribution Procedures and also prepared when the stay of all NARCO asbestos claims was in effect (which remained in effect until NARCO emerged from Bankruptcy protection). Some critical assumptions underlying this commonly accepted methodology included claims filing rates, disease criteria and payment values contained in the Trust Distribution Procedures, estimated approval rates of claims submitted to the NARCO Trust and epidemiological studies estimating disease instances. The estimated value of the future NARCO liability reflects claims expected to be asserted against NARCO over a fifteen year period. This projection resulted in a range of estimated liability of $743 million to $961 million. We believe that no amount within this range is a better estimate than any other amount and accordingly, we have recorded the minimum amount in the range. Given the Trust's lack of sufficient claims processing experience since NARCO emerged from bankruptcy protection, it is not yet possible to reliably estimate future claim costs based on actual Trust experience.

Our insurance receivable corresponding to the estimated liability for pending and future NARCO asbestos claims reflects coverage which reimburses Honeywell for portions of NARCO-related indemnity and defense costs and is provided by a large number of insurance policies written by dozens of insurance companies in both the domestic insurance market and the London excess market. We conduct analyses to estimate the probable amount of insurance that is recoverable for asbestos claims. While the substantial majority of our insurance carriers are solvent, some of our individual carriers are insolvent, which has been considered in our analysis of probable recoveries. We made judgments concerning insurance coverage that we believe are reasonable and consistent with our historical dealings and our knowledge of any pertinent solvency issues surrounding insurers.

Projecting future events is subject to many uncertainties that could cause the NARCO-related asbestos liabilities or assets to be higher or lower than those projected and recorded. Given the uncertainties, we review our estimates periodically, and update them based on our experience and other relevant factors. Similarly, we will reevaluate our projections concerning our probable insurance recoveries in light of any changes to the projected liability or other developments that may impact insurance recoveries.

Bendix Products—The following tables present information regarding Bendix related asbestos claims activity:

Claims Activity	**Years Ended December 31,**	
	2017	**2016**

Claims Unresolved at the beginning of year	7,724	7,779
Claims Filed	2,645	2,830
Claims Resolved	(4,089)	(2,885)
Claims Unresolved at the end of year	6,280	7,724

Disease Distribution of Unresolved Claims	**December 31,**	
	2017	**2016**
Mesothelioma and Other Cancer Claims	3,062	3,490
Nonmalignant Claims	3,218	4,234
Total Claims	6,280	7,724

(Dollars in millions, except per share amounts)

Honeywell has experienced average resolution values per claim excluding legal costs as follows:

	Years Ended December 31,				
	2017	2016	2015	2014	2013
	(in whole dollars)				
Malignant claims	$ 56,000	$ 44,000	$ 44,000	$ 53,500	$ 51,000
Nonmalignant claims	$ 2,800	$ 4,485	$ 100	$ 120	$ 850

It is not possible to predict whether resolution values for Bendix-related asbestos claims will increase, decrease or stabilize in the future.

Our consolidated financial statements reflect an estimated liability for resolution of pending (claims actually filed as of the financial statement date) and future Bendix-related asbestos claims. We have valued Bendix pending and future claims using average resolution values for the previous five years. We update the resolution values used to estimate the cost of Bendix pending and future claims during the fourth quarter each year.

The liability for future claims represents the estimated value of future asbestos related bodily injury claims expected to be asserted against Bendix over the next five years. Such estimated cost of future Bendix-related asbestos claims is based on historic claims filing experience and dismissal rates, disease classifications, and resolution values in the tort system for the previous five years. In light of the uncertainties inherent in making long-term projections, as well as certain factors unique to friction product asbestos claims, we do not believe that we have a reasonable basis for estimating asbestos claims beyond the next five years. The methodology used to estimate the liability for future claims is similar to that used to estimate the liability for future NARCO-related asbestos claims.

Our insurance receivable corresponding to the liability for settlement of pending and future Bendix asbestos claims reflects coverage which is provided by a large number of insurance policies written by dozens of insurance companies in both the domestic insurance market and the London excess market. Based on our ongoing analysis of the probable insurance recovery, insurance receivables are recorded in the financial statements simultaneous with the recording of the estimated liability for the underlying asbestos claims. This determination is based on our analysis of the underlying insurance policies, our historical experience with our insurers, our ongoing review of the solvency of our insurers, judicial determinations relevant to our insurance programs, and our consideration of the impacts of any settlements reached with our insurers.

Honeywell believes it has sufficient insurance coverage and reserves to cover all pending Bendix-related asbestos claims and Bendix-related asbestos claims estimated to be filed within the next five years. Although it is impossible to predict the outcome of either pending or future Bendix-related asbestos claims, we do not believe that such claims would have a material adverse effect on our consolidated financial position in light of our insurance coverage and our prior experience in resolving such claims. If the rate and types of claims filed, the average resolution value of such claims and the period of time over which claim settlements are paid (collectively, the Variable Claims Factors) do not substantially change, Honeywell would not expect future Bendix-related asbestos claims to have a material adverse effect on our results of operations or operating cash flows in any fiscal year. No assurances can be given, however, that the Variable Claims Factors will not change.

Other Matters

We are subject to a number of other lawsuits, investigations and disputes (some of which involve substantial amounts claimed) arising out of the conduct of our business, including matters relating to commercial transactions, government contracts, product liability, prior acquisitions and divestitures, employee benefit plans, intellectual property, and environmental, health and safety matters. We recognize a liability for any contingency that is probable of occurrence and reasonably estimable. We continually assess the likelihood of adverse judgments of outcomes in these matters, as well as potential ranges of possible losses (taking into consideration any insurance recoveries), based on a careful analysis of each matter with the assistance of outside legal counsel and, if applicable, other experts. Included in these other matters are the following:

Honeywell v. United Auto Workers (UAW) et. al—In September 2011, the UAW and certain Honeywell retirees filed a suit in the Eastern District of Michigan alleging that the Master Collective Bargaining Agreements (MCBAs) between Honeywell and the UAW do not provide for limitations on Honeywell's obligation to contribute toward healthcare coverage for former employees who retired under the MCBAs ("CAPS"). Honeywell subsequently answered the UAW's complaint and asserted counterclaims.

Honeywell began enforcing the CAPS against former employees who retired after the initial inclusion of the CAPS in the 2003 MCBA (the post-2003 retirees) on January 1, 2014. The UAW and certain of the plaintiffs filed a motion for partial summary judgment with respect to the post-2003 retirees, seeking a ruling that the 2003 MCBA did not limit Honeywell's obligation to contribute to healthcare coverage for those retirees. That motion remains pending. Honeywell is confident that the District Court will find that the 2003 MCBA does, in fact, limit Honeywell's retiree healthcare obligation for the post-2003 retirees. In the event of an adverse ruling, however, Honeywell's other postretirement benefits for post-2003 retirees would increase by approximately $79 million, reflecting the estimated value of these CAPS.

In the second quarter of 2014, the parties agreed to stay the proceedings with respect to former employees who retired before the initial inclusion of the CAPS in the 2003 MCBA (the pre-2003 retirees) until the Supreme Court decided *M&G Polymers USA, LLC v. Tackett*. The Supreme Court decided the case on January 26, 2015 and, based on the ruling, Honeywell began enforcing the CAPS against the pre-2003 retirees on May 1, 2015. Honeywell is confident that the CAPS will be upheld by the District Court and that its liability for healthcare coverage premiums with respect to the putative class will be limited as negotiated and expressly set forth in the applicable MCBAs. In the event of an adverse ruling, however, Honeywell's other postretirement benefits for pre-2003 retirees would increase by approximately $103 million, reflecting the estimated value of these CAPS.

Given the uncertainty inherent in litigation and investigations (including the specific matter referenced above), we do not believe it is possible to develop estimates of reasonably possible loss in excess of current accruals for these matters (other than as specifically set forth above). Considering our past experience and existing accruals, we do not expect the outcome of these matters, either individually or in the aggregate, to have a material adverse effect on our consolidated financial position. Because most contingencies are resolved over long periods of time, potential liabilities are subject to change due to new developments, changes in settlement strategy or the impact of evidentiary requirements, which could cause us to pay damage awards or settlements (or become subject to equitable remedies) that could have a material adverse effect on our results of operations or operating cash flows in the periods recognized or paid.

Warranties and Guarantees

In the normal course of business we issue product warranties and product performance guarantees. We accrue for the estimated cost of product warranties and performance guarantees based on contract terms and historical experience at the time of sale. Adjustments to initial obligations for warranties and guarantees are made as changes to the obligations become reasonably estimable.

(Dollars in millions, except per share amounts)

The following table summarizes information concerning our recorded obligations for product warranties and product performance guarantees.

	Years Ended December 31,		
	2017	**2016**	**2015**
Beginning of year	$ 487	$ 416	$ 403
Accruals for warranties/guarantees issued during the year	215	326	206
Adjustment of pre-existing warranties/ guarantees	(27)	(40)	13
Settlement of warranty/guarantee claims	(267)	(215)	(206)
End of year	$ 408	$ 487	$ 416

Product warranties and product performance guarantees are included in the following balance sheet accounts:

	December 31,	
	2017	**2016**
Accrued liabilities	$ 307	$ 351
Other liabilities	101	136
	$ 408	$ 487

Note 20. Pension and Other Postretirement Benefits

We sponsor a number of both funded and unfunded U.S. and non-U.S. defined benefit pension plans. Pension benefits for many of our U.S. employees are provided through non-contributory, qualified and non-qualified defined benefit plans. All non-union hourly and salaried employees joining Honeywell for the first time after

December 31, 2012, are not eligible to participate in Honeywell's U.S. defined benefit pension plans. We also sponsor defined benefit pension plans which cover non-U.S. employees who are not U.S. citizens, in certain jurisdictions, principally the UK, Netherlands, Germany, and Canada. Other pension plans outside of the U.S. are not material to the Company either individually or in the aggregate.

We also sponsor postretirement benefit plans that provide health care benefits and life insurance coverage mainly to U.S. eligible retirees. None of Honeywell's U.S. employees are eligible for a retiree medical subsidy from the Company. In addition, the vast majority of Honeywell's U.S. retirees either have no Company subsidy or have a fixed-dollar subsidy amount. This significantly limits our exposure to the impact of future health care cost increases. The retiree medical and life insurance plans are not funded. Claims and expenses are paid from our operating cash flow.

(Dollars in millions, except per share amounts)

The following tables summarize the balance sheet impact, including the benefit obligations, assets and funded status associated with our significant pension and other postretirement benefit plans.

	Pension Benefits			
	U.S. Plans		Non-U.S. Plans	
	2017	2016	2017	2016
Change in benefit obligation:				
Benefit obligation at beginning of year	$ 17,414	$ 17,298	$ 6,483	$ 6,338
Service cost	172	191	40	47
Interest cost	586	600	147	179
Plan amendments	—	—	(1)	—
Actuarial (gains) losses	1,234	448	(24)	1,125
Benefits paid	(1,146)	(1,135)	(253)	(243)
Settlements and curtailments	(109)	—	—	(50)
Foreign currency translation	—	—	614	(930)
Other	—	12	13	17
Benefit obligation at end of year	18,151	17,414	7,019	6,483
Change in plan assets:				

Fair value of plan assets at beginning of year	16,814	16,349	6,120	6,117
Actual return on plan assets	3,287	1,554	539	1,006
Company contributions	139	36	161	186
Benefits paid	(1,146)	(1,135)	(253)	(243)
Settlements and curtailments	(109)	—	—	—
Foreign currency translation	—	—	569	(957)
Other	—	10	15	11
Fair value of plan assets at end of year	18,985	16,814	7,151	6,120
Funded status of plans	$ 834	$ (600)	$ 132	$ (363)
Amounts recognized in Consolidated Balance				
Sheet consist of:				
Prepaid pension benefit cost(1)	$ 1,205	$ —	$ 944	$ 380
Accrued pension liabilities—current(2)	(27)	(106)	(12)	(11)
Accrued pension liabilities—noncurrent(3)	(344)	(494)	(800)	(732)
Net amount recognized	$ 834	$ (600)	$ 132	$ (363)

(1) Included in Other assets on Consolidated Balance Sheet

(2) Included in Accrued liabilities on Consolidated Balance Sheet

(3) Included in Other liabilities on Consolidated Balance Sheet

(Dollars in millions, except per share amounts)

	Other Postretirement Benefits	
	2017	**2016**
Change in benefit obligation:		
Benefit obligation at beginning of year	$ 492	$ 569
Service cost	—	—
Interest cost	19	20
Plan amendments	91	27
Actuarial (gains) losses	(14)	(31)
Benefits paid	(58)	(93)
Benefit obligation at end of year	530	492
Change in plan assets:		
Fair value of plan assets at beginning of year	—	—
Actual return on plan assets	—	—
Company contributions	—	—
Benefits paid	—	—

Fair value of plan assets at end of year	—	—
Funded status of plans	$ (530)	$ (492)
Amounts recognized in Consolidated Balance Sheet consist of:		
Accrued liabilities	$ (62)	$ (62)
Postretirement benefit obligations other than pensions(1)	(468)	(430)
Net amount recognized	$ (530)	$ (492)

(1) Excludes non-U.S. plans of $44 million and $43 million in 2017 and 2016.

Amounts recognized in Accumulated other comprehensive (income) loss associated with our significant pension and other postretirement benefit plans at December 31, 2017 and 2016 are as follows:

	Pension Benefits			
	U.S. Plans		**Non-U.S. Plans**	
	2017	**2016**	**2017**	**2016**
Prior service (credit)	$ (268)	$ (312)	$ (13)	$ (11)
Net actuarial loss	248	1,099	427	582
Net amount recognized	$ (20)	$ 787	$ 414	$ 571

	Other Postretirement Benefits	
	2017	**2016**
Prior service (credit)	$ (244)	$ (393)

Net actuarial loss	109	136
Net amount recognized	$ (135)	$ (257)

(Dollars in millions, except per share amounts)

The components of net periodic benefit (income) cost and other amounts recognized in Other comprehensive (income) loss for our significant pension and other postretirement benefit plans include the following components:

Net Periodic Benefit Cost	**Pension Benefits**					
	U.S. Plans			**Non-U.S. Plans**		
	2017	**2016**	**2015**	**2017**	**2016**	**2015**
Service cost	$ 172	$ 191	$ 223	$ 40	$ 47	$ 51
Interest cost	586	600	696	147	179	177
Expected return on plan assets	(1,262)	(1,226)	(1,278)	(411)	(377)	(358)
Amortization of transition obligation	—	—	—	—	—	1
Amortization of prior service (credit) cost	(43)	(43)	13	(1)	(3)	(3)
Recognition of actuarial losses	41	27	52	46	246	15
Settlements and curtailments	18	—	8	—	(7)	2
Net periodic benefit (income) cost	$ (488)	$ (451)	$ (286)	$ (179)	$ 85	$ (115)

Other Changes in Plan Assets and Benefits Obligations Recognized in Other Comprehensive (Income) Loss	**U.S. Plans**			**Non-U.S. Plans**		
	2017	**2016**	**2015**	**2017**	**2016**	**2015**
Actuarial (gains) losses	$ (792)	$ 121	$ 775	$ (153)	$ 447	$ 27

Prior service (credit)	—	—	(429)	(1)	—	—
Transition obligation recognized during year	—	—	—	—	—	(1)
Prior service (cost) credit recognized during year	43	43	(13)	1	10	3
Actuarial losses recognized during year	(59)	(27)	(52)	(46)	(246)	(17)
Foreign currency translation	—	—	—	43	(83)	(37)
Total recognized in other comprehensive (income) loss	$ (808)	$ 137	$ 281	$ (156)	$ 128	$ (25)
Total recognized in net periodic benefit (income) cost and other comprehensive (income) loss	$ (1,296)	$ (314)	$ (5)	$ (335)	$ 213	$ (140)

The estimated prior service (credit) for pension benefits that will be amortized from Accumulated other comprehensive (income) loss into net periodic benefit (income) cost in 2018 are expected to be ($43) million and ($1) million for U.S. and non-U.S. pension plans.

Net Periodic Benefit Cost	**Other Postretirement Benefits Years Ended December 31,**		
	2017	**2016**	**2015**
Service cost	$ —	$ —	$ —
Interest cost	19	20	33
Amortization of prior service (credit)	(58)	(76)	(30)
Recognition of actuarial losses	13	22	34
Net periodic benefit (income) cost			

$ (26)	$ (34)	$ 37

(Dollars in millions, except per share amounts)

Other Changes in Plan Assets and Benefits Obligations Recognized in Other Comprehensive (Income) Loss	Years Ended December 31,		
	2017	2016	2015
Actuarial (gains) losses	$ (14)	$ (31)	$ (55)
Prior service cost (credit)	91	27	(290)
Prior service credit recognized during year	58	76	30
Actuarial losses recognized during year	(13)	(22)	(34)
Total recognized in other comprehensive (income) loss	$ 122	$ 50	$ (349)
Total recognized in net periodic benefit cost and other comprehensive (income) loss	$ 96	$ 16	$ (312)

The estimated net loss and prior service (credit) for other postretirement benefits that will be amortized from Accumulated other comprehensive (income) loss into net periodic benefit (income) in 2018 are expected to be $9 million and ($52) million.

Major actuarial assumptions used in determining the benefit obligations and net periodic benefit (income) cost for our significant benefit plans are presented in the following table as weighted averages.

	Pension Benefits					
	U.S. Plans			Non-U.S. Plans		
	2017	2016	2015	2017	2016	2015
Actuarial assumptions used to determine benefit obligations as of December 31:						
Discount rate	3.68 %	4.20 %	4.46 %	2.36 %	2.51 %	3.49 %
Expected annual rate of	4.50 %	4.50 %	4.48 %	0.73 %	2.17 %	2.11 %

compensation increase						
Actuarial assumptions used to determine net periodic benefit (income) cost for years ended December 31:						
Discount rate—benefit obligation	4.20 %	4.46 %	4.08 %	2.51 %	3.49 %	3.26 %
Discount rate—service cost	4.42 %	4.69	N/A	2.14 %	2.92	N/A
Discount rate—interest cost	3.49 %	3.59	N/A	2.19 %	3.07	N/A
Expected rate of return on plan assets	7.75 %	7.75 %	7.75 %	6.43 %	6.65 %	6.94 %
Expected annual rate of compensation increase	4.50 %	4.48 %	4.50 %	2.17 %	2.11 %	2.53 %

	Other Postretirement Benefits		
	2017	**2016**	**2015**
Actuarial assumptions used to determine benefit obligations as of December 31:			
Discount rate	3.39 %	3.65 %	3.80 %
Actuarial assumptions used to determine net periodic benefit cost for years ended December 31:			
Discount rate(1)	3.60 %	3.80 %	3.45 %

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(1) Discount rate was 3.65% for 1/1/17 through 2/28/17. Rate was changed to 3.60% for the remainder of 2017 due to Plan remeasurement as of 3/1/17.

The discount rate for our U.S. pension and other postretirement benefits plans reflects the current rate at which the associated liabilities could be settled at the measurement date of December 31. To determine discount rates for our U.S. pension and other postretirement benefit plans, we use a modeling process that involves matching the expected cash outflows of our benefit plans to a yield curve constructed from a portfolio of high quality, fixed-income debt instruments. We use the single weighted-average yield of this hypothetical portfolio as a discount rate benchmark. The discount rate used to determine the other postretirement benefit obligation is lower principally due to a shorter expected duration of other postretirement plan obligations as compared to pension plan obligations.

(Dollars in millions, except per share amounts)

During the fourth quarter of 2015 we changed the methodology used to estimate the service and interest cost components of net periodic benefit (income) cost for our significant pension plans. Previously, we estimated such cost components utilizing a single weighted-average discount rate derived from the yield curve used to measure the pension benefit obligation. The new methodology utilizes a full yield curve approach in the estimation of these cost components by applying the specific spot rates along the yield curve used in the determination of the pension benefit obligation to their underlying projected cash flows and provides a more precise measurement of service and interest costs by improving the correlation between projected cash flows and their corresponding spot rates. The change did not affect the measurement of our pension obligation and was applied prospectively as a change in estimate. For our U.S. pension plans, the single weighted average spot rates used to determine service and interest costs for 2018 are 3.77% and 3.27%.

Our expected rate of return on U.S. plan assets of 7.75% is a long-term rate based on historical plan asset returns over varying long-term periods combined with current market conditions and broad asset mix considerations. We review the expected rate of return on an annual basis and revise it as appropriate.

For non-U.S. benefit plans actuarial assumptions reflect economic and market factors relevant to each country.

Pension Benefits

The following amounts relate to our significant pension plans with accumulated benefit obligations exceeding the fair value of plan assets.

	December 31,			
	U.S. Plans		Non-U.S. Plans	
	2017	2016	2017	2016
Projected benefit obligation	$ 371	$ 17,414	$ 1,082	$ 2,294
Accumulated benefit obligation	$ 360	$ 17,263	$ 1,018	$ 2,220
Fair value of plan assets	—	$ 16,814	$ 269	$ 1,552

Accumulated benefit obligation for our U.S. defined benefit pension plans were $18.1 billion and $17.3 billion and for our Non-U.S. defined benefit pension plans were $6.9 billion and $6.4 billion at December 31, 2017 and 2016.

Our asset investment strategy for our U.S. pension plans focuses on maintaining a diversified portfolio using various asset classes in order to achieve our long-term investment objectives on a risk adjusted basis. Our actual invested positions in various securities change over time based on short and longer-term investment opportunities. To achieve our objectives, we have established long-term target allocations as follows: 60%-70% equity securities, 10%-20% fixed income securities and cash, 5%-15% real estate investments, and 10%-20% other types of investments. Equity securities include publicly-traded stock of companies located both inside and outside the United States. Fixed income securities include corporate bonds of companies from diversified industries, mortgage-backed securities, and U.S. Treasuries. Real estate investments include direct investments in commercial properties and investments in real estate funds. Other types of investments include investments in private equity and hedge funds that follow several different strategies. We review our assets on a regular basis to ensure that we are within the targeted asset allocation ranges and, if necessary, asset balances are adjusted back within target allocations.

Our non-U.S. pension assets are typically managed by decentralized fiduciary committees with the Honeywell Corporate Investments group providing funding and investment guidance. Our non-U.S.

(Dollars in millions, except per share amounts)

investment policies are different for each country as local regulations, funding requirements, and financial and tax considerations are part of the funding and investment allocation process in each country.

In accordance with ASU 2015-07, "Fair Value Measurement (Topic 820)", certain investments that are measured at fair value using the net asset value (NAV) per share (or its equivalent) practical expedient have not been classified in the fair value hierarchy. The fair value amounts presented in the following tables are intended to permit reconciliation of the fair value hierarchy to the amounts presented for the total pension benefits plan assets.

The fair values of both our U.S. and non-U.S. pension plans assets by asset category are as follows:

	U.S. Plans			
	December 31, 2017			
	Total	**Level 1**	**Level 2**	**Level 3**
Equities:				
Honeywell common stock	$ 2,832	$ 2,832	$ —	$ —
U.S. equities	3,573	3,573	—	—
Non-U.S. equities	2,631	2,618	13	—
Real estate investment trusts	265	265	—	—
Fixed income:				
Short term investments	919	919	—	—
Government securities	428	—	428	—
Corporate bonds	5,052	—	5,052	—
Mortgage/Asset-backed securities	742	—	742	—

Insurance contracts	8	—	8	—
Direct investments:				
Direct private investments	752	—	—	752
Real estate properties	597	—	—	597
Total	17,799	$ 10,207	$ 6,243	$ 1,349
Investments measured at NAV:				
Private funds	901			
Real estate funds	84			
Hedge funds	20			
Commingled Funds	181			
Total assets at fair value	$ 18,985			

(Dollars in millions, except per share amounts)

	U.S. Plans			
	December 31, 2016			
	Total	Level 1	Level 2	Level 3
Equities:				
Honeywell common stock	$ 2,140	$ 2,140	$ —	$ —
U.S. equities	3,583	3,583	—	—
Non-U.S. equities	2,069	2,037	32	—
Real estate investment trusts	203	203	—	—
Fixed income:				
Short term investments	1,306	1,306	—	—
Government securities	305	—	305	—
Corporate bonds	4,366	—	4,366	—
Mortgage/Asset-backed securities	617	—	617	—
Insurance contracts	7	—	7	—
Direct investments:				
Direct private investments	609	—	—	609
Real estate properties	664	—	—	664

Total	15,869	$ 9,269	$ 5,327	$ 1,273
Investments measured at NAV:				
Private funds	815			
Real estate funds	110			
Hedge funds	20			
Total assets at fair value	$ 16,814			

	Non-U.S. Plans			
	December 31, 2017			
	Total	Level 1	Level 2	Level 3
Equities:				
U.S. equities	$ 573	$ 420	$ 153	$ —
Non-U.S. equities	2,801	99	2,702	—
Fixed income:				
Short-term investments	238	238	—	—
Government securities	1,685	—	1,685	—
Corporate bonds	1,364	—	1,364	—
Mortgage/Asset-backed securities	47	—	47	—
Insurance contracts	157	—	157	—
Investments in private funds:				

Private funds	52	—	21	31
Real estate funds	149	—	—	149
Total	7,066	$ 757	$ 6,129	$ 180
Investments measured at NAV:				
Private funds	29			
Real estate funds	56			
Total assets at fair value	$ 7,151			

(Dollars in millions, except per share amounts)

	Non-U.S. Plans			
	December 31, 2016			
	Total	Level 1	Level 2	Level 3
Equities:				
U.S. equities	$ 650	$ 525	$ 125	$ —
Non-U.S. equities	2,153	219	1,934	—
Fixed income:				
Short-term investments	146	146	—	—
Government securities	1,530	—	1,530	—
Corporate bonds	1,220	—	1,220	—
Mortgage/Asset-backed securities	18	—	18	—
Insurance contracts	152	—	152	—
Investments in private funds:				
Private funds	42	—	19	23
Real estate funds	124	—	—	124
Total	6,035	$ 890	$ 4,998	$ 147
Investments measured at NAV:				

Private funds	33
Real estate funds	52
Total assets at fair value	$ 6,120

The following table summarizes changes in the fair value of Level 3 assets for both U.S. and Non-U.S. plans:

	U.S. Plans		**Non-U.S. Plans**	
	Direct Private Investments	**Real Estate Properties**	**Private Funds**	**Real Estate Funds**
Balance at December 31, 2015	$ 535	$ 626	$ 10	$ 152
Actual return on plan assets:				
Relating to assets still held at year-end	(42)	11	1	(22)
Relating to assets sold during the year	28	7	—	(1)
Purchases	141	48	12	—
Sales and settlements	(53)	(28)	—	(5)
Balance at December 31, 2016	609	664	23	124
Actual return on plan assets:				
Relating to assets still held at year-end	33	2	5	26
Relating to assets sold during the year	51	31	—	—
Purchases	148	18	6	—

Sales and settlements	(89)	(118)	(3)	(1)
Balance at December 31, 2017	$ 752	$ 597	$ 31	$ 149

The Company enters into futures contracts to gain exposure to certain markets. Sufficient cash or cash equivalents are held by our pension plans to cover the notional value of the futures contracts. At December 31, 2017 and 2016, our U.S. plans had contracts with notional amounts of $4,188 million and $3,775 million. At December 31, 2017 and 2016, our non-U.S. plans had contracts with notional amounts of $133 million and $55 million. In both our U.S. and non-U.S. pension plans, the notional derivative exposure is primarily related to outstanding equity futures contracts.

Common stocks, preferred stocks, real estate investment trusts, and short-term investments are valued at the closing price reported in the active market in which the individual securities are traded. Corporate bonds, mortgages, asset-backed securities, and government securities are valued either by using pricing models, bids provided by brokers or dealers, quoted prices of securities with similar characteristics or discounted cash flows and as such include adjustments for certain risks that may not be observable such as credit and liquidity risks. Certain securities are held in collective trust funds which are valued using net asset values provided by the administrators of the funds. Investments in private equity, debt, real estate and hedge funds and direct private investments are valued at estimated fair value based on quarterly financial information received from the investment advisor and/or general partner. Investments in real estate properties are valued on a quarterly basis using the income approach. Valuation estimates are periodically supplemented by third party appraisals.

(Dollars in millions, except per share amounts)

Our general funding policy for qualified defined benefit pension plans is to contribute amounts at least sufficient to satisfy regulatory funding standards. In 2017, 2016, and 2015, we were not required to make contributions to our U.S. pension plans and no contributions were made. We are not required to make any contributions to our U.S. pension plans in 2018. In 2017, contributions of $136 million were made to our non-U.S. pension plans to satisfy regulatory funding requirements. In 2018, we expect to make contributions of cash and/or marketable securities of approximately $142 million to our non-U.S. pension plans to satisfy regulatory funding standards. Contributions for both our U.S. and non-U.S. pension plans do not reflect benefits paid directly from Company assets.

Benefit payments, including amounts to be paid from Company assets, and reflecting expected future service, as appropriate, are expected to be paid as follows:

	U.S. Plans	Non-U.S. Plans
2018	$ 1,170	$ 261
2019	1,159	256
2020	1,165	264
2021	1,169	271
2022	1,176	289
2023-2027	5,795	1,477

Other Postretirement Benefits

	December 31,	
	2017	2016
Assumed health care cost trend rate:		
Health care cost trend rate assumed for next year	6.50 %	6.50 %
Rate that the cost trend rate gradually declines to	5.00 %	5.00 %
Year that the rate reaches the rate it is assumed to remain at	2023	2023

The assumed health care cost trend rate has a significant effect on the amounts reported. A one-percentage-point change in the assumed health care cost trend rate would have the following effects:

	1 percentage point	
	Increase	Decrease
Effect on total of service and interest cost components	$ 1	$ (1)
Effect on postretirement benefit obligation	$ 28	$ (22)

Benefit payments reflecting expected future service, as appropriate, are expected to be paid as follows:

(Dollars in millions, except per share amounts)

	Without Impact of Medicare Subsidy	Net of Medicare Subsidy
2018	$ 67	$ 62
2019	62	57
2020	58	53
2021	54	49
2022	50	46
2023-2027	161	145

Note 21. Segment Financial Data

We globally manage our business operations through four reportable operating segments. Segment information is consistent with how management reviews the businesses, makes investing and resource allocation decisions and assesses operating performance.

Honeywell's senior management evaluates segment performance based on segment profit. Segment profit is measured as segment income (loss) before taxes excluding general corporate unallocated expense, other income (expense), interest and other financial charges, stock compensation expenses, pension and other postretirement benefits (expense), stock compensation expense and repositioning and other charges.

Effective October 2017, the Company realigned the Smart Energy business, previously part of the Home and Building Technologies segment, into the Process Solutions business within the Performance Materials and Technologies segment.

Effective July 2016, the Company realigned the business units comprising its Automation and Control Solutions reporting segment by forming two new reportable operating segments: Home and Building Technologies and Safety and Productivity Solutions.

These realignments have no impact on the Company's historical consolidated financial position, results of operations or cash flows. Prior period amounts have been reclassified to conform to current period segment presentation.

(Dollars in millions, except per share amounts)

	Years Ended December 31,		
	2017	2016	2015
Net Sales			
Aerospace			
Product	$ 10,067	$ 9,926	$ 10,379
Service	4,712	4,825	4,858
Total	14,779	14,751	15,237
Home and Building Technologies			
Product	8,396	8,250	7,850
Service	1,381	1,240	1,176
Total	9,777	9,490	9,026
Performance Materials and Technologies			
Product	8,521	8,725	7,809
Service	1,818	1,711	1,801
Total	10,339	10,436	9,610
Safety and Productivity Solutions			

Product	5,333	4,461	4,657
Service	306	164	51
Total	5,639	4,625	4,708
	$ 40,534	$ 39,302	$ 38,581
Depreciation and amortization			
Aerospace	$ 279	$ 275	$ 267
Home and Building Technologies	118	107	100
Performance Materials and Technologies	441	399	286
Safety and Productivity Solutions	219	188	173
Corporate	58	61	57
	$ 1,115	$ 1,030	$ 883
Segment Profit			
Aerospace	$ 3,288	$ 2,991	$ 3,218
Home and Building Technologies	1,650	1,621	1,492
Performance Materials and Technologies	2,206	2,112	2,010
Safety and Productivity Solutions	852	680	746
Corporate	(306)	(218)	(210)

	$ 7,690	$ 7,186	$ 7,256
Capital expenditures			
Aerospace	$ 380	$ 331	$ 314
Home and Building Technologies	88	92	103
Performance Materials and Technologies	303	473	481
Safety and Productivity Solutions	79	55	47
Corporate	181	144	128
	$ 1,031	$ 1,095	$ 1,073

	December 31,		
	2017	**2016**	**2015**
Total Assets			
Aerospace	$ 11,769	$ 11,426	$ 11,235
Home and Building Technologies	10,592	10,392	10,464
Performance Materials and Technologies	17,203	15,835	15,185
Safety and Productivity Solutions	9,456	8,951	7,006
Corporate	10,367	7,542	5,426
	$ 59,387	$ 54,146	$ 49,316

A reconciliation of segment profit to consolidated income from continuing operations before taxes are as follows:

(Dollars in millions, except per share amounts)

	Years Ended December 31,		
	2017	**2016**	**2015**
Segment Profit	$ 7,690	$ 7,186	$ 7,256
Other income (expense)(1)	28	71	38
Interest and other financial charges	(316)	(338)	(310)
Stock compensation expense(2)	(176)	(184)	(175)
Pension ongoing income (expense)(2)	713	601	430
Pension mark-to-market expense(2)	(87)	(273)	(67)
Other postretirement income (expense)(2)	21	32	(40)
Repositioning and other charges(2)	(971)	(648)	(546)
Income before taxes	$ 6,902	$ 6,447	$ 6,586

(1) Equity income (loss) of affiliated companies is included in Segment Profit.

(2) Amounts included in cost of products and services sold and selling, general and administrative expenses.

Note 22. Geographic Areas—Financial Data

	Net Sales(1)			Long-lived Assets(2)		
	Years Ended December 31,			December 31,		
	2017	**2016**	**2015**	**2017**	**2016**	**2015**
United States						

	$ 22,722	$ 22,652	$ 23,771	$ 3,604	$ 3,744	$ 3,939
Europe	10,400	9,966	8,674	927	741	746
Other International	7,412	6,684	6,136	1,395	1,308	1,104
	$ 40,534	$ 39,302	$ 38,581	$ 5,926	$ 5,793	$ 5,789

(1) Sales between geographic areas approximate market and are not significant. Net sales are classified according to their country of origin. Included in United States net sales are export sales of $4,974 million, $5,290 million and $5,526 million in 2017, 2016 and 2015.

(2) Long-lived assets are comprised of property, plant and equipment - net.

Note 23. Supplemental Cash Flow Information

	Years Ended December 31,		
	2017	**2016**	**2015**
Payments for repositioning and other charges:			
Severance and exit cost payments	$ (177)	$ (228)	$ (118)
Environmental payments	(212)	(228)	(273)
Insurance receipts for asbestos related liabilities	27	43	63
Asbestos related liability payments	(266)	(212)	(209)
	$ (628)	$ (625)	$ (537)
Interest paid, net of amounts capitalized	$ 306	$ 329	$ 310
Income taxes paid, net of refunds	1,751	1,142	1,192

Non-cash investing and financing activities:			
Common stock contributed to savings plans	172	168	174
Marketable securities contributed to non-U.S. pension plans	89	106	109

(Dollars in millions, except per share amounts)

Non-cash operating activities reported within Other of the Consolidated Statement of Cash Flows included the noncurrent portion of the 2017 provisional tax charge of $1,737 due to the imposition of the mandatory transition tax on the deemed repatriation of certain undistributed foreign earnings, and within Deferred income taxes the provisional tax charge of $2,094 related to the estimated foreign and state taxes on undistributed earnings of its foreign affiliates (see Note 5 Income Taxes).

Note 24. Unaudited Quarterly Financial Information

	2017				
	Mar. 31	June 30	Sept. 30	Dec. 31(3)	Year
Net Sales	$ 9,492	$ 10,078	$ 10,121	$ 10,843	$ 40,534
Gross Profit	3,136	3,228	3,248	3,347	12,959
Net income (loss) attributable to Honeywell	1,326	1,392	1,348	(2,411)	1,655
Earnings (loss) per common share—basic(1)	1.74	1.82	1.77	(3.18)	2.17
Earnings (loss) per common share—assuming dilution(1)(2)	1.71	1.80	1.75	(3.18)	2.14
Cash dividends per common share	0.6650	0.6650	0.6650	0.7450	2.74
Market price per common share					
High	127.25	135.84	141.75	155.96	155.96
Low	116.18	122.50	133.37	142.55	116.18

	2016				
	Mar. 31	June 30	Sept. 30	Dec. 31	Year
Net Sales					

	$ 9,522	$ 9,991	$ 9,804	$ 9,985	$ 39,302
Gross Profit	2,975	3,170	2,901	3,106	12,152
Net income attributable to Honeywell	1,216	1,319	1,240	1,034	4,809
Earnings per common share—basic	1.58	1.73	1.62	1.36	6.29
Earnings per common share—assuming dilution	1.56	1.70	1.60	1.34	6.20
Cash dividends per common share	0.5950	0.5950	0.5950	0.6650	2.45
Market price per common share					
High	113.23	117.32	119.88	118.09	119.88
Low	96.24	111.46	111.60	105.78	96.24

(1) Total for the full year may differ from the sum of the individual quarters due to the requirement to use weighted average shares each quarter, which may fluctuate with share repurchases and share issuances, and due to the impact of losses in a quarter.

(2) Due to a loss for the quarter ended December 31, 2017, no incremental shares were included because the effect would be antidilutive.

(3) For the quarter ended December 31, 2017 Net income (loss) attributable to Honeywell, Earnings (loss) per common share - basic and Earnings (loss) per common share - assuming dilution were impacted by the Tax Cuts and Jobs Act; see Note 5 Income Taxes for further details.

Report of Independent Registered Public Accounting Firm

TO THE SHAREOWNERS AND THE BOARD OF DIRECTORS OF HONEYWELL INTERNATIONAL INC.

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated balance sheets of Honeywell International Inc. and subsidiaries (the "Company") as of December 31, 2017 and 2016, and the related consolidated statements of operations, comprehensive income, shareholders' equity, and cash flows, for each of the three years in the period ended December 31, 2017, and the related notes (collectively referred to as the "financial statements"). We also have audited the Company's internal control over financial reporting as of December 31, 2017, based on criteria established in *Internal Control—Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2017 and 2016, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2017, in conformity with accounting principles generally accepted in the United States of America. Also, in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2017, based on criteria established in *Internal Control—Integrated Framework (2013)* issued by COSO.

Basis for Opinions

The Company's management is responsible for these financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Report on Internal Control Over Financial Reporting. Our responsibility is to express an opinion on these financial statements and an opinion on the Company's internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the financial statements included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures to respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

Definition and Limitations of Internal Control over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ Deloitte & Touche LLP

Parsippany, New Jersey
February 9, 2018

We have served as the Company's auditor since 2014.

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure

Not Applicable.

Item 9A. Controls and Procedures

Honeywell management maintains disclosure controls and procedures designed to provide reasonable assurance that information required to be disclosed in reports filed under the Securities Exchange Act of 1934, as amended (Exchange Act) is recorded, processed, summarized and reported within the specified time periods and accumulated and communicated to our management, including our principal executive officer and principal financial officer, as appropriate to allow timely decisions regarding required disclosure. There have been no changes that have materially affected, or are reasonably likely to materially affect, Honeywell's internal control over financial reporting that have occurred during the quarter ended December 31, 2017.

Our management, with the participation of our CEO and CFO, evaluated the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15(e) or 15d-15(e) promulgated under the Exchange Act) at December 31, 2017. Based on these evaluations, our CEO and CFO concluded that our disclosure controls and procedures required by paragraph (b) of Rules 13a-15 or 15d-15 were effective as of December 31, 2017.

Management's Report on Internal Control Over Financial Reporting

Honeywell management is responsible for establishing and maintaining adequate internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting as defined in Rules 13a-15(f) and 15d-15(f) under the Securities Exchange Act of 1934. Honeywell's internal control over financial reporting is a process designed to provide reasonable assurance to our management and board of directors regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements.

Management assessed the effectiveness of Honeywell's internal control over financial reporting as of December 31, 2017. In making this assessment, management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in *Internal Control—Integrated Framework (2013)*.

Based on this assessment, management determined that Honeywell maintained effective internal control over financial reporting as of December 31, 2017.

The effectiveness of Honeywell's internal control over financial reporting as of December 31, 2017 has been audited by Deloitte & Touche LLP, an independent registered public accounting firm, as stated in their report which is included in Item 8. Financial Statements and Supplementary Data.

Item 9B. Other Information

Iran Threat Reduction and Syrian Human Rights Act of 2012

Under the Iran Threat Reduction and Syrian Human Rights Act of 2012, which added Section 13(r) of the Securities Exchange Act of 1934, Honeywell is required to disclose in its periodic reports if it or any of its affiliates knowingly engaged in certain activities, transactions or dealings relating to Iran or with entities or individuals designated pursuant to certain Executive Orders. All of our activities in Iran during the fiscal year ended December 31, 2017, including the activities disclosed below, were conducted by our non-U.S. subsidiaries under General License H, (ii) under General License I, or (iii) under a specific license issued by U.S. Treasury's Office of Foreign Assets Control (OFAC), and otherwise in compliance with all applicable laws, including sanctions regulations administered by OFAC.

In the fiscal year ended December 31, 2017, the non-U.S. subsidiaries of our UOP business, part of Performance Materials and Technologies, engaged in the following activities related to Iran's oil, gas and/or petrochemical sectors:

- Delivered services to Iranian counterparties pursuant to new and existing contracts, which resulted in revenue of approximately $54.2 million (expected total value of these contracts is approximately $81.2 million).
- Sold non-U.S. origin products to non-U.S. third-parties for end-use in Iran pursuant to new and existing contracts, which resulted in revenue of approximately $1.8 million (expected total value of these contracts is approximately $3.5 million).

In the fiscal year ended December 31, 2017, the non-U.S. subsidiaries of our Process Solutions business, part of Performance Materials and Technologies, engaged in the following activities related to Iran's oil, gas and/or petrochemical sectors:

- Sold non-U.S. origin products to non-U.S. third-parties for end-use in Iran pursuant to new contracts, which resulted in revenue of approximately $1.4 million (expected total value of these contracts is approximately $6.9 million).
- Sold approximately $0.4 million of non-U.S. origin products to distributors (including an Iranian distributor) for use in the gas distribution sector in Iran.

We intend to continue doing business in Iran under General Licenses H and I or under a specific license issued by OFAC, and otherwise in compliance with all applicable laws. Such activities may require additional disclosure pursuant to Section 13(r) of the Act.

PART III.

Item 10. Directors and Executive Officers of the Registrant

Information relating to the Directors of Honeywell, as well as information relating to compliance with Section 16(a) of the Securities Exchange Act of 1934, will be contained in our definitive Proxy Statement involving the election of the Directors, which will be filed with the SEC pursuant to Regulation 14A not later than 120 days after December 31, 2017, and such information is incorporated herein by reference. Certain other information relating to the Executive Officers of Honeywell appears in Part I of this Annual Report on Form 10-K under the heading Executive Officers of the Registrant.

The members of the Audit Committee of our Board of Directors are: George Paz (Chair), Kevin Burke, D. Scott Davis, Linnet Deily, Judd Gregg and Robin L. Washington. The Board has determined that Mr. Paz, Mr. Davis and Ms. Washington are audit committee financial experts as defined by applicable SEC rules and that Mr. Paz, Mr. Burke, Mr. Davis, Ms. Deily and Ms. Washington satisfy the accounting or related financial management expertise criteria established by the NYSE. All members of the Audit Committee are independent as that term is defined in applicable SEC rules and NYSE listing standards.

Honeywell's corporate governance policies and procedures, including the Code of Business Conduct, Corporate Governance Guidelines and Charters of the Committees of the Board of Directors are available, free of charge, on our website under the heading Investor Relations (see Corporate Governance), or by writing to Honeywell, 115 Tabor Road, Morris Plains, New Jersey 07950, c/o Vice President and Corporate Secretary. Honeywell's Code of Business Conduct applies to all Honeywell directors, officers (including the Chief Executive Officer, Chief Financial Officer and Controller) and employees. Amendments to or waivers of the Code of Business Conduct granted to any of Honeywell's directors or executive officers will be published on our website within five business days of such amendment or waiver.

Item 11. Executive Compensation

Information relating to executive compensation is contained in the Proxy Statement referred to above in Item 10. Directors and Executive Officers of the Registrant, and such information is incorporated herein by reference.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters

Information relating to security ownership of certain beneficial owners and management and related stockholder matters is contained in the Proxy Statement referred to above in Item 10. Directors and Executive Officers of the Registrant, and such information is incorporated herein by reference.

EQUITY COMPENSATION PLANS

As of December 31, 2017 information about our equity compensation plans is as follows:

Plan category	Number of Shares to be Issued Upon Exercise of Outstanding Options, Warrants and Rights	Weighted-Average Exercise Price of Outstanding Options, Warrants and Rights	Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans (Excluding Securities Reflected in Column (a))
	(a)	(b)	(c)
Equity compensation plans approved by security holders	29,299,135 (1)	$ 94.16 (2)	44,805,201 (3)
Equity compensation plans not approved by security holders	404,048 (4)	N/A (5)	N/A (6)
Total	29,703,183	$ 94.16	44,805,201

(1) Equity compensation plans approved by shareowners which are included in column (a) of the table are the 2016 Stock Incentive Plan, the 2011 Stock Incentive Plan and the 2006 Stock Incentive Plan (including 23,175,962 shares of Common Stock to be issued for options; 3,922,890 RSUs subject to continued employment; and 1,896,307 deferred RSUs); and the 2016 Stock Plan for Non-Employee Directors and the 2006 Stock Plan for Non-Employee Directors

(including 283,431 shares of Common Stock to be issued for options; and 20,545 RSUs subject to continued services). RSUs included in column (a) of the table represent the full number of RSUs awarded and outstanding whereas the number of shares of Common Stock to be issued upon vesting will be lower than what is reflected on the table because the value of shares required to meet employee tax withholding requirements are not issued.

1,398,906 growth plan units were issued and remain outstanding for the performance cycle commencing January 1, 2016 and ended December 31, 2017 pursuant to the 2011 Stock Incentive Plan. The value of this growth plan award will be paid in cash and, thus, growth plan units are not included in the table above.

Because the number of future shares that may be distributed to employees participating in the Honeywell Global Stock Plan is unknown, no shares attributable to that plan are included in column (a) of the table above.

(2) Column (b) relates to stock options and does not include any exercise price for RSUs because an RSU’s value is dependent upon attainment of certain performance goals or continued employment or service and they are settled for shares of Common Stock on a one-for-one basis.

(3) The number of shares that may be issued under the 2016 Stock Incentive Plan as of December 31, 2017 is 42,025,990 which includes the following additional shares that may again be available for issuance: shares that are settled for cash, expire, are canceled, or under similar prior plans, are tendered as option exercise price or tax withholding obligations, are reacquired with cash option exercise price or with monies attributable to any tax deduction to Honeywell upon the exercise of an option, or are under any outstanding awards assumed under any equity compensation plan of

an entity acquired by Honeywell. No securities are available for future issuance under the 2011 Stock Incentive Plan or the 2006 Stock Incentive Plan.

The number of shares that may be issued under the Honeywell Global Stock Plan as of December 31, 2017 is 1,854,517. This plan is an umbrella plan for three plans described below maintained solely for eligible employees of participating non-U.S. countries.

- The UK Sharebuilder Plan allows an eligible UK employee to invest taxable earnings in Common Stock. The Company matches those shares and dividends paid are used to purchase additional shares of Common Stock. For the year ending December 31, 2017, 46,573 shares were credited to participants' accounts under the UK Sharebuilder Plan.
- The Honeywell International Technologies Employees Share Ownership Plan (Ireland) and the Honeywell Measurex (Ireland) Limited Group Employee Profit Sharing Scheme, allow eligible employees in Ireland to contribute specified percentages of base pay, bonus or performance pay that are then invested in Common Stock. For the year ending December 31, 2017, 5,887 shares of Common Stock were credited to participants' accounts under these two plans.

The remaining 924,694 shares included in column (c) are shares remaining under the 2016 Stock Plan for Non-Employee Directors.

(4) Equity compensation plans not approved by shareowners included in the table refers to the Supplemental Non-Qualified Savings Plan for Highly Compensated Employees.

The Supplemental Non-Qualified Savings Plan for Highly Compensated Employees is an unfunded, non-tax qualified plan that provides benefits equal to the employee deferrals and company matching allocations that would have been provided under Honeywell's U.S. tax-qualified savings plan if the Internal Revenue Code limitations on compensation and contributions did not apply. The Company matching contribution is credited to participants' accounts in the form of notional shares of Common Stock. The notional shares are distributed in the form of actual shares of Common Stock. The number of shares to be issued under this plan based on the value of the notional shares as of December 31, 2017 is 399,676.

The AlliedSignal Incentive Compensation Plan for Executive Employees was a cash incentive compensation plan maintained by AlliedSignal Inc. This plan has expired. Employees were permitted to defer receipt of a cash bonus payable under the plan and invest the deferred bonus in notional shares of Common Stock. The notional shares are distributed in the form of actual shares of Common Stock. The number of shares of Common Stock that remain to be issued as of December 31, 2017 is 4,372.

(5) Column (b) does not include any exercise price for notional shares allocated to employees under Honeywell's equity compensation plans not approved by shareowners because all of these shares are only settled for shares of Common Stock on a one-for-one basis.

(6)

The amount of securities available for future issuance under the Supplemental Non-Qualified Savings Plan for Highly Compensated Employees is not determinable because the number of securities that may be issued under this plan depends upon the amount deferred to the plan by participants in future years.

Item 13. Certain Relationships and Related Transactions

Information relating to certain relationships and related transactions is contained in the Proxy Statement referred to above in Item 10. Directors and Executive Officers of the Registrant, and such information is incorporated herein by reference.

Item 14. Principal Accounting Fees and Services

Information relating to fees paid to and services performed by Deloitte & Touche LLP and our Audit Committee's pre-approval policies and procedures with respect to non-audit services are contained in the Proxy Statement referred to above in Item 10. Directors and Executive Officers of the Registrant, and such information is incorporated herein by reference.

PART IV.

Item 15. Exhibits and Financial Statement Schedules

Item 16. Form 10-K Summary

None.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

HONEYWELL INTERNATIONAL INC.

Date: February 9, 2018

By: /s/ Jennifer H. Mak

Jennifer H. Mak
Vice President and Controller
(on behalf of the Registrant
and as the Registrant's
Principal Accounting Officer)

Pursuant to the requirements of the Securities Exchange Act of 1934, this annual report has been signed below by the following persons on behalf of the Registrant and in the capacities and on the date indicated:

Name	Name
*	*
David M. Cote Chairman of the Board	Judd Gregg Director
*	*

Darius Adamczyk
President and Chief Executive Officer
and Director
(Principal Executive Officer)

*

William S. Ayer
Director

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Kevin Burke
Director

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Jaime Chico Pardo
Director

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D. Scott Davis
Director

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Clive Hollick
Director

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Grace D. Lieblein
Director

*

George Paz
Director

*

Bradley T. Sheares, Ph.D.
Director

*

Robin L. Washington
Director

Linnet F. Deily
Director

/s/ Thomas A. Szlosek

Thomas A. Szlosek
Senior Vice President and
Chief Financial Officer
(Principal Financial Officer)

/s/ Jennifer H. Mak

Jennifer H. Mak
Vice President and Controller
(Principal Accounting Officer)

*By: /s/ Thomas A. Szlosek

(Thomas A. Szlosek
Attorney-in-fact)

February 9, 2018

EXHIBIT INDEX

Exhibit No.	Description
3(i)	Amended and Restated Certificate of Incorporation of Honeywell International Inc., as amended April 26, 2010 (incorporated by reference to Exhibit 3(i) to Honeywell's Form 8-K filed April 27, 2010)
3(ii)	By-laws of Honeywell International Inc., as amended February 12, 2016 (incorporated by reference to Exhibit 3(ii) to Honeywell's Form 8-K filed February 12, 2016)
4	Honeywell International Inc. is a party to several long-term debt instruments under which, in each case, the total amount of securities authorized does not exceed 10% of the total assets of Honeywell and its subsidiaries on a consolidated basis. Pursuant to paragraph 4(iii)(A) of Item 601(b) of Regulation S-K, Honeywell agrees to furnish a copy of such instruments to the Securities and Exchange Commission upon request.
10.1*	Deferred Compensation Plan for Non-Employee Directors of Honeywell International Inc., as amended and restated (incorporated by reference to Exhibit 10.2 to Honeywell's Form 10-Q for quarter ended June 30, 2003)

10.2*	Amendment to Deferred Compensation Plan for Non-Employee Directors of Honeywell International Inc., as amended and restated (incorporated by reference to Exhibit 10.1 to Honeywell's Form 8-K filed December 21, 2004)
10.3*	Amendment to Deferred Compensation Plan for Non-Employee Directors of Honeywell International Inc., as amended and restated (incorporated by reference to Exhibit 10.2 to Honeywell's Form 10-K for the year ended December 31, 2005)
10.4*	Honeywell International Inc. Incentive Compensation Plan for Executive Employees, as amended and restated (incorporated by reference to Exhibit 10.4 to Honeywell's Form 10-K for the year ended December 31, 2013)
10.5*	Supplemental Non-Qualified Savings Plan for Highly Compensated Employees of Honeywell International Inc. and its Subsidiaries, as amended and restated (incorporated by reference to Exhibit 10.6 to Honeywell's Form 10-K for the year ended December 31, 2008)
10.6*	Amendment to Supplemental Non-Qualified Savings Plan for Highly Compensated Employees of Honeywell International Inc. and its Subsidiaries, as amended and restated (incorporated by reference to Exhibit 10.5 to Honeywell's Form 10-K for the year ended December 31, 2010)

10.7*	Amendment to Supplemental Non-Qualified Savings Plan for Highly Compensated Employees of Honeywell International Inc. and its Subsidiaries, as amended and restated (incorporated by reference to Exhibit 10.1 to Honeywell's Form 10-Q for the quarter ended June 30, 2012)
10.8*	Amendment to Supplemental Non-Qualified Savings Plan for Highly Compensated Employees of Honeywell International Inc. and its Subsidiaries, as amended and restated (incorporated by reference to Exhibit 10.5 to Honeywell's Form 10-K for the year ended December June 31, 2013)
10.9*	Amendment to Supplemental Non-Qualified Savings Plan for Highly Compensated Employees of Honeywell International Inc. and its Subsidiaries, as amended and restated (incorporated by reference to Exhibit 10.1 to Honeywell's Form 10-Q for the quarter ended June 30, 2015)
10.10*	Honeywell International Inc. Severance Plan for Designated Officers, as amended and restated (incorporated by reference to Exhibit 10.6 to Honeywell's Form 10-K for the year ended December 31, 2013)

Exhibit No.	Description
10.11*	Salary and Incentive Award Deferral Plan for Selected Employees of Honeywell International Inc. and its Affiliates, as amended and restated (incorporated by reference to Exhibit 10.8 to Honeywell’s Form 10-K for the year ended December 31, 2008)
10.12*	Amendment to Salary and Incentive Award Deferral Plan for Selected Employees of Honeywell International Inc. and its Affiliates, as amended and restated (incorporated by reference to Exhibit 10.7 to Honeywell’s Form 10-K for the year ended December 31, 2013)
10.13*	Honeywell International Inc. Supplemental Pension Plan, as amended and restated (incorporated by reference to Exhibit 10.10 to Honeywell’s Form 10-K for the year ended December 31, 2008)
10.14*	Amendment to Honeywell International Inc. Supplemental Pension Plan, as amended and restated (incorporated by reference to Exhibit 10.10 to Honeywell’s Form 10-K for the year ended December 31, 2009)
10.15*	Amendment to Honeywell International Inc. Supplemental Pension Plan, as amended and restated (incorporated by reference to Exhibit 10.7 to Honeywell’s Form 10-K

	for the year ended December 31, 2015)
10.16*	Honeywell International Inc. Supplemental Executive Retirement Plan for Executives in Career Band 6 and Above, as amended and restated (incorporated by reference to Exhibit 10.12 to Honeywell's Form 10-K for the year ended December 31, 2008)
10.17*	Amendment to Honeywell International Inc. Supplemental Executive Retirement Plan for Executives in Career Band 6 and Above, as amended and restated (incorporated by reference to Exhibit 10.12 to Honeywell's Form 10-K for the year ended December 31, 2009)
10.18*	Amendment to Honeywell International Inc. Supplemental Executive Retirement Plan for Executives in Career Band 6 and Above, as amended and restated (incorporated by reference to Exhibit 10.9 to Honeywell's Form 10-K for the year ended December 31, 2013)
10.19*	Amendment to Honeywell International Inc. Supplemental Executive Retirement Plan for Executives in Career Band 6 and Above, as amended and restated (incorporated by reference to Exhibit 10.8 to Honeywell's Form 10-K for the year ended December 31, 2015)
10.20*	Honeywell Supplemental Defined Benefit Retirement Plan, as amended and restated (incorporated by reference to Exhibit 10.13 to Honeywell's Form 10-K for

	the year ended December 31, 2008)
10.21*	Amendment to Honeywell Supplemental Defined Benefit Retirement Plan, as amended and restated (incorporated by reference to Exhibit 10.13 to Honeywell's Form 10-K for the year ended December 31, 2009)
10.22*	Amendment to Honeywell Supplemental Defined Benefit Retirement Plan, as amended and restated (incorporated by reference to Exhibit 10.9 to Honeywell's Form 10-K for the year ended December 31, 2015)
10.23*	Honeywell International Inc. Severance Plan for Corporate Staff Employees (Involuntary Termination Following a Change in Control), as amended and restated (incorporated by reference to Exhibit 10.12 to Honeywell's Form 10-K for the year ended December 31, 2013)
10.24*	Employment Agreement dated as of February 18, 2002 between Honeywell and David M. Cote (incorporated by reference to Exhibit 10.24 to Honeywell's Form 8-K filed March 4, 2002)

Exhibit No.	Description
10.25*	Amendment to Employment Agreement dated as of February 18, 2002 between Honeywell and David M. Cote (incorporated by reference to Exhibit 10.3 to Honeywell's Form 10-Q for the quarter ended September 30, 2008)
10.26*	Amendment to Employment Agreement dated as of February 18, 2002 between Honeywell and David M. Cote (incorporated by reference to Exhibit 10.17 to Honeywell's Form 10-K for the year ended December 31, 2008)
10.27*	Amendment to Employment Agreement dated as of February 18, 2002 between Honeywell and David M. Cote (incorporated by reference to Exhibit 10.1 to Honeywell's Form 10-Q for the quarter ended March 31, 2013)
10.28*	Deferred Compensation Agreement dated August 4, 2006 between Honeywell and David M. Cote (incorporated by reference to Exhibit 10.22 to Honeywell's Form 10-K for the year ended December 31, 2006)
10.29*	Amendment to Deferred Compensation Agreement dated August 4, 2006 between Honeywell and David M. Cote (incorporated by reference

	to Exhibit 10.22 to Honeywell's Form 10-K for the year ended December 31, 2009)
10.30*	Honeywell Supplemental Retirement Plan (incorporated by reference to Exhibit 10.24 to Honeywell's Form 10-K for the year ended December 31, 2006)
10.31*	Pittway Corporation Supplemental Executive Retirement Plan (incorporated by reference to Exhibit 10.25 to Honeywell's Form 10-K for the year ended December 31, 2006)
10.32*	Amendment to Pittway Corporation Supplemental Executive Retirement Plan (incorporated by reference to Exhibit 10.25 to Honeywell's Form 10-K for the year ended December 31, 2008)
10.33*	Amendment to Pittway Corporation Supplemental Executive Retirement Plan (incorporated by reference to Exhibit 10.25 to Honeywell's 10-K for the year ended December 31, 2009)
10.34*	Amendment to Pittway Corporation Supplemental Executive Retirement Plan (incorporated by reference to Exhibit 10.16 to Honeywell's Form 10-K for the year ended December 31, 2015)
10.35*	2006 Stock Incentive Plan of Honeywell International Inc. and Its Affiliates, as amended and restated (incorporated by reference to Exhibit 10.26 to Honeywell's Form 10-K for the year ended December 31, 2008)

10.36*	2006 Stock Incentive Plan of Honeywell International Inc. and Its Affiliates, as amended and restated (incorporated by reference to Exhibit 10.1 to Honeywell's 10-Q for the quarter ended March 31, 2011)
10.37*	2006 Stock Incentive Plan of Honeywell International Inc. and Its Affiliates—Form of Option Award Agreement (incorporated by reference to Exhibit 10.2 to Honeywell's Form 10-Q for the quarter ended March 31, 2009)
10.38*	2006 Stock Incentive Plan of Honeywell International Inc. and Its Affiliates—Form of Restricted Unit Agreement (incorporated by reference to Exhibit 10.1 to Honeywell's Form 10-Q for the quarter ended March 31, 2009)
10.39*	2006 Stock Incentive Plan of Honeywell International Inc. and Its Affiliates—Form of Performance Share Agreement (incorporated by reference to Exhibit 10.30 to Honeywell's Form 10-K for the year ended December 31, 2006)
10.40*	2006 Stock Plan for Non-Employee Directors of Honeywell International Inc., as amended and restated (incorporated by reference to Exhibit 10.31 to Honeywell's Form 10-K for the year ended December 31, 2008)

Exhibit No.	Description
10.41*	Amendment to 2006 Stock Plan for Non-Employee Directors of Honeywell International Inc., as amended and restated (incorporated by reference to Exhibit 10.27 to Honeywell’s Form 10-K for the year ended December 31, 2011)
10.42*	Amendment to 2006 Stock Plan for Non-Employee Directors of Honeywell International Inc., as amended and restated (incorporated by reference to Exhibit 10.24 to Honeywell’s Form 10-K for the year ended December 31, 2014)
10.43*	2006 Stock Plan for Non-Employee Directors of Honeywell International Inc.—Form of Option Agreement (incorporated by reference to Exhibit 10.3 to Honeywell’s Form 10-Q for the quarter ended March 31, 2012)
10.44*	2006 Stock Plan for Non-Employee Directors of Honeywell International Inc.—Form of Restricted Unit Agreement (incorporated by reference to Exhibit 10.4 to Honeywell’s Form 10-Q for the quarter ended March 31, 2012)
10.45*	2007 Honeywell Global Employee Stock Plan (incorporated by reference to Honeywell’s Proxy Statement, dated March 12, 2007, filed pursuant to

	Rule 14a-6 of the Securities Exchange Act of 1934)
10.46*	2006 Stock Incentive Plan of Honeywell International Inc. and its Affiliates—Form of Restricted Unit Agreement, Form 2 (incorporated by reference to Exhibit 10.2 to Honeywell's Form 10-Q for the quarter ended June 30, 2010)
10.47*	2006 Stock Incentive Plan of Honeywell International Inc. and Its Affiliates—Form of Option Award Agreement, Form 2 (incorporated by reference to Exhibit 10.37 to Honeywell's Form 10-K for the year ended December 31, 2010)
10.48*	Letter Agreement dated September 3, 2009 between Honeywell and Timothy Mahoney (incorporated by reference to Exhibit 10.38 to Honeywell's Form 10-K for the year ended December 31, 2010)
10.49*	Form of Honeywell International Inc. Noncompete Agreement for Senior Executives (incorporated by reference to Exhibit 10.39 to Honeywell's Form 10-K for the year ended December 31, 2010)
10.50*	2011 Stock Incentive Plan of Honeywell International Inc. and its Affiliates (incorporated by reference to Honeywell's Proxy Statement, dated March 10, 2011, filed pursuant to Rule 14a-6 of the Securities Exchange Act of 1934)

10.51*	Amendment to 2011 Stock Incentive Plan of Honeywell International Inc. and its Affiliates (incorporated by reference to Exhibit 10.36 to Honeywell's Form 10-K for the year ended December 31, 2012)
10.52*	Amendment to 2011 Stock Incentive Plan of Honeywell International Inc. and its Affiliates (incorporated by reference to Exhibit 10.1 to Honeywell's Form 10-Q for the quarter ended March 31, 2014)
10.53*	2011 Stock Incentive Plan of Honeywell International Inc. and its Affiliates—Form of Restricted Unit Agreement (incorporated by reference to Exhibit 10.2 to Honeywell's Form 10-Q for the quarter ended March 31, 2014)
10.54*	2011 Stock Incentive Plan of Honeywell International Inc. and its Affiliates—Form of Restricted Unit Agreement, Form 2 (incorporated by reference to Exhibit 10.3 to Honeywell's Form 10-Q for the quarter ended March 31, 2014)
10.55*	2011 Stock Incentive Plan of Honeywell International Inc. and Its Affiliates—Form of Stock Option Award Agreement (incorporated by reference to Exhibit 10.4 to Honeywell's Form 10-Q for the quarter ended March 31, 2014)
10.56*	2011 Stock Incentive Plan of Honeywell International Inc. and Its Affiliates—Form of Stock Option Award Agreement, Form 2 (incorporated by reference

to Exhibit 10.39 to Honeywell's Form 10-K for the year ended December 31, 2014)

Exhibit No.	Description
10.57*	2011 Stock Incentive Plan of Honeywell International Inc. and Its Affiliates—Form of Growth Plan Agreement (incorporated by reference to Exhibit 10.5 to Honeywell's Form 10-Q for the quarter ended March 31, 2014)
10.58*	2016 Stock Incentive Plan of Honeywell International Inc. and its Affiliates—Form of Performance Plan Grant Agreement (incorporated by reference to Exhibit 10.2 to Honeywell's Form 10-Q for the quarter ended March 31, 2017)
10.59*	Letter Agreement dated August 4, 2011 between Honeywell International Inc. and David M. Cote (incorporated by reference to Exhibit 10.1 to Honeywell's Form 10-Q for the quarter ended September 30, 2011)
10.60*	Letter Agreement dated April 7, 2014 between Honeywell International Inc. and Thomas A. Szlosek (incorporated by reference to Exhibit 10.10 to Honeywell's Form 10-Q for the quarter ended March 31, 2014)
10.61*	CEO Retention Agreement, as approved by the Board of Directors of Honeywell International Inc. on October 31, 2014 and agreed to by David M. Cote on December 11, 2014 (incorporated by

	reference to Exhibit 99.2 to Honeywell's Form 8-K filed December 12, 2014)
10.62*	Chief Executive Officer Business Continuity Agreement as approved by the Board of Directors of Honeywell International Inc. on June 28, 2016 (incorporated by reference to Exhibit 99.1 to Honeywell's Form 8-K filed June 28, 2016)
10.63*	Amendment to Chief Executive Officer Business Continuity Agreement as approved by the Board of Directors of Honeywell International Inc. on June 28, 2016 (incorporated by reference to Exhibit 10.1 to Honeywell's Form 10-Q for the quarter ended March 31, 2017)
10.64*	Letter Agreement dated February 24, 2012 between Honeywell and Darius Adamczyk (incorporated by reference to Exhibit 10.1 to Honeywell's Form 10-Q for the quarter ended March 31, 2016)
10.65*	Offer letter dated March 31, 2016 from Honeywell International Inc. to Darius Adamczyk (incorporated by reference to Exhibit 99.1 to Honeywell's Form 8-K filed April 6, 2016)
10.66*	Employment Offer Letter dated March 1, 2017 between Honeywell and Darius Adamczyk (incorporated by reference to Exhibit 99.1 to Honeywell's Form 8-K filed March 6, 2017)
10.67*	Offer letter dated March 11, 2013 from Honeywell International Inc. to

	Krishna Mikkilineni (incorporated by reference to Exhibit 10.43 to Honeywell's Form 10-K for the year ended December 31, 2016)
10.68*	2016 Stock Incentive Plan of Honeywell International Inc. and its Affiliates (incorporated by reference to Honeywell's Proxy Statement, dated March 10, 2016, filed pursuant to Rule 14a-6 of the Securities Exchange Act of 1934)
10.69*	2016 Stock Incentive Plan of Honeywell International Inc. and its Affiliates—Form of Restricted Unit Agreement (incorporated by reference to Exhibit 10.1 to Honeywell's Form 10-Q for the quarter ended June 30, 2016)
10.70*	2016 Stock Incentive Plan of Honeywell International Inc. and its Affiliates—Form of Restricted Unit Agreement, Form 2 (incorporated by reference to Exhibit 10.2 to Honeywell's Form 10-Q for the quarter ended June 30, 2016)
10.71*	2016 Stock Incentive Plan of Honeywell International Inc. and its Affiliates—Form of Stock Option Award Agreement (incorporated by reference to Exhibit 10.3 to Honeywell's Form 10-Q for the quarter ended June 30, 2016)

Exhibit No.	Description
10.72*	2016 Stock Incentive Plan of Honeywell International Inc. and its Affiliates—Form of Growth Plan Agreement (incorporated by reference to Exhibit 10.4 to Honeywell's Form 10-Q for the quarter ended June 30, 2016)
10.73*	2016 Stock Plan for Non-Employee Directors (incorporated by reference to Honeywell's Proxy Statement, dated March 10, 2016, filed pursuant to Rule 14a-6 of the Securities Exchange Act of 1934)
10.74*	2016 Stock Plan for Non-Employee Directors of Honeywell International Inc.—Form of Stock Option Award Agreement (filed herewith)
10.75*	2016 Stock Plan for Non-Employee Directors of Honeywell International Inc.—Form of Restricted Unit Agreement (incorporated by reference to Exhibit 10.6 to Honeywell's Form 10-Q for the quarter ended June 30, 2016)
10.76*	UOP LLC Supplemental Pension Plan, as amended and restated (filed herewith)
10.77	Amended and Restated Five Year Credit Agreement dated as of July 10, 2015 among Honeywell International Inc., the banks, financial institutions and other

		institutional lenders parties thereto, Citibank, N.A., as administrative agent, Citibank International Limited, as swing line agent, JPMorgan Chase Bank, N.A., as syndication agent, Bank of America, N.A., Barclays Bank PLC, Deutsche Bank Securities Inc., Goldman Sachs Bank USA, Morgan Stanley MUFG Loan Partners, LLC and Wells Fargo Bank, National Association, as documentation agents, and Citigroup Global Markets Inc., and J.P. Morgan Securities LLC, as joint lead arrangers and co-book managers (incorporated by reference to Exhibit 10.1 to Honeywell's Form 8-K filed July 10, 2015)
10.78		Amendment No. 1, dated as of September 30, 2015, to the Amended and Restated Five Year Credit Agreement dated as of July 10, 2015 among Honeywell International Inc., the banks, financial institutions and other institutional lenders parties thereto, Citibank, N.A., as administrative agent, Citibank International Limited, as swing line agent, JPMorgan Chase Bank, N.A., as syndication agent, Bank of America, N.A., Barclays Bank PLC, Deutsche Bank Securities Inc., Goldman Sachs Bank USA, Morgan Stanley MUFG Loan Partners, LLC and Wells Fargo Bank, National Association, as documentation agents, and Citigroup Global Markets Inc. and J.P.

	Morgan Securities LLC, as joint lead arrangers and co-book managers (incorporated by reference to Exhibit 10.1 to Honeywell's Form 8-K filed October 1, 2015)
10.79	Amendment No. 2, dated as of April 29, 2016, to the Amended and Restated Five Year Credit Agreement dated as of July 10, 2015, as amended by Amendment No. 1 dated as of September 30, 2015, among Honeywell International Inc., the banks, financial institutions and other institutional lenders parties thereto, Citibank, N.A., as administrative agent, Citibank International Limited, as swing line agent, JPMorgan Chase Bank, N.A., as syndication agent, Bank of America, N.A., Barclays Bank PLC, Deutsche Bank Securities Inc., Goldman Sachs Bank USA, Morgan Stanley MUFG Loan Partners, LLC and Wells Fargo Bank, National Association, as documentation agents, and Citigroup Global Markets Inc. and J.P. Morgan Securities LLC, as joint lead arrangers and co-book managers (incorporated by reference to Exhibit 10.2 to Honeywell's Form 8-K filed April 29, 2016)

Exhibit No.	Description
10.80	Amendment No. 3, dated as of April 28, 2017, to the Amended and Restated Five Year Credit Agreement dated as of July 10, 2015, as amended by Amendment No. 1 dated as of September 30, 2015 and that certain Amendment No. 2 dated as of April 29, 2016, among Honeywell International Inc., the banks, financial institutions and other institutional lenders parties thereto, Citibank, N.A., as administrative agent, Citibank International Limited, as swing line agent, JPMorgan Chase Bank, N.A., as syndication agent, Bank of America, N.A., Barclays Bank PLC, Deutsche Bank Securities Inc., Goldman Sachs Bank USA, Morgan Stanley MUFG Loan Partners, LLC and Wells Fargo Bank, National Association, as documentation agents, and Citigroup Global Markets Inc. and J.P. Morgan Securities LLC, as joint lead arrangers and co-book managers (incorporated by reference to Exhibit 10.2 to Honeywell's Form 8-K filed April 28, 2017)
10.81	364-Day Credit Agreement, dated as of April 28, 2017, among Honeywell International Inc., the banks, financial

	institutions and other institutional lenders parties thereto, Citibank, N.A., as administrative agent, JPMorgan Chase Bank, N.A., as syndication agent, Bank of America, N.A., Barclays Bank PLC, Deutsche Bank Securities Inc., Goldman Sachs Bank USA, Morgan Stanley MUFG Loan Partners, LLC and Wells Fargo Bank, National Association, as documentation agents, and Citigroup Global Markets Inc. and JPMorgan Chase Bank, N.A., as joint lead arrangers and co-book managers (incorporated by reference to Exhibit 10.1 to Honeywell's Form 8-K filed April 28, 2017)
12	Statement re: Computation of Ratio of Earnings to Fixed Charges (filed herewith)
21	Subsidiaries of the Registrant (filed herewith)
23.1	Consent of Deloitte & Touche LLP (filed herewith)
24	Powers of Attorney (filed herewith)
31.1	Certification of Principal Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 (filed herewith)
31.2	Certification of Principal Financial Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 (filed herewith)
32.1	Certification of Principal Executive Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the

	Sarbanes-Oxley Act of 2002 (filed herewith)
32.2	Certification of Principal Financial Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (filed herewith)
101.INS	XBRL Instance Document (filed herewith)
101.SCH	XBRL Taxonomy Extension Schema (filed herewith)
101.CAL	XBRL Taxonomy Extension Calculation Linkbase (filed herewith)
101.DEF	XBRL Taxonomy Extension Definition Linkbase (filed herewith)
101.LAB	XBRL Taxonomy Extension Label Linkbase (filed herewith)
101.PRE	XBRL Taxonomy Extension Presentation Linkbase (filed herewith)

The Exhibits identified above with an asterisk (*) are management contracts or compensatory plans or arrangements.