

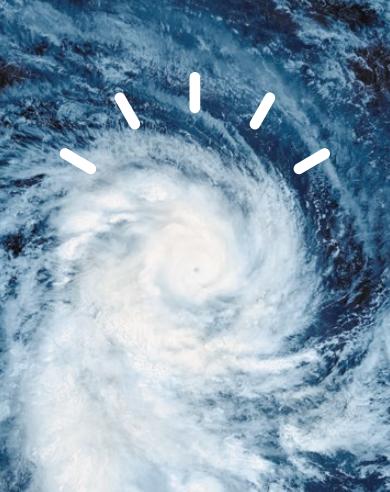
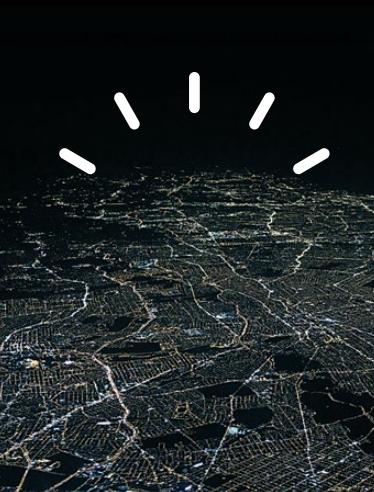


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+37.90 N  
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2017  
Annual  
Report

IBM



Dear IBM Investor:

The businesses  
of the world are  
changing the  
way they work.  
We have prepared  
your company  
for this moment.

During the past five years, propelled by our belief that the phenomenon of data would reorder technology and business, we have undertaken one of the most ambitious reinventions in IBM's modern history. This phase is largely complete. IBM is now a cognitive solutions and cloud platform company. IBM now possesses capabilities that are unmatched in our industry to address our clients' most pressing needs.

In my letter to you this year, I will describe our performance in 2017, which reflects the progress we have made in building these capabilities. And I will explain why we believe this moment marks an inflection point, not just for our company, but for business and society at large.

## The substantial progress we made last year

We achieved operating earnings per share of \$13.80, up 2 percent. Our revenue for the year was \$79.1 billion, with operating pre-tax income of \$13.9 billion. In the fourth quarter, we grew revenue 4 percent, 1 percent adjusted for the effects of currency (as are all other revenue numbers in this letter).

We did so in significant part because our strategic imperatives reached critical mass. With revenue of \$36.5 billion and growing 11 percent, these products and services now contribute 46 percent of IBM's revenue. And we expect to achieve our goal of growing these new products and services to \$40 billion in 2018.

Watson strengthened its position as the AI platform for business. We are embedding AI into more of what we offer—including security, the Internet of Things, commerce and verticals, such as Watson Health. Together, these helped IBM's Cognitive Solutions business generate more than \$18 billion in revenue in 2017.

We also remained the global leader in cloud for the enterprise. In 2017, our cloud revenue grew 24 percent, to \$17 billion. Cloud by itself is now more than 21 percent of our total revenue.

Our reinvented systems franchises generated strong growth. Mainframes enjoyed a very strong fourth quarter, thanks to the launch of the new z14, the world's first system that can encrypt data pervasively without requiring changes to applications and with no downtime. We expect this breakthrough will drive significant expansion of the mainframe's already broad market.

Similarly, we are reinventing our services business. Global Business Services saw signings growth throughout the year, as clients engaged with our high-value consulting practices in areas such as AI, blockchain, and digital strategy and design.

In addition, our Technology Services and Cloud Platform team is working with clients worldwide to integrate public, private and managed cloud environments through a single architecture.

IBM is the clear leader in quantum computing. The world's first (and only) prototype 50-qubit system, announced in 2017, was a major step toward systems that can tackle problems beyond the scope of classical computation. Through IBM Q Experience, the world's first publicly available quantum computers, more than 75,000 users have run more than 2.5 million quantum experiments. A dozen clients, including partners JPMorgan Chase, Daimler AG, Samsung and JSR, are now exploring practical applications on our latest commercial systems.

We have also achieved global leadership in blockchain. By providing a permissioned and immutable shared ledger, blockchain is doing for trusted transactions what the Internet did for information. Hundreds of leading organizations already have embraced IBM's blockchain platform. Walmart, Nestlé, Dole, Kroger and others are applying blockchain to improve food safety. Early in 2018, we announced a joint venture with Maersk to apply blockchain to the complex world of international shipping. We also are working with The Depository Trust & Clearing Corporation (DTCC) on new blockchain approaches for complex derivatives, such as credit default swaps.

Finally, 2017 saw a milestone in innovation as IBM, for the 25<sup>th</sup> year in a row, led the world in U.S. patents earned, setting a new record of 9,043. Importantly, nearly half of those patents were in AI, cloud, blockchain, quantum, security and other technologies that will power our portfolio for years to come.

We did all this while continuing to invest heavily for long-term competitiveness—\$5.6 billion in research and development and \$3.3 billion in net capital expenditures, adding to the capabilities of our high-growth strategic businesses.

We also returned \$9.8 billion to you, our owners, including dividends of \$5.5 billion and \$4.3 billion in gross share repurchases. We raised our dividend for the 22<sup>nd</sup> consecutive year—it was IBM's 102<sup>nd</sup> straight year of providing one. All of this is due to the creativity and passion of IBMers. They are the reason we have reached an inflection point, and they are our greatest competitive advantage.

**Virginia M. Rometty**  
Chairman, President and  
Chief Executive Officer



## Today's IBM: Built for smarter businesses

For over a century, IBM has reinvented itself again and again to help its clients move from one era to the next. Today, we are witnessing another such transition, at the dawn of smarter business. All companies need an enterprise-strength cloud platform. They need AI capable of understanding all their data. They need

services grounded in their professions and industries. And they need a technology infrastructure infused with intelligence, protected with advanced security and future-proofed against the flow of new breakthroughs and risks.

That is, they need today's IBM.

### IBM Cloud: The platform for smarter businesses

IBM Cloud uniquely provides a single architecture that unifies infrastructure and higher-value services, including AI, IoT, quantum computing and blockchain.



**58**  
cloud data centers  
across 19 countries

**10**  
of the largest global  
banks and 9 of the top  
10 retailers use IBM  
Cloud-as-a-Service

**1,900+**  
cloud-technology patents  
awarded in 2017

### IBM Watson: AI for the enterprise

Watson offers the fullest spectrum of cognitive technologies to professionals who are transforming work and decision-making in healthcare, transportation, retail, insurance, education and more.



**100,000+**  
patients and consumers  
touched by Watson Health

**70+ percent**  
growth in organizations  
using Watson

**1,400+**  
artificial intelligence  
patents awarded in 2017

### IBM Services: Business and technology partners of choice

Teams of global experts in business strategy, technology and design, with professional experience across multiple industries, help companies transform for competitive advantage.



**1,000+**  
clients served from the  
IBM Services Platform  
with Watson

**Half**  
of the world's  
telecommunications IT  
infrastructure managed  
by IBM Services

**38 IBM iX studios**  
where clients co-create  
with IBM strategists and  
designers

### IBM Systems: The industry's most powerful infrastructure

IBM's mainframe, cognitive systems and storage offerings provide the world's most powerful, secure and flexible foundation for AI and data-intensive applications and workloads.



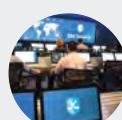
**z14**  
is the only server that  
can encrypt all data  
pervasively without  
requiring application  
changes or downtime

**87 percent**  
of all credit card  
transactions and nearly  
\$8 trillion in payments  
are supported by  
IBM Z systems

**POWER9**  
introduced as the most  
advanced servers for  
enterprise AI and data-  
intensive workloads

### IBM Security: The gold standard for cyber protection

IBM's industry-leading enterprise security offerings have been taken to the next level through AI and advanced analytics.



**60 billion**  
security events  
monitored each day

**22 of 25**  
of the world's largest  
banks protected

**X-Force Command**  
opened as the industry's  
first commercial cyber  
range, allowing clients  
to experience simulated  
cyberattacks

### IBM Research: The world's premier private research organization

Twelve global research labs bring an unmatched range of scientific expertise—from AI, to blockchain, to quantum computing and more—to bear on the needs of clients and their industries.



**50-qubit**  
prototype quantum  
system debuted

**5 nanometer**  
transistors developed,  
which will lead to  
high-performance,  
low-power chips

**MIT-IBM  
Watson AI Lab**  
launched as a large, long-  
term collaboration with  
MIT for joint research in  
AI science and technology

The world's incumbents own the most valuable sources of data: the 80 percent not on the Web.

## Inflection points

This is not just an inflection point for IBM. It is also an inflection point for our clients—the enterprises and institutions of the world.

Until a year or so ago, you would find many who believed that “digital disruption” was here to stay. They believed that the world’s incumbent businesses were at risk of being marginalized.

We had a different point of view. We did not believe the platform giants alone would dominate a data-centric economy—in large measure because they lack access to the most valuable sources of the world’s data: the 80 percent that is not searchable on the Web. The world’s incumbent businesses and institutions own and generate this data, coming from their professional expertise, their industry’s practices and market dynamics, their processes and operations, their people and cultures. Therefore, we believe they are positioned to lead.

In this letter and throughout this report, you will find the names of many of the world’s great enterprises and institutions. This is not a coincidence. It is a reflection of an important new reality: The incumbents of the world understand that they can be the new disruptors, and they are going on offense to seize this opportunity and to capture this moment.

They are doing so by becoming smarter businesses.

- *Businesses are becoming smarter by leveraging intelligent digital platforms.* The IBM Cloud has emerged as the platform of choice for business—built for all applications, ready for AI and secure to the core. It is the unifying platform for IBM’s capabilities, integrated into a single architecture that spans public and private clouds. Through this powerful platform, we are delivering to the world’s businesses a continuous stream of innovative capabilities: computation and storage, data and Watson services, IoT and blockchain services, and IBM Q.

- *Businesses are becoming smarter by making their systems and processes intelligent*—which is why IBM’s services and solutions are grounded in deep knowledge of our clients’ industries. This has made IBM the partner of choice for smarter businesses’ digital and cognitive transformation and IT services. Clients include RBS, Autodesk and Hyundai Card, as well as the large client bases of our strategic partners, such as Salesforce, Workday, Apple, SAP and VMware. This deep industry dimension is also what has allowed us to establish successful new solutions businesses, such as Watson Health, Watson IoT and Watson Financial Services.

- *Businesses are becoming smarter by embedding AI and data to change how work is done, equipping themselves for an era of man + machine.* Watson for Oncology is helping doctors identify treatment options for their patients at more than 150 hospitals around the world, including Gachon University Gil Medical Center in South Korea, Svet Zdravia in Slovakia and Taipei Medical University in Taiwan. A year ago, Watson for Oncology was trained in four types of cancer. Today, it is trained in multidisciplinary support for 13 cancer types. Watson is helping tax preparers at H&R Block provide the best advice to millions of clients. Bankers and customer service representatives at Crédit Mutuel, Banco Bradesco, Orange Bank and other financial institutions are reinventing banking. Woodside Energy chose Watson to help it preserve the institutional knowledge—and reinvent the work—of petroleum engineers.

You can read in this report how these and other leaders are making their companies smarter, in all dimensions. They are placing big bets on the future to increase their competitiveness and to reconnect with their company’s true reason for being.

## IBM patent leadership is building the future for smarter businesses

IBMer received a record-breaking 9,043 U.S. patents during 2017—the 25<sup>th</sup> consecutive year that the company has led the world.

Even more important, nearly half of IBM's new patents are advancing AI, cloud computing, blockchain, quantum computing, cybersecurity and other technologies that will change the way the world works—again.

### Five 2017 patents that are shaping the future:



#### Luring Hackers

U.S. Patent 9,560,075: Cybersecurity technology that enables AI systems to lure malicious hackers with email exchanges and websites that divert their attacks.



#### Personalizing AI Communication

U.S. Patent 9,601,104: A system that analyzes, interprets and mirrors a user's unique speech and linguistic traits.



#### Forecasting Cloud Resources

U.S. Patent 9,755,923: A system to predict cloud computing needs, based on human behaviors and current events.



#### Improving Quantum Signal Fidelity

U.S. Patent 9,818,064: A method for improving a quantum computer's ability to read signals, which can lead to efficiency in the system's components.



#### Speeding Trust on Blockchain

U.S. Patent 9,824,031: A method to remove steps for settling transactions among multiple parties, even untrusted ones, without involving a third party.

We also stand at an inflection point for society, everywhere in the world.

IBM does not believe that the future belongs to the few. We believe it belongs to all of us—and we translate that belief into practice and policy.

*On data and AI responsibility:* As the world's new natural resource, unleashed by the maturation of AI, data holds the potential to generate growth, prosperity and societal progress. But it will only do so if the world can trust that data is being collected, managed and analyzed responsibly.

At a time when many are questioning the power and behavior of some companies, IBM is stepping forward as a responsible steward of data and AI. We believe that AI's purpose is to augment, not replace, human intelligence. We are clear on the need for transparency—on where AI is used, who trained it and what data sets were ingested. We also believe that data and the insights it generates belong to their creators. No one should have to give up ownership or control of their data to benefit from AI and cloud computing. We have built and are deploying Watson accordingly.

Trust also requires the protection of data through strong encryption and security systems that are constantly tested and strengthened. The privacy of data must be respected. Those, too, are core dimensions of the IBM Cloud with Watson.

*On jobs:* Without question, new technology will eliminate work; it always has. At the same time, new job categories will emerge. The challenge, however, is that AI will transform the skills required for *all* jobs. There still will be doctors, lawyers, salespeople, teachers and engineers. But the tasks and tools they need to perform their work will be different.

For more than a century,  
IBMer have earned the world's  
trust. We continue that legacy.

This is why building skills for the jobs of the future—not blue collar or white collar, but “new collar” jobs—will require a major reinvention of education. We at IBM are leading that transformation, in the U.S. and worldwide, through public-private partnerships to create the revolutionary Pathways in Technology Early College High Schools (P-TECH) education model, 21<sup>st</sup> century apprenticeships and retraining programs. This includes investing \$5 billion over 10 years in the continuous renewal of IBMers and the re-skilling of mid-career professionals looking to get back into the tech workforce.

*On inclusion:* Today, we proudly carry forward a global commitment to inclusion that has defined IBM for more than a century. We are stepping forward to support the open exchange of people, information and ideas, as well as to protect cross-border data flows for international privacy and security agreements.

IBM is the recognized gold standard for inclusion, reflected in winning the 2018 Catalyst Award for advancing women in business. IBM is the first company to win this award four times. We advocate for fairness and equality—as everyone is, and always has been, welcome at IBM.

For more than a century, IBMers have earned the world's trust by building progress with responsibility. We continue this legacy today.

## Rediscovering IBM

At the deepest level, the most important fact about IBM's 2017 was not our return to revenue growth in the fourth quarter or the continued scaling of our new products and services or our patent achievement. It is our reaffirmation of IBM's essential identity.

IBM is an enterprise technology company. We deliver services with the simplicity, speed and delight of the best consumer products and services, but we are very clear on whom we serve. We are dedicated to our clients' success, and our reinvention during the past five years has been driven by helping our clients serve their customers. This unrelenting focus on the client is a particular source of pride.

We also are clear on the markets we serve. IBM is global in presence and mind-set.

We earn trust. We take positions—and act—on issues that matter for our time. Today, that begins with data, AI and security, and extends to inclusion and trust.

Put it all together, and you have a company that always has been unique in combining innovative technology with deep industry expertise, underpinned by security, trust and responsible stewardship. In helping businesses move from era to era, we seek to be essential—to our clients and to the world.

Let me close by expressing my gratitude to the treasured clients we serve, and to the hundreds of thousands of IBMers whose brilliance and resilience make it possible for us all to achieve our life's work at the world's most essential enterprise.

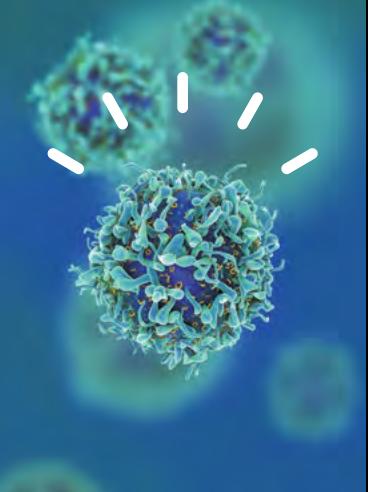
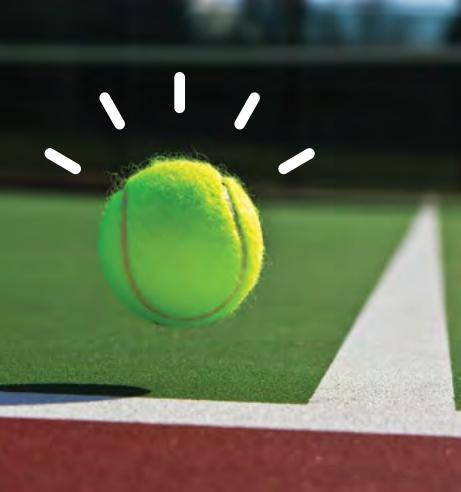
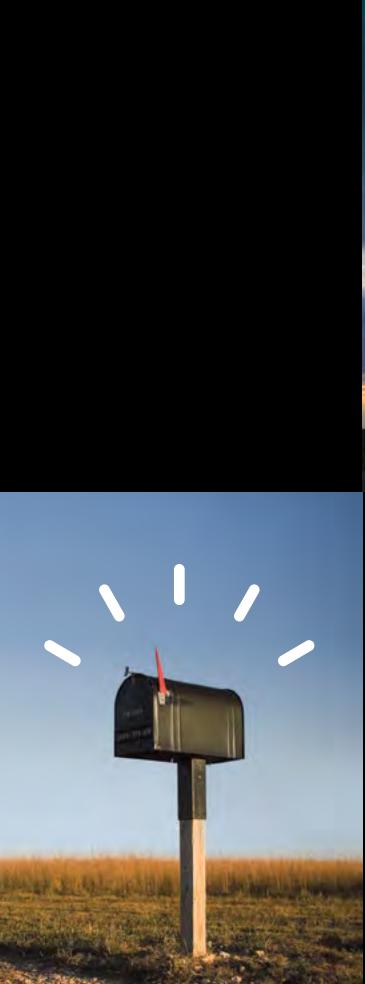
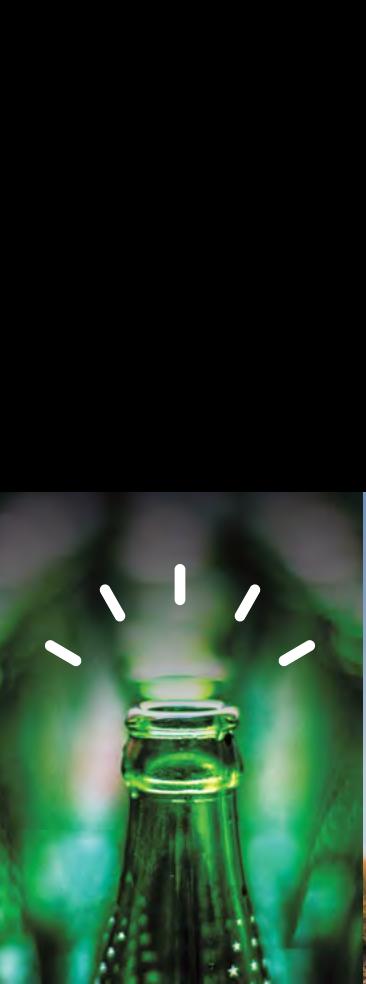
I never have been more optimistic in my IBM career—optimistic about our technology, about our clients, about IBM and about the world we are building together.



**Virginia M. Rometty**

Chairman, President and Chief Executive Officer

In an effort to provide additional and useful information regarding the company's financial results and other financial information, as determined by generally accepted accounting principles (GAAP), these materials contain certain non-GAAP financial measures on a continuing operations basis, including revenue at constant currency, strategic imperatives revenue at constant currency, cloud revenue at constant currency, operating pre-tax income, operating (non-GAAP) research, development and engineering and operating earnings per share. The rationale for management's use of this non-GAAP information is included on pages 26, 27 and 68 of the company's 2017 Annual Report, which is Exhibit 13 to the Form 10-K submitted with the SEC on February 27, 2018. For reconciliation of these non-GAAP financial measures to GAAP and other information, please refer to pages 28, 43, 49 and 50 of the company's 2017 Annual Report.

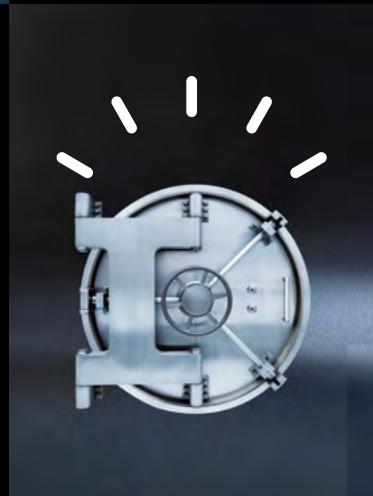
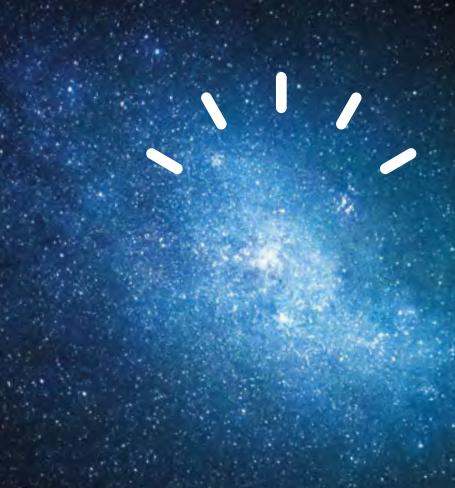




# This is smart at work.

It's a business remaking itself on platforms infused with digital intelligence. An enterprise whose operations and processes are designed to learn with intelligent systems. A company of experts whose knowledge is augmented by systems that learn.

This is smarter business—a new era, brought to the world by a new IBM.



# IBM Cloud

## The platform for smarter businesses

Many types of clouds exist, but only the IBM Cloud is built for the enterprise, is able to handle all kinds of data and applications, and provides seamless integration of artificial intelligence, world-leading security and the ability to evolve over time.

To support innovation, the public cloud allows businesses to quickly create, deploy and manage new cloud-native apps; they can also easily isolate specific computing workloads to ensure performance and security. IBM's private cloud offerings let leading enterprises re-architect critical applications for the cloud, while maintaining regulatory compliance and security on their own premises.



**IBMer**s deliver the IBM Cloud's broad array of services and expertise. They help the world's smarter businesses transform their processes, assimilate new technologies and capabilities, and pivot quickly to new market opportunities.

*Left to right:*  
**AI** to surface new insights and augment decision-making  
Vivian Lee,  
IBM Watson Development

**Cloud-based services** to manage IT complexity and capitalize on the speed of innovation  
Twannia Arnold,  
Global Technology Services



**Security** to help protect all data and ensure regulatory compliance  
Cameron Will, IBM Security

**Data Science Experience** to help data scientists learn, create and collaborate in a single workspace  
Armand Ruiz Gabernet, Watson Machine Learning

**The Internet of Things** to capture data and insights from the physical world  
Lisa Seacat DeLuca, IBM Watson IoT

**NVIDIA GPUs** to boost artificial intelligence and deep-learning workloads  
Glen Wiedemeier, IBM Systems

**Video streaming** to deliver high-quality content to audiences of any size, anywhere  
Arpad Kun, IBM Cloud Video

**Quantum computing** to tackle business and scientific problems that are intractable with classical computers  
Jerry Chow, IBM Research

**Blockchain** to digitize transactions through a secured, shared and replicated ledger  
Noi Sukaviriya, IBM Blockchain Solutions

**VMware** implementation to easily deploy workloads from on-premises to the cloud  
Camilla Sharpe, Global Technology Services

**SAP** implementation to bring optimized business operations to the cloud  
Bridget Jones, Global Business Services

**Workday** implementation for workforce insight and HR management  
Mickey Patel, Global Business Services

**Storage** to provide consistent, highly secure and fast data delivery  
Sam Werner, IBM Systems

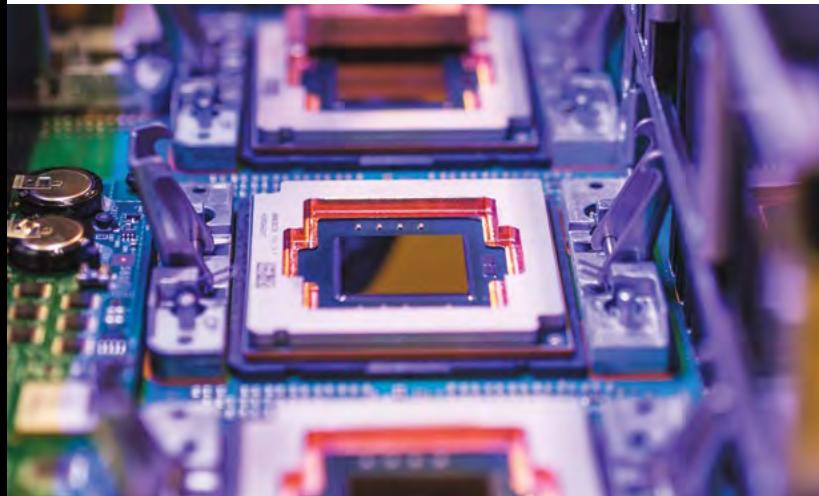
**Developer tools** to rapidly build, deploy and manage cloud services  
Remko De Knikker, IBM Industry Platforms

## A single, integrated architecture for all the needs of smarter businesses

IBM Cloud is the most flexible and intelligent cloud for business—a fully managed, unified platform built on secure containers across public and private clouds, with 170+ services for developers to build, deploy and manage cloud-native applications, as well as the capacity to easily integrate new products and offerings.



**z14 pervasively encrypts data at scale, all the time.** The z14, the world's most powerful transaction system, is the first that can encrypt every piece of data at the silicon level, without requiring changes to applications or downtime. Open and connected in the cloud, the z14 is capable of running 12.5 billion fully encrypted transactions per day.

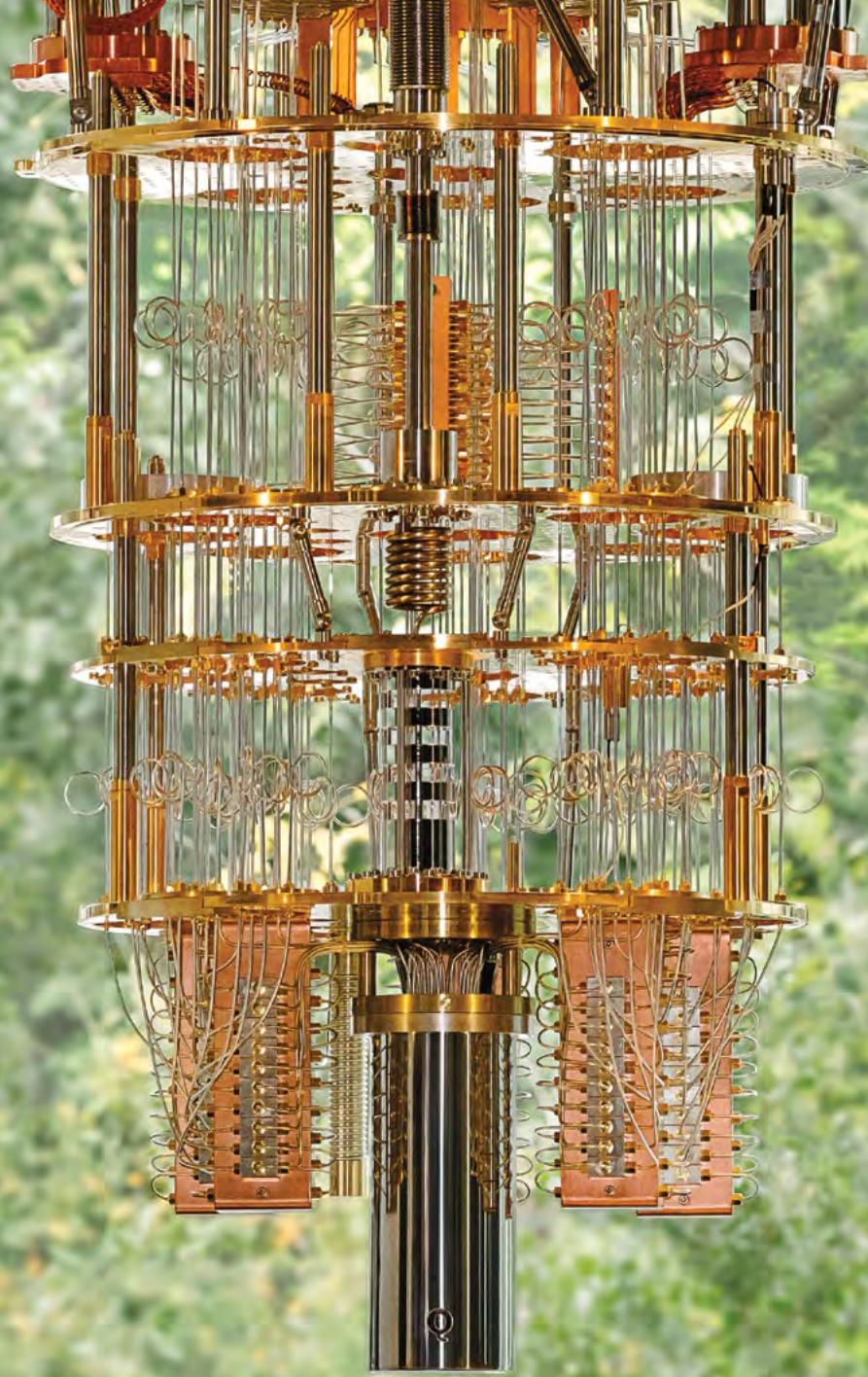


*Left:*

**POWER9 is built for data-intensive workloads, including AI and scientific discovery.** POWER9 systems and software are designed for the compute-intensive workloads of smarter businesses. POWER9 systems cut deep learning training times by at least 4x, unleashing mission-critical insights that would otherwise be trapped in massive data sets. POWER9 servers with NVIDIA GPUs substantially boost AI accuracy and accelerate the performance of AI frameworks.

*Above:*

**IBM Cloud Private is a scalable cloud platform that runs on a company's own infrastructure and behind its firewalls.** This offers the benefits of the public cloud but gives customers the power to address proprietary data, regulatory requirements and security threats on-premises.



**Quantum computing will solve the previously unsolvable.** Quantum computers embody the most radical new computing technology in generations. They encode information in quantum bits, or qubits, which can represent tremendous amounts of data, and can interact with one another in ways that are impossible for classical bit-based computers. As a result, quantum computers may offer paths to finding solutions to hard

problems that require exploring an exponential number of possibilities—like drug discovery, alternative fuel design and financial risk optimization. Already, the IBM Q Experience, available via the IBM Cloud, is being used by more than 75,000 early adopters who are getting “quantum ready”: learning and exploring the implications of quantum computing for science and business.

# IBM Services and Solutions

## Making smarter real, industry by industry

The leading businesses and institutions of the world are going on offense, moving from the disrupted to the disruptors. To do so, they rely on the deep industry and technology expertise of IBM Services and solutions professionals and consultants around the world. These IBMers—experts in industries ranging from healthcare, to financial services, to retail and more—help organizations transform at scale and become smarter.



**Walmart** uses blockchain to provide traceability from “farm to fork” and to improve transparency, efficiency and food safety.



**Maersk's** blockchain platform eliminates millions of pieces of paperwork, reduces fraud and increases transparency for global shipping.

**CEMEX's** digital transformation provides its customers with real-time tracking and analytics that help them make better decisions and improve their supply chains.



**London Stock Exchange Group** and the **Santiago Stock Exchange** are building blockchain solutions to take cost and complexity out of trading and settlement.



**Japan Airlines'** custom mobile app frees up engineers' time, improves its aircraft quality and on-time arrivals and has eliminated 3.3 million paper documents in one year.



The Port of Rotterdam is fully digitizing—with IoT and artificial intelligence—to maximize cargo loads and speed shipping traffic.



Mercedes-Benz Stadium's technology infrastructure and mobile apps create personalized game-day experiences for fans in Atlanta.



Goldcorp is using artificial intelligence to sift through drilling logs, geological surveys and other data to pinpoint where to explore next.

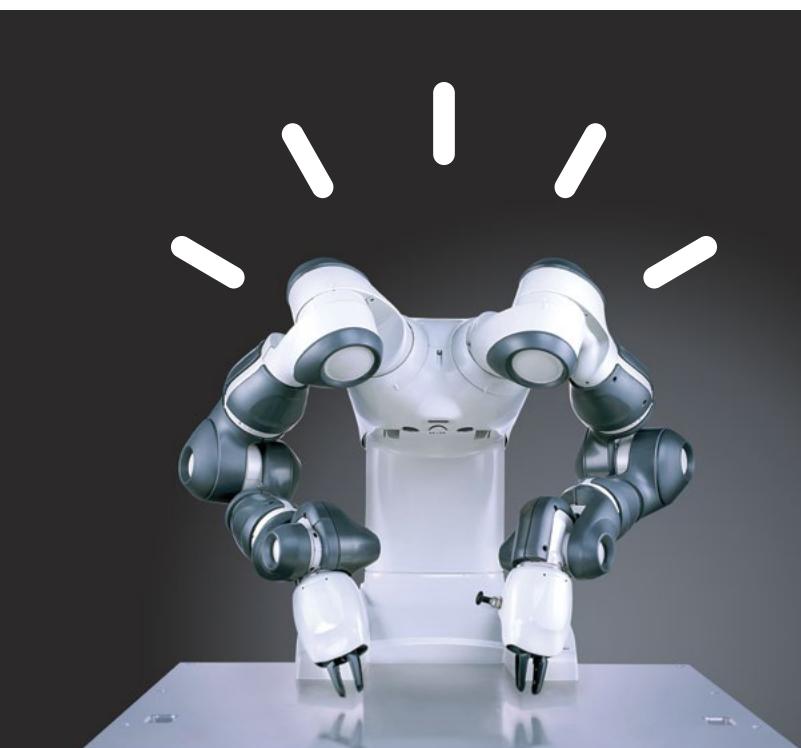


Toronto Western Hospital's Movement Disorders Clinic has reviewed thousands of drugs to identify medications that might be repurposed for Parkinson's disease.

**Welgevonden Game Reserve**  
uses the Internet of Things and  
predictive analytics to track  
animal movements and protect  
endangered rhinos.



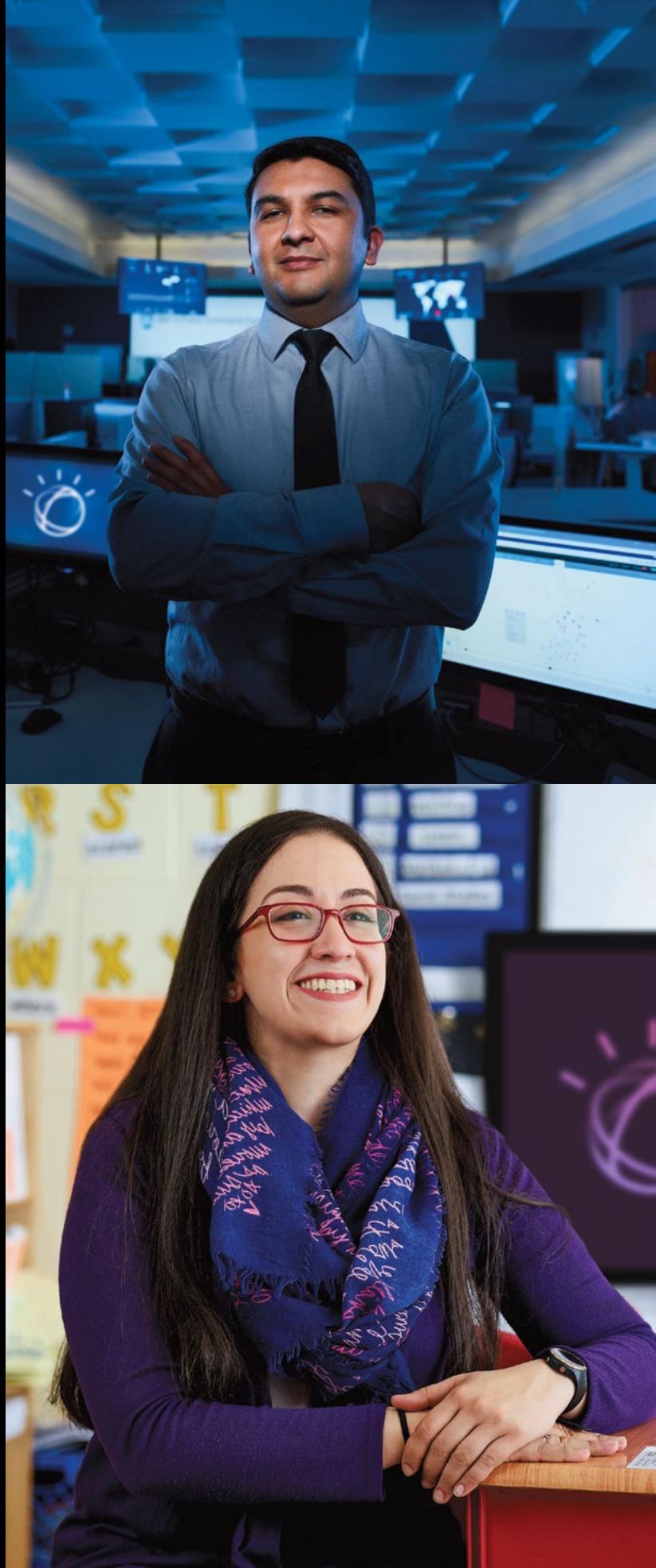
**ABB** applies artificial intelligence  
and the Internet of Things on  
factory floors to quickly identify  
defects not always picked up by  
the naked eye.



**Plastic Bank's** blockchain-based  
system turns trust into sustainability,  
as recyclers in developing countries  
earn credits, helping to alleviate  
poverty and reduce ocean waste.

# IBM Watson

## Empowering professionals with AI



IBM Watson's enterprise-strength artificial intelligence is transforming the way people work in nearly every industry. It helps organizations derive insight from complex and unstructured information. And it allows professionals to scale their expertise and focus their efforts on higher-value work.

**Left:**

Working with Watson for Cyber Security allows experts to identify threats up to 60 times faster than traditional methods.

**Carlos Aguilera,**  
Security Expert, IBM

**Bottom left:**

Elementary school instructors are using Teacher Advisor With Watson to tailor high-quality instructional resources to the specific needs of their students.

**Lisnerva Nuez,**  
Kindergarten Teacher,  
New York City



**“We trained Watson Virtual Agent in Brazilian Portuguese so it can answer customers’ questions in seconds.”**

Customer service representatives at Banco Bradesco use Watson Virtual Agent to answer questions quickly, which boosts customer satisfaction.

**Jacqueline Pessoa Ferreira,**  
Digital Channels Analyst  
and Trainer, Banco Bradesco





Watson helps KONE's data scientists provide technicians with real-time information from elevators and escalators around the world, to predict maintenance issues and help keep people moving.

**Aleksi Seppänen,**  
Data Scientist, KONE

**“Watson speeds up how we find important patterns—and ones we didn’t know to look for.”**

AI, machine learning and analytics are allowing Kraft Heinz experts to evaluate thousands of variables in real time and address previously unsolvable problems, leading to reductions in food loss.

**Pat Doyle,**  
Supply Chain Expert,  
Kraft Heinz Company



Trained by H&R Block on millions of customer conversations and returns, Watson helps tax pros engage with their clients in new ways.

**Gloria Bridges,**  
Tax Professional, H&R Block



# A smarter future does not belong to the few. It belongs to all of us.

The coming era offers vast new opportunities to change the way the world works—but it will take more than technology and more than business. At IBM we are working to build new levels of trust and new forms of collaboration across all sectors of society.

**Data and AI:** Only an economy where data is protected will produce a society where data is trusted. In 2017, IBM issued principles for AI and for Data Responsibility, ensuring that wherever our cognitive technology is used, we will be transparent about how it was trained and clear about who owns its data and insights.

**Jobs:** To build the “new collar” skills required for the future of work, we are pioneering new models of education, including P-TECH, a six-year high school and community college program that enables students to earn an associate degree. From its roots in 2010 with one school in Brooklyn, New York, P-TECH is on track to serve more than 60,000 students on four continents, and build upon partnerships with more than 430 other companies.

**Workforce inclusion:** New technology can lift everyone up—and it must. We have led in inclusion for more than a century, hiring our first women and African American employees in 1899. And in 2005, IBM became the first company to protect employees’ genetics privacy. We are committed to extending that legacy into the future.

Gabriel Rosa, a 2015 graduate of P-TECH, now works in IBM’s Digital Business Group, following an internship guided by Maria Arbusto, who still acts as his mentor.

**Gabriel Rosa (left), Front-End Engineer, and Maria Arbusto, Director, Marketing**

**Financial Highlights**

International Business Machines Corporation and Subsidiary Companies

(\$ in millions except per share amounts)

<b>For the year ended December 31:</b>	<b>2017</b>	<b>2016</b>
Revenue	\$ 79,139	\$ 79,919
Net Income	\$ 5,753*	\$ 11,872
Income from continuing operations	\$ 5,758*	\$ 11,881
Operating (non-GAAP) earnings**	\$ 12,935	\$ 13,031
Earnings per share of common stock		
Assuming dilution	\$ 6.14*	\$ 12.39
Basic	\$ 6.17*	\$ 12.44
Diluted operating (non-GAAP)**	\$ 13.80	\$ 13.59
Net cash provided by operating activities	\$ 16,724	\$ 17,084***
Capital expenditures, net	\$ 3,312	\$ 3,726
Share repurchases	\$ 4,340	\$ 3,502
Cash dividends paid on common stock	\$ 5,506	\$ 5,256
Per share of common stock	\$ 5.90	\$ 5.50
<b>At December 31:</b>	<b>2017</b>	<b>2016</b>
Cash, cash equivalents and marketable securities	\$ 12,580	\$ 8,527
Total assets	\$125,356	\$117,470
Working capital	\$ 12,373	\$ 7,613
Total debt	\$ 46,824	\$ 42,169
Total equity	\$ 17,725	\$ 18,392
Common shares outstanding (in millions)	922	946
Stock price per common share	\$ 153.42	\$ 165.99

\* Includes a one-time charge of \$5.5 billion associated with the enactment of U.S. tax reform in 2017.

\*\* See page 49 for a reconciliation of net income to operating earnings.

\*\*\*Reclassified to reflect adoption of the FASB guidance on share-based compensation.

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## Management Discussion

International Business Machines Corporation and Subsidiary Companies

### OVERVIEW

The financial section of the International Business Machines Corporation (IBM or the company) 2017 Annual Report includes the Management Discussion, the Consolidated Financial Statements and the Notes to Consolidated Financial Statements. This Overview is designed to provide the reader with some perspective regarding the information contained in the financial section.

### Organization of Information

- The Management Discussion is designed to provide readers with an overview of the business and a narrative on the company's financial results and certain factors that may affect its future prospects from the perspective of the company's management. The "Management Discussion Snapshot," beginning on page 27, presents an overview of the key performance drivers in 2017.
- Beginning with the "Year in Review" on page 35, the Management Discussion contains the results of operations for each reportable segment of the business and a discussion of the company's financial position and cash flows. Other key sections within the Management Discussion include: "Looking Forward" on page 66, and "Liquidity and Capital Resources" on page 67, which includes a description of management's definition and use of free cash flow.
- The Consolidated Financial Statements are presented on pages 78 through 83. These statements provide an overview of the company's income and cash flow performance and its financial position.
- The Notes follow the Consolidated Financial Statements. Among other items, the Notes contain the company's accounting policies (pages 84 to 93), acquisitions and divestitures (pages 96 to 99), detailed information on specific items within the financial statements, certain contingencies and commitments (pages 119 to 121) and retirement-related plans information (pages 128 to 142).
- The Consolidated Financial Statements and the Notes have been prepared in accordance with accounting principles generally accepted in the United States (GAAP).
- On December 22, 2017, the Tax Cuts and Jobs Act ("U.S. tax reform") was enacted in the U.S. This Act resulted in the company recognizing a fourth quarter provisional one-time charge of \$5.5 billion. Refer to note N, "Taxes," on pages 121 to 124 for additional information.
- The references to "adjusted for currency" or "at constant currency" in the Management Discussion do not include operational impacts that could result from fluctuations in foreign currency rates. When the company refers to growth rates at constant currency or adjusts such growth rates for currency, it is done so that certain financial results can be viewed without the impact of fluctuations in foreign currency exchange rates, thereby facilitating period-to-period comparisons of its business performance. Financial results adjusted for currency are calculated by translating current period activity in local currency using the comparable prior year period's currency conversion rate. This approach is used for countries where the functional currency is the local currency. Generally, when the dollar either strengthens or weakens against other currencies, the growth at constant currency rates or adjusting for currency will be higher or lower

than growth reported at actual exchange rates. See "Currency Rate Fluctuations" on page 73 for additional information.

- Within the financial statements and tables in this Annual Report, certain columns and rows may not add due to the use of rounded numbers for disclosure purposes. Percentages reported are calculated from the underlying whole-dollar numbers.

### Operating (non-GAAP) Earnings

In an effort to provide better transparency into the operational results of the business, the company separates business results into operating and non-operating categories. Operating earnings from continuing operations is a non-GAAP measure that excludes the effects of certain acquisition-related charges, intangible asset amortization expense resulting from basis differences on equity method investments, retirement-related costs, discontinued operations and related tax impacts. For the fourth-quarter and full-year 2017, operating (non-GAAP) earnings also exclude a one-time charge associated with the enactment of U.S. tax reform due to its unique and non-recurring nature. For acquisitions, operating (non-GAAP) earnings exclude the amortization of purchased intangible assets and acquisition-related charges such as in-process research and development, transaction costs, applicable restructuring and related expenses and tax charges related to acquisition integration. These charges are excluded as they may be inconsistent in amount and timing from period to period and are dependent on the size, type and frequency of the company's acquisitions. All other spending for acquired companies is included in both earnings from continuing operations and in operating (non-GAAP) earnings. Throughout the Management Discussion and Analysis, the impact of acquisitions over the prior 12-month period may be a driver of higher expense year to year. For retirement-related costs, the company characterizes certain items as operating and others as non-operating. The company includes defined benefit plan and nonpension postretirement benefit plan service cost, amortization of prior service cost and the cost of defined contribution plans in operating earnings. Non-operating retirement-related cost includes defined benefit plan and nonpension postretirement benefit plan interest cost, expected return on plan assets, amortized actuarial gains/losses, the impacts of any plan curtailments/settlements and multi-employer plan costs, pension insolvency costs and other costs. Non-operating retirement-related costs are primarily related to changes in pension plan assets and liabilities which are tied to financial market performance, and the company considers these costs to be outside of the operational performance of the business. Effective January 1, 2018, the company adopted the new Financial Accounting Standards Board (FASB) guidance on presentation of net periodic pension and nonpension postretirement benefits costs, and as a result, the company will align its presentation for operating (non-GAAP) earnings to conform to the FASB presentation of these costs included in the Consolidated Statement of Earnings. Operating (non-GAAP) earnings will no longer include amortization of prior service costs and will now include multi-employer plan costs. The full-year 2018 operating (non-GAAP) earnings per share expectation has been calculated under this new definition.

Overall, the company believes that providing investors with a view of operating earnings as described here provides increased transparency and clarity into both the operational results of the business and the performance of the company's pension plans;

**Management Discussion**

International Business Machines Corporation and Subsidiary Companies

improves visibility to management decisions and their impacts on operational performance; enables better comparison to peer companies; and allows the company to provide a long-term strategic view of the business going forward. The company's reportable segment financial results reflect operating earnings from continuing operations, consistent with the company's management and measurement system.

**FORWARD-LOOKING AND CAUTIONARY STATEMENTS**

Certain statements contained in this Annual Report may constitute forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Any

forward-looking statement in this Annual Report speaks only as of the date on which it is made; the company assumes no obligation to update or revise any such statements. Forward-looking statements are based on the company's current assumptions regarding future business and financial performance; these statements, by their nature, address matters that are uncertain to different degrees. Forward-looking statements involve a number of risks, uncertainties and other factors that could cause actual results to be materially different, as discussed more fully elsewhere in this Annual Report and in the company's filings with the Securities and Exchange Commission (SEC), including the company's 2017 Form 10-K filed on February 27, 2018.

**MANAGEMENT DISCUSSION SNAPSHOT**

(\$ and shares in millions except per share amounts)

For the year ended December 31:	2017	2016	Yr.-to-Yr. Percent/Margin Change
Revenue	\$ 79,139	\$ 79,919	(1.0)%*
Gross profit margin	45.8%	47.9%	(2.1) pts.
Total expense and other (income)	\$ 24,827	\$ 25,964	(4.4)%
Total expense and other (income)-to-revenue ratio	31.4%	32.5%	(1.1) pts.
Income from continuing operations before income taxes	\$ 11,400	\$ 12,330	(7.5)%
Provision for income taxes from continuing operations	\$ 5,642**	\$ 449	NM
Income from continuing operations	\$ 5,758**	\$ 11,881	(51.5)%
Income from continuing operations margin	7.3%	14.9%	(7.6) pts.
Loss from discontinued operations, net of tax	\$ (5)	\$ (9)	(44.7)%
Net income	\$ 5,753**	\$ 11,872	(51.5)%
Earnings per share from continuing operations:			
Assuming dilution	\$ 6.14**	\$ 12.39	(50.4)%
Consolidated earnings per share—assuming dilution	\$ 6.14**	\$ 12.38	(50.4)%
Weighted-average shares outstanding			
Assuming dilution	937.4	958.7	(2.2)%
Assets <sup>+</sup>	\$ 125,356	\$ 117,470	6.7%
Liabilities <sup>+</sup>	\$ 107,631	\$ 99,078	8.6%
Equity <sup>+</sup>	\$ 17,725	\$ 18,392	(3.6)%

\* (1.3) percent adjusted for currency.

\*\*Includes a one-time charge of \$5.5 billion associated with the enactment of U.S. tax reform, or \$5.84 of diluted earnings per share in 2017.

+ At December 31

NM—Not meaningful

The following table provides the company's (non-GAAP) operating earnings for 2017 and 2016.

(\$ in millions except per share amounts)

For the year ended December 31:	2017	2016	Yr.-to-Yr. Percent Change
Net income as reported	\$ 5,753**	\$ 11,872	(51.5)%
Loss from discontinued operations, net of tax	(5)	(9)	(44.7)%
Income from continuing operations	\$ 5,758**	\$ 11,881	(51.5)%
Non-operating adjustments (net of tax)			
Acquisition-related charges	718	735	(2.3)
Non-operating retirement-related costs/(income)	983	415	137.0
U.S. tax reform one-time charge	5,475	—	NM
Operating (non-GAAP) earnings*	\$ 12,935	\$ 13,031	(0.7)%
Diluted operating (non-GAAP) earnings per share	\$ 13.80	\$ 13.59	1.5%

\* See page 49 for a more detailed reconciliation of net income to operating earnings.

\*\*Includes a one-time charge of \$5.5 billion associated with the enactment of U.S. tax reform in 2017.

NM—Not meaningful

## Management Discussion

### International Business Machines Corporation and Subsidiary Companies

In 2017, the company reported \$79.1 billion in revenue and \$5.8 billion in income from continuing operations, which includes a one-time charge of \$5.5 billion associated with the enactment of U.S. tax reform. Operating (non-GAAP) earnings were \$12.9 billion, which excludes the one-time charge. Diluted earnings per share from continuing operations were \$6.14 as reported and \$13.80 on an operating (non-GAAP) basis. The company generated \$16.7 billion in cash from operations, \$13.0 billion in free cash flow and delivered shareholder returns of \$9.8 billion in gross common stock repurchases and dividends.

Total consolidated revenue in 2017 decreased 1.0 percent as reported and 1.3 percent year to year adjusted for currency. The company returned to revenue growth in the fourth quarter with an increase of 3.6 percent as reported and 0.9 percent adjusted for currency. Year-to-year revenue performance improved sequentially in the second half of 2017 compared to first-half performance. Contributors to the second-half improvement included: momentum in cloud and as-a-Service offerings, strong Systems growth across IBM Z, Power and Storage, improved software transactional performance and improved growth in Consulting.

In 2017, the company continued to deliver solid revenue growth in its strategic imperatives which generated \$36.5 billion of revenue and grew 11 percent as reported and adjusted for currency, with double-digit growth in cloud, security and mobile, as the company continues to build new products and offerings and continuously reinvent its platforms. These are not separate businesses, they are offerings across the segments that address opportunities in analytics, cloud, security and mobile. The company is embedding cloud and cognitive capabilities across the business and the strategic imperatives reflect the progress being made in helping enterprise clients extract value from data and become digital businesses. Strategic imperatives growth in 2017 largely represented organic growth as the acquisitive content leveled on a year-to-year basis. Total Cloud revenue of \$17.0 billion increased 24 percent as reported and adjusted for currency, with as-a-Service revenue up 31 percent as reported and adjusted for currency. The annual exit run rate for as-a-Service revenue increased to \$10.3 billion in 2017 compared to \$8.6 billion in 2016. Analytics revenue of \$20.6 billion increased 6 percent as reported and adjusted for currency. Mobile revenue increased 19 percent as reported and adjusted for currency and Security revenue increased 55 percent (54 percent adjusted for currency), driven by security software solutions and strong demand for the pervasive encryption capabilities in the new z14 mainframe.

From a segment perspective, Cognitive Solutions revenue increased 1.5 percent as reported and 1 percent adjusted for currency with growth in Solutions Software and Transaction Processing Software as reported and adjusted for currency. Solutions Software performance included growth in annuity revenue, led by as-a-Service solutions. Global Business Services (GBS) revenue decreased 2.1 percent as reported and 2 percent adjusted for currency with declines across all lines of business. However, GBS strategic imperatives revenue increased 10 percent as reported and adjusted for currency year to year. The GBS business continued to shift resources and move into the high-value strategic areas of digital, cloud and analytics. Technology Services & Cloud Platforms revenue decreased 3.0 percent as reported and 3 percent adjusted for currency, primarily driven by a decline in Infrastructure Services. Within Technology Services & Cloud Platforms, strategic imperatives revenue was up 19 percent as reported and 18 percent adjusted for currency year to year, driven by hybrid cloud services, security and mobile. Systems revenue increased 6.2 percent as reported and 5 percent adjusted for currency driven by contributions from the z14 mainframe in the second half of 2017 and growth in Storage Systems.

From a geographic perspective, Americas revenue was essentially flat year to year as reported (decreased 1 percent adjusted for currency) with the U.S. decline of 1.4 percent, partially offset by growth in Latin America (5.1 percent as reported, 3 percent adjusted for currency) and Canada (4.9 percent as reported, 3 percent adjusted for currency). Europe/Middle East/Africa (EMEA) revenue decreased 1.7 percent (3 percent adjusted for currency) driven primarily by declines in the UK (11.2 percent as reported, 7 percent adjusted for currency) and Germany (3.2 percent as reported, 6 percent adjusted for currency). Asia Pacific revenue decreased 2.0 percent (1 percent adjusted for currency) with a decline in China of 10.6 percent (10 percent adjusted for currency). Japan declined 1.1 percent as reported (increased 2 percent adjusted for currency) and India grew 8.6 percent (5 percent adjusted for currency).

The consolidated gross margin of 45.8 percent decreased 2.1 points year to year and reflects investments, mix and higher retirement-related costs, partially offset by benefits from productivity. The operating (non-GAAP) gross margin of 47.4 percent decreased 1.6 points versus the prior year primarily driven by the same factors, excluding the impact of higher non-operational retirement-related costs.

## Management Discussion

### International Business Machines Corporation and Subsidiary Companies

Total expense and other (income) decreased 4.4 percent in 2017 compared to the prior year. The year-to-year decrease was primarily the result of continued focus on efficiency in spending and reduced expenses for workforce transformation. This included a lower level of workforce rebalancing charges (3 points), lower operational spending (2 points) and a prior-year charge for real estate actions (1 point). The year-to-year decrease in expense and other (income) was partially offset by spending related to acquisitions completed in the prior 12 months (1 point) and a decline in intellectual property (IP) income (1 point). Total operating (non-GAAP) expense and other (income) decreased 6.2 percent year to year, driven primarily by the same factors.

Pre-tax income from continuing operations of \$11.4 billion decreased 7.5 percent and the pre-tax margin was 14.4 percent, a decrease of 1.0 points versus 2016. The continuing operations effective tax rate for 2017 was 49.5 percent, which includes a one-time charge of \$5.5 billion from the enactment of U.S. tax reform in December 2017, compared to 3.6 percent in 2016. The charge encompasses several elements, including taxes on accumulated overseas profits and the revaluation of certain deferred tax assets and liabilities. The tax rate in 2016 was primarily the result of a refund (\$1.0 billion) of previously paid Japan taxes plus interest in the first quarter of 2016. Income from continuing operations of \$5.8 billion decreased 51.5 percent, impacted by the one-time charge, and the net income margin was 7.3 percent, a decrease of 7.6 points versus 2016. Losses from discontinued operations, net of tax, were \$5 million in 2017 compared to \$9 million in 2016. Net income of \$5.8 billion decreased 51.5 percent year to year. Operating (non-GAAP) pre-tax income from continuing operations of \$13.9 billion decreased 0.5 percent year to year and the operating (non-GAAP) pre-tax margin from continuing operations was essentially flat at 17.5 percent. Operating (non-GAAP) income from continuing operations of \$12.9 billion decreased 0.7 percent with an operating (non-GAAP) income margin from continuing operations of 16.3 percent, flat year to year. The operating (non-GAAP) effective tax rate from continuing operations in 2017 was 6.7 percent, which includes the effect of discrete tax benefits in the first and second quarters of 2017.

Diluted earnings per share from continuing operations of \$6.14 in 2017, which includes the one-time charge associated with U.S. tax reform, decreased 50.4 percent year to year. In 2017, the company repurchased 27.2 million shares of its common stock at a cost of \$4.3 billion and had \$3.8 billion remaining in the current share repurchase authorization at December 31, 2017. Operating (non-GAAP) diluted earnings per share of \$13.80 increased 1.5 percent versus 2016.

At December 31, 2017, the balance sheet remains strong, and with the newly reorganized financing entity, IBM Credit LLC, the company is better positioned to support the business over the long term. Cash and marketable securities at December 31, 2017 were \$12.6 billion, an increase of \$4.1 billion from December 31, 2016. Key drivers in the balance sheet and total cash flows were:

Total assets increased \$7.9 billion (\$3.0 billion adjusted for currency) from December 31, 2016 driven by:

- Increases in cash and marketable securities (\$4.1 billion), total receivables (\$2.9 billion), retirement plan assets (\$1.6 billion) and goodwill (\$0.6 billion); partially offset by
- Decreases in intangible assets (\$0.9 billion).

Total liabilities increased \$8.6 billion (\$4.0 billion adjusted for currency) from December 31, 2016 driven by:

- Increases in total debt (\$4.7 billion) and taxes (\$3.5 billion).

Total equity of \$17.7 billion decreased \$0.7 billion from December 31, 2016 as a result of:

- Decreases from dividends (\$5.5 billion) and share repurchases (\$4.3 billion); partially offset by
- Increases from net income (\$5.8 billion), retirement-related benefit plans (\$2.3 billion) and equity translation adjustments (\$0.8 billion).

The company generated \$16.7 billion in cash flow provided by operating activities, a decrease of \$0.4 billion compared to 2016, driven primarily by performance-related declines within net income and an increase in cash tax payments, partially offset by an increase in cash provided by receivables. Net cash used in investing activities of \$7.1 billion was \$3.9 billion lower than the prior year, primarily driven by a decrease in cash used for acquisitions (\$5.2 billion). Net cash used in financing activities of \$6.4 billion increased \$0.5 billion compared to 2016, driven primarily by increased gross common share repurchases (\$0.8 billion).

## Management Discussion

International Business Machines Corporation and Subsidiary Companies

In January 2018, the company disclosed that it is expecting GAAP earnings per share from continuing operations of at least \$11.70 and operating (non-GAAP) earnings of at least \$13.80 per diluted share for 2018. The company expects free cash flow to be approximately \$12 billion in 2018. Free cash flow realization is expected to be in excess of 100 percent of GAAP net income. Refer to page 68 in the Liquidity and Capital Resources section for additional information on this non-GAAP measure. Refer to the Looking Forward section on pages 66 and 67 for additional information on the company's expectations.

### DESCRIPTION OF BUSINESS

Please refer to IBM's Annual Report on Form 10-K filed with the SEC on February 27, 2018 for Item 1A. entitled "Risk Factors."

The company creates value for clients through integrated solutions and products that leverage: data, information technology, deep expertise in industries and business processes, and a broad ecosystem of partners and alliances. IBM solutions typically create value by enabling new capabilities for clients that transform their businesses and help them engage with their customers and employees in new ways. These solutions draw from an industry-leading portfolio of consulting and IT implementation services, cloud and cognitive offerings, and enterprise systems and software which are all bolstered by one of the world's leading research organizations.

### Strategy

The IBM strategy starts with its clients.

As a uniquely integrated technology and services company, IBM helps clients change the way the world works by building smarter businesses.

IBM's clients include many of the world's most successful enterprises. These clients are at an inflection point, facing tremendous new opportunity and incredible competition. Digital technologies are unlocking unparalleled insight from previously inaccessible data. Work processes are being reimaged for speed and vastly smarter decision-making.

To win in these disruptive times requires that businesses learn—learn by extracting insights from their data and by applying those insights to how work is done. Smarter businesses do this faster and more effectively supported by IBM's combination of **Innovative Technology, Industry Expertise and Trust and Security**.

The company's capabilities include:

#### Cloud

Cloud is enabling the emergence of platforms through standardization, agility and innovation in both IT and business processes. Enterprise cloud is very different from consumer cloud: enterprises must bridge together mission-critical assets from on-premise systems with private cloud and public cloud. Hybrid cloud technology provides that bridge. All three must coexist and interoperate as a single platform.

The IBM Cloud is uniquely:

- Built for all applications: Applications require data. That data is in on-premise systems, in private clouds and in the public cloud. The IBM Cloud enables one data platform that, regardless of data's location, can run all applications. IBM's hybrid cloud capabilities make this single platform operate seamlessly.
- Artificial intelligence (AI)-ready: The IBM Cloud is built from the ground up to handle the demanding data and computational requirements of AI.
- Secure to the Core: IBM has a long history of helping clients keep data and transactions secure. Security is even more important in an increasingly connected world, and IBM has extended this unparalleled level of security to the cloud. For example, IBM's cybersecurity offerings act as a business immune system, with AI technology at its core, delivered from the IBM Cloud. These systems help to defend and respond to cyber-attacks across an organization's data, applications, mobile and endpoint devices.

The IBM Cloud is delivered with leading edge technology, including:

- Modern infrastructure: IBM's systems, including servers, storage and operating system software, have been refreshed and redesigned for cloud and enterprise AI workloads. IBM's new z14 is the world's first system to offer pervasive encryption of data without requiring changes to applications, and with no performance degradation. With IBM's systems, clients can build an IT infrastructure that is optimized for the scalability, reliability and growth that businesses need in today's data-driven world.
- Future infrastructure: The Q Network on the IBM Cloud enables clients around the world to explore quantum computing capabilities. IBM is the leader in quantum computing. Clients are signing on to explore how to overcome foreseen constraints in traditional computing models.

#### AI and Data

Artificial intelligence can help clients extract insight and make intelligent decisions from data. Like cloud, enterprise AI is very different from consumer AI. Enterprise applications deal with more complex use cases that benefit from expert knowledge, such as in healthcare or in the identification of business risk. Enterprise AI applications are trained by expert data, through data sets of all sizes and with more specialization than those in the general-knowledge consumer world. IBM AI—through the Watson platform:

- Learns more from less data: The ability to extract deep insights from both large and small data sets is essential for enterprise applications. Watson excels at this and can produce more insights with less data than other AI systems. That means clients can get started more quickly and begin to gain experience deploying AI in the enterprise.

- Protects clients' insights: While Watson builds on cumulative experience and knowledge, IBM recognizes that data and insights are clients' most important assets and a true competitive advantage. Watson is built to safeguard this type of information.
- Reimagines your workflows: Watson has been built for—and trained in—areas requiring deep expertise. Watson brings AI to professionals so that work can be done more efficiently, and even more importantly, can improve as the systems learn from the data.

### Solutions

Creating smarter businesses requires reimagining a company's core processes—for example, in healthcare, managing risk or optimizing a supply chain. In addition to building solutions based on IBM's experience, IBM is also creating a series of AI solutions—cognitive solutions—that embed artificial intelligence and data to change how work is done. Examples include:

- Global Industry Platforms: provides cognitive, analytics, security and cloud technology in comprehensive industry-specific platforms to remove much of the cost and complexity of delivering core business functions. For example: Banking, wealth management, and insurance are some of the areas poised for dramatic change by using cognitive and AI solutions from IBM Watson Financial Services. Watson Health provides technology and expertise to empower leaders, advocates and influencers in health to accelerate discovery, make essential connections and gain confidence on their path to solving the world's biggest health challenges.
- Blockchain Solutions: IBM is working with clients and developers across multiple industries to use blockchain to transform how business is done in areas such as banking and financial services and supply chain. For example, blockchain technology can be used to digitize global trade processes, providing a more efficient and secure method of moving goods across borders and trading zones.
- Watson IoT: includes both a cloud-based platform and industry solutions infused with AI, helping organizations mine intelligence from billions of connected devices.

### Enterprise Services

Through Global Business Services and Global Technology Services, IBM has helped the world's most successful enterprises transition from era to era. Using proven methods, IBM Services bring globally delivered outcomes using proven methods by focusing on:

- Digital Reinvention for growth: a unique framework for business transformation focused on growth opportunities.
- End-to-end Services integration: Global Technology Services brings the ability to connect previously disconnected parts of an organization. By embedding Watson into these mission critical services, new levels of quality, resiliency and automation are achieved.

- Pragmatic journey to Cloud and AI: Global Business Services brings its deep experience when guiding clients through the journey to cloud and AI. Clients gain from the thorough understanding of technology and the best ways to utilize it.

As clients reinvent their businesses to be smarter, they need all of this to work together. This is what they expect from IBM, what they need from IBM and what sets IBM apart.

\* \* \* \*

Responsible stewardship is an enduring principle that underscores all IBM endeavors. While IBM is constantly ushering in new technology it does so by:

- Leading in data responsibility, ethics and transparency;
- Preparing workforces of the world;
- Continuing the company's century-long commitment to diversity and inclusion, and
- Remaining grounded in a set of enduring IBM Values:
  - Dedication to every client's success
  - Innovation that matters—for our company and for the world
  - Trust and personal responsibility in all relationships

IBM has built a reputation and track record of trust with its clients for more than a century. IBM safeguards a client's privacy, data and insights. For example, IBM was one of the first companies to appoint a Chief Privacy Officer, to develop and publish a genetics privacy policy, to be certified under the APEC Cross Borders Privacy Rules system and to sign the EU Data Protection Code of Conduct for Cloud Service Providers.

\* \* \* \*

This is an era where being faster, more productive and lower cost is important but frankly not enough. To win, a business must be smarter: Being smarter means having deeper expertise, extracting better insights from data and being capable of rapidly changing the way in which one does work.

This is core to the strategy of IBM's clients and is at the heart of the IBM strategy.

### Business Model

The company's business model is built to support two principal goals: helping enterprise clients to move from one era to the next by bringing together innovative technology and industry expertise, and providing long-term value to shareholders. The business model has been developed over time through strategic investments in capabilities and technologies that have long-term growth and profitability prospects based on the value they deliver to clients.

## Management Discussion

### International Business Machines Corporation and Subsidiary Companies

The company's global capabilities include services, software, systems, fundamental research and related financing. The broad mix of businesses and capabilities are combined to provide integrated solutions and platforms to the company's clients.

The business model is dynamic, adapting to the continuously changing industry and economic environment, including the company's transformation into cloud and as-a-Service delivery models. The company continues to strengthen its position through strategic organic investments and acquisitions in higher-value areas, broadening its industry expertise and integrating AI into more of what the company offers. In addition, the company is transforming into a more agile enterprise to drive innovation and speed, as well as helping to drive productivity, which supports investments for participation in markets with significant long-term opportunity.

This business model, supported by the company's financial model, has enabled the company to deliver strong earnings, cash flows and returns to shareholders over the long term.

#### **Business Segments and Capabilities**

The company's major operations consist of five business segments: Cognitive Solutions, Global Business Services, Technology Services & Cloud Platforms, Systems and Global Financing.

Cognitive Solutions comprises a broad portfolio of capabilities that help IBM's clients to identify actionable new insights and inform decision-making for competitive advantage. Leveraging IBM's research, technology and industry expertise, this business delivers a full spectrum of capabilities, from descriptive, predictive and prescriptive analytics to cognitive systems. Cognitive Solutions includes Watson, the first commercially available AI platform that has the ability to interact in natural language, process vast amounts of big data, and learn from interactions with people and systems. These solutions are provided through the most contemporary delivery methods including through cloud environments and "as-a-Service" models. Cognitive Solutions consists of Solutions Software and Transaction Processing Software.

#### **Cognitive Solutions Capabilities**

**Solutions Software:** provides the basis for many of the company's strategic areas. IBM has established the world's deepest portfolio of data and analytics solutions, including analytics and data management platforms, cloud data services, talent management solutions, and solutions tailored by industry. Watson Platform, Watson Health and Watson Internet of Things (IoT) are certain capabilities included in Solutions Software. IBM's world-class security platform delivers integrated security intelligence across clients' entire operations, including their cloud, applications, networks and data, helping them to prevent, detect and remediate potential threats.

**Transaction Processing Software:** includes software that primarily runs mission-critical systems in industries such as banking, airlines and retail. Most of this software is on-premise and annuity in nature.

Global Business Services (GBS) provides clients with consulting, application management services and business process services. These professional services deliver value and innovation to clients through solutions which leverage industry, technology and business strategy and process expertise. GBS is the digital reinvention partner for IBM clients, combining industry knowledge, functional expertise, and applications with the power of business design and cognitive and cloud technologies. The full portfolio of GBS services is backed by its globally integrated delivery network and integration with technologies, solutions and services from IBM units including IBM Watson, IBM Cloud, IBM Research, and Global Technology Services.

In 2017, GBS deployed a new operating model designed to address specific client digital transformation imperatives and take full advantage of IBM and GBS's competitive differentiators in industry, cognitive and cloud. The operating model features Digital Strategy and iX, Cognitive Process Transformation and Cloud Application Innovation. To bring value at scale to clients around the world, GBS has implemented global service lines within each of the three focus areas, which are populated with new practices staffed by practitioners with deep domain skills and industry expertise.

#### **GBS Capabilities**

**Consulting:** provides business consulting services focused on bringing to market solutions that help clients shape their digital blueprints and customer experiences, define their cognitive operating models, unlock the potential in all data to improve decision-making, set their next-generation talent strategies and create new technology architectures in a cloud-centric world.

**Application Management:** delivers system integration, application management, maintenance and support services for packaged software, as well as custom and legacy applications. Value is delivered through advanced capabilities in areas such as security and privacy, application testing and modernization, cloud application migration and automation.

**Global Process Services:** delivers finance, procurement, talent and engagement, and industry-specific business process outsourcing services. These services deliver improved business results to clients through our consult-to-operate model which includes the strategic change and/or operation of the client's processes, applications and infrastructure. GBS is redefining process services for both growth and efficiency through the application of the power of cognitive technologies like Watson, as well as the IoT, blockchain and deep analytics.

**Technology Services & Cloud Platforms** provides comprehensive IT infrastructure services creating business value for clients. By leveraging insights and experience drawn from IBM's global scale, skills and technology, with applied innovation from IBM Research, clients gain access to leading-edge, high-quality services with improved outcomes in productivity, flexibility and cost.

**Technology Services & Cloud Platforms Capabilities**

**Infrastructure Services:** delivers a portfolio of cloud, project-based, outsourcing and other managed services focused on clients' enterprise IT infrastructure environments to enable digital transformation and deliver improved quality, flexibility, risk management and financial value. The portfolio includes a comprehensive set of hybrid cloud services and solutions to assist clients in building and running enterprise IT environments that utilize public and private clouds and traditional IT. The IBM Cloud Platform offers leading-edge services to developers and IBM's Cloud Infrastructure-as-a-Service covers a wide variety of workloads with high-quality performance. These offerings integrate long-standing expertise in service management and technology with the ability to utilize the power of new technologies, drawn from across IBM's businesses and ecosystem partners. The portfolio is built around a key set of predictive and proactive solutions addressing systems, mobility, resiliency, networking, cloud and security. The company's capabilities, including IBM Cloud, cognitive computing and hybrid cloud implementation, provide high-performance, end-to-end innovation and an improved ability to achieve business objectives.

**Technical Support Services:** delivers comprehensive support services to maintain and improve the availability of clients' IT infrastructures. These offerings include maintenance for IBM products and other technology platforms, as well as software and solution support, drawing on innovative technologies and leveraging the Watson platform's predictive capabilities.

**Integration Software:** delivers industry-leading hybrid cloud solutions that empower clients to achieve rapid innovation, hybrid integration, and process transformation with choice and consistency across public, dedicated and local cloud environments, leveraging the IBM Platform-as-a-Service solution. Integration Software offerings and capabilities help clients address the digital imperatives to create, connect and optimize their applications, data and infrastructure on their journey to become cognitive businesses.

Systems provides clients with innovative infrastructure platforms to help meet the new requirements of hybrid cloud and cognitive workloads. Approximately half of Systems Hardware's server and storage sales transactions are through the company's business partners, with the balance direct to end-user clients. IBM Systems also designs advanced semiconductor and systems technology in collaboration with IBM Research, primarily for use in the company's systems.

**Systems Capabilities**

**Servers:** a range of high-performance systems designed to address computing capacity, security and performance needs of businesses, hyperscale cloud service providers and scientific computing organizations. The portfolio includes IBM Z, a trusted enterprise platform for integrating data, transactions and insight, and Power Systems, a system designed from the ground up for big data and analytics, optimized for scale-out cloud and Linux, and delivering open innovation with OpenPOWER.

**Storage:** data storage products and solutions that allow clients to retain and manage rapidly growing, complex volumes of digital information and to fuel data-centric cognitive applications. These solutions address critical client requirements for information retention and archiving, security, compliance and storage optimization including data deduplication, availability and virtualization. The portfolio consists of a broad range of software-defined storage solutions, flash storage, disk and tape storage solutions.

**Operating Systems Software:** The company's z/OS is a security-rich, scalable, high-performance enterprise operating system for IBM Z. Power Systems offers a choice of AIX or Linux operating systems. These operating systems leverage POWER architecture to deliver secure, reliable and high performing enterprise-class workloads across a breadth of server offerings.

**Global Financing** encompasses two primary businesses: financing, primarily conducted through IBM Credit LLC (IBM Credit), and remanufacturing and remarketing. In 2017, the company reorganized its client and commercial financing business as a wholly owned subsidiary, IBM Credit LLC, and it began accessing the capital markets directly in September 2017. IBM Credit, through its financing solutions, facilitates IBM clients' acquisition of information technology systems, software and services in the areas where the company has the expertise. The financing arrangements are predominantly for products or services that are critical to the end users' business operations. The company conducts a comprehensive credit evaluation of its clients prior to extending financing. As a captive financier, Global Financing has the benefit of both deep knowledge of its client base and a clear insight into the products and services financed. These factors allow the business to effectively manage two of the major risks associated with financing, credit and residual value, while generating strong returns on equity. Global Financing also maintains a long-term partnership with the company's clients through various stages of the IT asset life cycle—from initial purchase and technology upgrades to asset disposition decisions.

**Global Financing Capabilities**

**Client Financing:** lease, installment payment plan and loan financing to end users and internal clients for terms up to seven years. Assets financed are primarily new and used IT hardware, software and services where the company has expertise. Internal financing is predominantly in support of Technology Services & Cloud Platforms' long-term client service contracts. All internal financing arrangements are at arm's-length rates and are based upon market conditions.

**Commercial Financing:** short-term working capital financing to suppliers, distributors and resellers of IBM and OEM products and services. This includes internal activity where Global Financing factors a selected portion of the company's accounts receivable primarily for cash management purposes, at arm's-length rates.

**Management Discussion**

International Business Machines Corporation and Subsidiary Companies

**Remanufacturing and Remarketing:** assets include used equipment returned from lease transactions, or used and surplus equipment acquired internally or externally. These assets may be refurbished or upgraded and sold or leased to new or existing clients both externally or internally. Externally remarketed equipment revenue represents sales or leases to clients and resellers. Internally remarketed equipment revenue primarily represents used equipment that is sold internally to Systems and Technology Services & Cloud Platforms. Systems may also sell the equipment that it purchases from Global Financing to external clients.

**IBM Worldwide Organizations**

The following worldwide organizations play key roles in IBM's delivery of value to its clients:

- Global Markets
- Research, Development and Intellectual Property

**Global Markets**

IBM has a global presence, operating in more than 175 countries with a broad-based geographic distribution of revenue. The company's Global Markets organization manages IBM's global footprint, working closely with dedicated country-based operating units to serve clients locally. These country teams have client relationship managers who lead integrated teams of consultants, solution specialists and delivery professionals to enable clients' growth and innovation.

By complementing local expertise with global experience and digital capabilities, IBM builds deep and broad-based client relationships. This local management focus fosters speed in supporting clients, addressing new markets and making investments in emerging opportunities. The Global Markets organization serves clients with expertise in their industry as well as through the products and services that IBM and partners supply. IBM is also expanding its reach to new and existing clients through digital marketplaces, digital sales and local Business Partner resources.

**Research, Development and Intellectual Property**

IBM's research and development (R&D) operations differentiate the company from its competitors. IBM annually invests 7 to 8 percent of total revenue for R&D, focusing on high-growth, high-value opportunities. IBM Research works with clients and the company's business units through global labs on near-term and mid-term innovations. It delivers many new technologies to IBM's portfolio every year and helps clients address their most difficult challenges. IBM Research scientists are conducting pioneering work in artificial intelligence, quantum computing, blockchain, security, cloud, nanotechnology, silicon and post-silicon computing architectures and more—applying these technologies across industries including healthcare, IoT, education and financial services.

In 2017, for the 25th consecutive year, IBM was awarded more U.S. patents than any other company. IBM's 9,043 patents awarded in 2017 represent a diverse range of inventions in artificial intelligence, cloud, cybersecurity and other strategic growth areas for the company.

The company continues to actively seek IP protection for its innovations, while increasing emphasis on other initiatives designed to leverage its IP leadership. Some of IBM's technological breakthroughs are used exclusively in IBM products, while others are licensed and may be used in IBM products and/or the products of the licensee. As part of its business model, the company licenses certain of its intellectual property, which is high-value technology, but may be in more mature markets. The licensee drives the future development of the IP and ultimately expands the customer base. This would generate IP income for the company both upon licensing, and with any ongoing royalty arrangements between it and the licensee. While the company's various proprietary IP rights are important to its success, IBM believes its business as a whole is not materially dependent on any particular patent or license, or any particular group of patents or licenses. IBM owns or is licensed under a number of patents, which vary in duration, relating to its products.

**Management Discussion**

International Business Machines Corporation and Subsidiary Companies

**YEAR IN REVIEW****Results of Continuing Operations****Segment Details**

The following is an analysis of the 2017 versus 2016 reportable segment results. The table below presents each reportable segment's external revenue and gross margin results. Segment pre-tax income includes transactions between segments that are intended to reflect an arm's-length transfer price and excludes certain unallocated corporate items.

(\$ in millions)

For the year ended December 31:	2017	2016	Yr.-to-Yr. Percent/ Margin Change	Yr.-to-Yr. Percent Change Adjusted for Currency
<b>Revenue</b>				
Cognitive Solutions	<b>\$18,453</b>	\$18,187	1.5%	1.0%
Gross margin	78.6%	81.9%	(3.2) pts.	
Global Business Services	<b>16,348</b>	16,700	(2.1)%	(1.8)%
Gross margin	25.2%	27.0%	(1.8) pts.	
Technology Services & Cloud Platforms	<b>34,277</b>	35,337	(3.0)%	(3.4)%
Gross margin	40.4%	41.9%	(1.5) pts.	
Systems	<b>8,194</b>	7,714	6.2%	5.4%
Gross margin	53.2%	55.7%	(2.5) pts.	
Global Financing	<b>1,696</b>	1,692	0.3%	(0.7)%
Gross margin	29.3%	38.7%	(9.4) pts.	
Other	<b>171</b>	289	(40.7)%	(41.1)%
Gross margin	(640.3)%	(293.9)%	(346.4) pts.	
<b>Total consolidated revenue</b>	<b>\$79,139</b>	\$79,919	(1.0)%	(1.3)%
 <b>Total consolidated gross profit</b>	 <b>\$36,227</b>	 \$38,294	 (5.4)%	
Total consolidated gross margin	45.8%	47.9%	(2.1) pts.	
 Non-operating adjustments				
Amortization of acquired intangible assets	449	494	(9.2)%	
Retirement-related costs/(income)	799	316	153.2%	
<b>Operating (non-GAAP) gross profit</b>	<b>\$37,475</b>	\$39,104	(4.2)%	
Operating (non-GAAP) gross margin	47.4%	48.9%	(1.6) pts.	

**Management Discussion**

International Business Machines Corporation and Subsidiary Companies

**Cognitive Solutions**

(\$ in millions)

For the year ended December 31:	2017	2016	Yr.-to-Yr. Percent Change	Yr.-to-Yr. Percent Change Adjusted for Currency
<b>Cognitive Solutions external revenue</b>	<b>\$18,453</b>	<b>\$18,187</b>	1.5%	1.0%
Solutions Software	\$12,806	\$12,589	1.7%	1.3%
Transaction Processing Software	5,647	5,598	0.9	0.3

Cognitive Solutions revenue of \$18,453 million grew 1.5 percent as reported and 1 percent adjusted for currency in 2017 compared to the prior year. On an as-reported and constant currency basis, there was growth in Solutions Software, which addresses many of the company's strategic areas, while Transaction Processing Software was relatively flat year to year.

Solutions Software revenue of \$12,806 million grew 1.7 percent as reported (1 percent adjusted for currency) compared to the prior year led by key areas including security, industry platforms and Watson offerings, as the company continued to embed cognitive into its security offerings and drive vertical solutions. In 2017, the company continued to expand the market for Watson Health which had strong double-digit revenue growth as reported and adjusted for currency compared to the prior year. Most of the strategic areas within Solutions Software have a Software-as-a-Service (SaaS) delivery model and the company continues to build scale in these areas. For the full year, there was year-to-year growth in annuity revenue as reported and at constant currency with strong double-digit growth in SaaS revenue as reported and adjusted for currency.

Transaction Processing Software revenue of \$5,647 million grew 0.9 percent as reported (flat adjusted for currency) in 2017 compared to the prior year. In the second half of 2017, there was improved revenue performance with growth both sequentially versus the first half 2017 and year to year as reported and adjusted for currency reflecting clients' ongoing long-term commitment and the value the company's platform provides to them. This portfolio predominately runs on-premise mission critical workloads running on IBM Z in industries such as banking, airlines and retail.

Cognitive Solutions total strategic imperatives revenue of \$12.0 billion grew 2 percent year to year as reported and adjusted for currency. Cloud revenue of \$2.5 billion grew 19 percent as reported and adjusted for currency, with an as-a-Service exit run rate of \$2.1 billion.

For the year ended December 31:	2017	2016	Yr.-to-Yr. Percent/ Margin Change
<b>Cognitive Solutions</b>			
External gross profit	\$14,510	\$14,890	(2.6)%
External gross profit margin	78.6%	81.9%	(3.2) pts.
Pre-tax income	\$ 6,817	\$ 6,352	7.3%
Pre-tax margin	32.3%	30.5%	1.8 pts.

Cognitive Solutions gross profit margin decreased 3.2 points to 78.6 percent in 2017 compared to the prior year. The gross profit margin decline year to year was driven by continued investment and an increasing mix toward SaaS which has a different margin profile than traditional software delivery offerings and is not yet at scale. Margins were impacted by a higher level of royalty cost associated with IP licensing agreements in 2017 compared to the prior year.

Pre-tax income of \$6,817 million increased 7.3 percent compared to the prior year with a pre-tax margin improvement of 1.8 points to 32.3 percent as the company continues to invest to embed cognitive into offerings, scale platforms and build high-value vertical solutions.

**Management Discussion**  
 International Business Machines Corporation and Subsidiary Companies

**Global Business Services**

(\$ in millions)

For the year ended December 31:	2017	2016	Yr.-to-Yr. Percent Change	Yr.-to-Yr. Percent Change Adjusted for Currency
<b>Global Business Services external revenue</b>	<b>\$16,348</b>	<b>\$16,700</b>	(2.1)%	(1.8)%
Consulting	\$ 7,262	\$ 7,332	(1.0)%	(0.4)%
Global Process Services	1,265	1,388	(8.8)	(9.0)
Application Management	7,821	7,980	(2.0)	(1.9)

Global Business Services revenue of \$16,348 million decreased 2.1 percent as reported and 2 percent adjusted for currency in 2017 compared to the prior year. The company continues to transform this business and shift its practices to digital, cognitive and cloud. GBS signings grew each quarter of the year as reported and adjusted for currency, and strategic imperatives revenue for the full year 2017 had strong growth year to year as reported and adjusted for currency. However, this growth continues to be more than offset by declines in the more traditional areas that the company is shifting away from such as large ERP and on-premise enterprise application implementation.

Consulting revenue of \$7,262 million decreased 1.0 percent year to year as reported (flat adjusted for currency). There was improved performance in the second half of 2017 with revenue growth both sequentially versus the first half of 2017 and year to year as reported and adjusted for currency. The improvement was driven by the company's digital strategy and iX platform, and a return to growth as reported and at constant currency in the Consulting backlog. Global Process Services (GPS) revenue of \$1,265 million decreased 8.8 percent as reported (9 percent adjusted for currency) compared to the prior year. Application Management revenue of \$7,821 million decreased 2.0 percent as reported (2 percent adjusted for currency). The company continues to help clients implement new cloud-centric architectures in their critical applications. However, overall revenue performance in Application Management was impacted by certain areas that are not as differentiated and are experiencing pricing pressure, as well as the successful completion of some large contracts.

Within GBS, total strategic imperatives revenue of \$9.8 billion grew 10 percent as reported and adjusted for currency year to year. Cloud revenue of \$4.0 billion grew 34 percent as reported (35 percent adjusted for currency), with an as-a-Service exit run rate of \$1.3 billion.

(\$ in millions)

For the year ended December 31:	2017	2016	Yr.-to-Yr. Percent/ Margin Change
<b>Global Business Services</b>			
External gross profit	\$4,112	\$4,501	(8.6)%
External gross profit margin	25.2%	27.0%	(1.8) pts.
Pre-tax income	\$1,401	\$1,732	(19.1)%
Pre-tax margin	8.4%	10.1%	(1.7) pts.

GBS gross profit margin decreased 1.8 points to 25.2 percent year to year and pre-tax income of \$1,401 million decreased 19.1 percent year to year. The pre-tax margin declined 1.7 points to 8.4 percent. Pre-tax income performance for the year included a lower level of charges related to workforce rebalancing and real estate actions as compared to the prior year.

GBS margin has been impacted by investments to drive transformation and reflects pricing and profit pressure in the more traditional IT services. The company will continue to focus on improving productivity with a streamlined practice model and new project management approaches.

**Management Discussion**

International Business Machines Corporation and Subsidiary Companies

**Technology Services & Cloud Platforms**

(\$ in millions)

For the year ended December 31:	2017	2016	Yr.-to-Yr. Percent Change	Percent Change Adjusted for Currency
<b>Technology Services &amp; Cloud Platforms external revenue</b>	<b>\$34,277</b>	<b>\$35,337</b>	(3.0)%	(3.4)%
Infrastructure Services	\$22,690	\$23,543	(3.6)%	(4.1)%
Technical Support Services	7,196	7,272	(1.0)	(1.5)
Integration Software	4,390	4,521	(2.9)	(3.4)

Technology Services & Cloud Platforms revenue of \$34,277 million decreased 3.0 percent as reported and 3 percent adjusted for currency in 2017 compared to the prior year. For the full year, there were declines across all lines of business, however, within the segment there was strong revenue growth year to year in cloud, analytics, mobile and security, as reported and adjusted for currency.

Infrastructure Services revenue of \$22,690 million declined 3.6 percent as reported (4 percent adjusted for currency) compared to the prior year. In Infrastructure Services, the business model is to deliver productivity to clients and then grow by expanding the scope of work and adding new clients to the platform. The revenue decline in 2017 reflects the continued impact associated with contract conclusions at the end of 2016 and the shift away from certain lower value work within this business. During 2017, there were some substantial new transactions signed to implement hybrid cloud environments. Technical Support Services revenue of \$7,196 million decreased 1.0 percent as reported (2 percent adjusted for currency) year to year. Within this line of business, the company is focused on growing its multi-vendor support services which provide clients with a single source of expertise and visibility across different vendor solutions. Integration Software full-year revenue of \$4,390 million decreased 2.9 percent as reported (3 percent adjusted for currency) compared to the prior year. While the annuity base remains relatively stable and there was strong double-digit growth in SaaS offerings, transactional revenue declined year to year as more of this portfolio shifts to the IBM Cloud.

Within Technology Services & Cloud Platforms, strategic imperatives revenue of \$10.4 billion grew 19 percent year to year as reported (18 percent adjusted for currency). Cloud revenue of \$7.1 billion grew 21 percent as reported (20 percent adjusted for currency), with an as-a-Service exit run rate of \$6.9 billion.

(\$ in millions)

For the year ended December 31:	2017	2016	Yr.-to-Yr. Percent/ Margin Change
<b>Technology Services &amp; Cloud Platforms</b>			
External Technology Services gross profit	\$10,256	\$10,969	(6.5)%
External Technology Services gross profit margin	34.3%	35.6%	(1.3) pts.
External Integration Software gross profit	\$ 3,587	\$ 3,830	(6.4)%
External Integration Software gross profit margin	81.7%	84.7%	(3.0) pts.
External total gross profit margin	40.4%	41.9%	(1.5) pts.
Pre-tax income	\$ 4,344	\$ 4,707	(7.7)%
Pre-tax margin	12.4%	13.1%	(0.6) pts.

Technology Services & Cloud Platforms gross profit margin decreased 1.5 points year to year in 2017 to 40.4 percent driven primarily by large contract conclusions, delays in productivity improvements, mix from Integration Software and investments in cloud. The current-year margin reflects savings from the prior-year workforce transformation action. Pre-tax income of \$4,344 million decreased 7.7 percent. The pre-tax margin declined 0.6 points year to year to 12.4 percent. The year-to-year performance in 2017 compared to the prior year includes a lower level of charges related to workforce and real estate actions.

The company continues to focus on scaling its platforms, delivering productivity through automation, infusing AI into its offerings and investing to expand its cloud infrastructure. There are approximately 60 cloud centers across 19 countries providing clients with flexibility in how and where they store their data. However, these investments to transform the business continued to impact margins in 2017.

**Management Discussion**  
International Business Machines Corporation and Subsidiary Companies

**Services Backlog and Signings**

(\$ in billions)

At December 31:	2017	2016	Yr.-to-Yr. Percent Change	Yr.-to-Yr. Percent Change Adjusted for Currency
<b>Total backlog</b>	<b>\$121.0</b>	\$118.7	1.9%	(3.4)%

The estimated total services backlog at December 31, 2017 was \$121 billion, an increase of 1.9 percent as reported (decrease of 3 percent adjusted for currency). There was growth in Global Technology Services backlog as reported, but a decrease year to year adjusted for currency. GBS backlog decreased year to year as reported and adjusted for currency compared to the December 31, 2016 balance.

Total services backlog includes Infrastructure Services, Consulting, Global Process Services, Application Management and Technical Support Services. Total backlog is intended to be a statement of overall work under contract for these businesses and therefore includes Technical Support Services. It does not include as-a-Service offerings that have flexibility in contractual commitment terms. Backlog estimates are subject to change and are affected by several factors, including terminations, changes in the scope of contracts, periodic revalidations, adjustments for revenue not materialized and adjustments for currency.

Services signings are management's initial estimate of the value of a client's commitment under a services contract. There are no third-party standards or requirements governing the calculation of signings. The calculation used by management involves estimates and judgments to gauge the extent of a client's commitment, including the type and duration of the agreement, and the presence of termination charges or wind-down costs.

Signings include Infrastructure Services, Consulting, Global Process Services and Application Management contracts. Contract extensions and increases in scope are treated as signings only to the extent of the incremental new value. Technical Support Services is not included in signings as the maintenance contracts tend to be more steady state, where revenues equal renewals.

Contract portfolios purchased in an acquisition are treated as positive backlog adjustments provided those contracts meet the company's requirements for initial signings. A new signing will be recognized if a new services agreement is signed incidental or coincidental to an acquisition or divestiture.

(\$ in millions)

For the year ended December 31:	2017	2016	Yr.-to-Yr. Percent Change	Yr.-to-Yr. Percent Change Adjusted for Currency
<b>Total signings</b>	<b>\$42,869</b>	\$44,645	(4.0)%	(4.4)%

**Systems**

(\$ in millions)

For the year ended December 31:	2017	2016	Yr.-to-Yr. Percent Change	Yr.-to-Yr. Percent Change Adjusted for Currency
<b>Systems external revenue</b>	<b>\$8,194</b>	\$7,714	6.2%	5.4%
Systems Hardware	\$6,494	\$5,926	9.6%	8.6%
IBM Z			24.0	22.3
Power Systems			(3.7)	(4.3)
Storage Systems			7.7	7.0
Operating Systems Software	1,701	1,788	(4.9)	(5.3)

Systems revenue of \$8,194 million grew 6.2 percent year to year as reported (5 percent adjusted for currency) in 2017 driven by a combination of strong z14 market acceptance and four consecutive quarters of growth as reported and adjusted for currency in Storage Systems. Systems Hardware revenue of \$6,494 million grew 9.6 percent as reported (9 percent adjusted for currency) with growth in IBM Z and Storage Systems partially offset by a decrease in Power Systems, as reported and adjusted for currency. Operating Systems Software revenue of \$1,701 million decreased 4.9 percent as reported (5 percent adjusted for currency) compared to the prior year.

Within Systems Hardware, IBM Z revenue grew 24.0 percent as reported (22 percent adjusted for currency) year to year, driven by the successful launch of the z14 mainframe in the third quarter of 2017. This success is due to the strong demand for technology that helps address the growing threat of global data breaches and the need for clients to operate within regulated environments. With unprecedented encryption capabilities, there has been strong demand for the z14 across a mix of industries and geographies since its introduction. The company's mainframe is a franchise that continues to deliver a high value, secure and scalable platform that clients rely on for their mission critical applications.

**Management Discussion**

International Business Machines Corporation and Subsidiary Companies

Power Systems revenue decreased 3.7 percent as reported (4 percent adjusted for currency) year to year with revenue growth in the company's high-end portfolio more than offset by declines in mid-range and low-range products, as reported and adjusted for currency. Overall performance reflects the company's continued shift to a growing Linux market while continuing to serve a high-value, but declining UNIX market. Linux revenue grew year to year as reported and adjusted for currency, while UNIX revenue declined as reported and adjusted for currency in 2017. In the fourth quarter of 2017, Power Systems revenue returned to growth as reported and adjusted for currency, and the company released its next generation POWER9 system in the low-end Linux portfolio. With the new POWER9 processor, these systems bring unprecedented speed to AI workloads.

Storage Systems revenue increased by 7.7 percent as reported (7 percent adjusted for currency) year to year. With the company's most competitive storage offerings in some time, there was growth as reported and adjusted for currency in each quarter of the year. All-flash array offerings were a catalyst for Storage Systems growth in 2017 with strong double-digit growth as reported and adjusted for currency throughout the year.

Within Systems, total strategic imperatives revenue of \$4.3 billion grew 28 percent year to year as reported (26 percent adjusted for currency). Cloud revenue of \$3.4 billion grew 26 percent as reported (25 percent adjusted for currency).

(\$ in millions)

For the year ended December 31:	2017	2016	Yr.-to-Yr. Percent/ Margin Change
<b>Systems</b>			
External Systems			
Hardware gross profit	\$2,894	\$2,720	6.4%
External Systems			
Hardware gross profit margin	44.6%	45.9%	(1.3) pts.
External Operating			
Systems Software			
gross profit	\$1,469	\$1,577	(6.9)%
External Operating			
Systems Software			
gross profit margin	86.4%	88.2%	(1.8) pts.
External total			
gross profit	\$4,363	\$4,298	1.5%
External total gross			
profit margin	53.2%	55.7%	(2.5) pts.
Pre-tax income	\$1,135	\$ 933	21.6%
Pre-tax margin	12.7%	11.0%	1.7 pts.

The Systems gross profit margin decreased 2.5 points to 53.2 percent in 2017 compared to the prior year. The overall decrease year to year was driven by margin declines across all product lines, partially offset by product mix primarily toward the higher margin IBM Z, reflecting product cycle dynamics.

Pre-tax income of \$1,135 million grew 21.6 percent and pre-tax margin increased 1.7 points year to year to 12.7 percent driven by the strong performance in Systems Hardware.

Overall Systems performance in 2017 reflected a successful repositioning of the business through continuous reinvention of core platforms and expansion into new workloads.

**Global Financing**

Global Financing is a reportable segment that is measured as a stand-alone entity. Global Financing facilitates IBM clients' acquisition of information technology systems, software and services by providing financing solutions in the areas where the company has the expertise, while generating strong returns on equity. Global Financing also optimizes the recovery of residual values by selling assets sourced from end of lease, leasing used equipment to new clients, or extending lease arrangements with current clients. Sales of equipment include equipment returned at the end of a lease, surplus internal equipment and used equipment purchased externally. Residual value is a risk unique to the financing business and management of this risk is dependent upon the ability to accurately project future equipment values at lease inception. Global Financing has insight into product plans and cycles for the IBM products under lease. Based upon this product information, Global Financing continually monitors projections of future equipment values and compares them with the residual values reflected in the portfolio.

**Results of Operations**

(\$ in millions)

For the year ended December 31:	2017	2016	Yr.-to-Yr. Percent Change
External revenue	\$1,696	\$1,692	0.3%
Internal revenue	1,471	1,802	(18.4)
Total revenue	\$3,168	\$3,494	(9.3)%
Pre-tax income	\$1,279	\$1,656	(22.7)%

## Management Discussion

### International Business Machines Corporation and Subsidiary Companies

In 2017, Global Financing delivered external revenue of \$1,696 million and total revenue of \$3,168 million, with a decline in gross margin of 6.7 points. Total pre-tax income of \$1,279 million decreased 22.7 percent compared to 2016 and return on equity increased 2.3 points to 32.9 percent.

Global Financing total revenue of \$3,168 million decreased 9.3 percent compared to the prior year. This was due to a decline in internal revenue of 18.4 percent, driven by a decrease in internal used equipment sales (down 25.2 percent to \$1,111 million) partially offset by an increase in internal financing (up 13.9 percent to \$360 million). External revenue grew 0.3 percent due to an increase in external used equipment sales (up 14.9 percent to \$530 million), partially offset by a decline in external financing (down 5.2 percent to \$1,167 million).

The decrease in external financing revenue was due to lower asset yields, partially offset by an increase in average asset balances. The increase in internal financing revenue was primarily due to higher average asset balances and higher asset yields.

Global Financing pre-tax income decreased 22.7 percent year to year in 2017 primarily driven by a decrease in gross profit (\$430 million), partially offset by a decline in financing receivables provisions (\$52 million). This decrease was primarily due to lower reserves in Brazil in the current year. At December 31, 2017 the overall allowance for credit losses coverage rate was 1.1 percent, a decrease of 48 basis points year over year primarily due to the write-off of previously reserved receivables.

The increase in return on equity from 2016 to 2017 was primarily due to a lower average equity balance. See page 48 for the details of the after-tax income and return on equity calculations.

Total unguaranteed residual value of leases at December 31, 2017 and 2016 were \$724 million and \$725 million, respectively. In addition to the unguaranteed residual value, on a limited basis, Global Financing will obtain guarantees of the future value of the equipment to be returned at end of lease.

Third-party residual value guarantees increase the minimum lease payments as provided for by accounting standards that are utilized in determining the classification of a lease as a sales-type lease, direct financing lease or operating lease. The aggregate asset values associated with the guarantees of sales-type leases were \$716 million and \$329 million for the financing transactions originated during the years ended December 31, 2017 and December 31, 2016, respectively. In 2017, the residual value guarantee program resulted in the company recognizing approximately \$452 million of revenue that would otherwise have been recognized in future periods as operating lease revenue. If the company had chosen to not participate in a residual value guarantee program in 2017 and prior years, the 2017 impact would be substantially mitigated by the effect of prior year asset values being recognized as operating lease revenue in the current year. The aggregate asset values associated with the guarantees of direct financing leases were \$154 million and \$169 million for the financing transactions originated during the years ended December 31, 2017 and 2016, respectively. The associated aggregate guaranteed future values at the scheduled end of lease were \$45 million and \$19 million for the financing transactions originated during the years ended December 31, 2017 and 2016, respectively. The cost of guarantees was \$4 million and \$2 million for the years ended December 31, 2017 and 2016, respectively.

#### Geographic Revenue

In addition to the revenue presentation by reportable segment, the company also measures revenue performance on a geographic basis. The following geographic, regional and country-specific revenue performance excludes OEM revenue.

(\$ in millions)

	2017	2016	Yr.-to-Yr. Percent Change	Percent Change Adjusted for Currency
<b>For the year ended December 31:</b>				
<b>Total revenue</b>	<b>\$79,139</b>	<b>\$79,919</b>	<b>(1.0)%</b>	<b>(1.3)%</b>
Geographies	\$78,793	\$79,594	(1.0)%	(1.4)%
Americas	37,479	37,513	(0.1)	(0.6)
Europe/Middle East/Africa	24,345	24,769	(1.7)	(2.8)
Asia Pacific	16,970	17,313	(2.0)	(1.1)

Total geographic revenue of \$78,793 million in 2017 decreased 1.0 percent as reported (1 percent adjusted for currency) compared to the prior year.

**Management Discussion**

International Business Machines Corporation and Subsidiary Companies

Americas revenue was essentially flat year to year as reported, but decreased 1 percent adjusted for currency with a decline in North America partially offset by growth in Latin America, both as reported and adjusted for currency. Within North America, the U.S. decreased 1.4 percent and Canada increased 4.9 percent (3 percent adjusted for currency). In Latin America, Brazil increased 7.6 percent (1 percent adjusted for currency) and Mexico increased 9.2 percent (10 percent adjusted for currency).

EMEA revenue decreased 1.7 percent as reported and 3 percent adjusted for currency. Revenue declined in the UK and Germany, while there was growth in France and Spain. The UK decreased 11.2 percent (7 percent adjusted for currency) and Germany decreased 3.2 percent (6 percent adjusted for currency). France increased 6.3 percent (3 percent adjusted for currency), and Spain was up 8.3 percent (6 percent adjusted for currency).

Asia Pacific revenue decreased 2.0 percent as reported and 1 percent adjusted for currency. Japan decreased 1.1 percent as reported, but increased 2 percent adjusted for currency. India grew 8.6 percent as reported and 5 percent adjusted for currency. China decreased 10.6 percent (10 percent adjusted for currency) and Australia decreased 5.8 percent (9 percent adjusted for currency).

**Total Expense and Other (Income)**

	(\$ in millions)		Yr.-to-Yr. Percent/ Margin Change
For the year ended December 31:	2017	2016	
<b>Total consolidated expense and other (income)</b>	<b>\$24,827</b>	\$25,964	(4.4)%
Non-operating adjustments			
Amortization of acquired intangible assets	(496)	(503)	(1.4)
Acquisition-related charges	(52)	(5)	NM
Non-operating retirement-related (costs)/income	(669)	(282)	137.2
<b>Operating (non-GAAP) expense and other (income)</b>	<b>\$23,609</b>	\$25,174	(6.2)%
Total consolidated expense-to-revenue ratio	31.4%	32.5%	(1.1) pts.
Operating (non-GAAP) expense-to-revenue ratio	29.8%	31.5%	(1.7) pts.

NM—Not meaningful

For additional information regarding total expense and other (income) for both expense presentations, see the following analyses by category.

**Selling, General and Administrative**

(\$ in millions)

For the year ended December 31:	2017	2016	Yr.-to-Yr. Percent Change
<b>Selling, general and administrative expense</b>			
<b>Selling, general and administrative—other</b>			
Advertising and promotional expense	\$16,568	\$16,971	(2.4)%
Workforce rebalancing charges	1,445	1,327	8.9
Retirement-related costs	959	742	29.3
Amortization of acquired intangible assets	496	503	(1.4)
Stock-based compensation	384	401	(4.1)
Bad debt expense	55	87	(36.5)
<b>Total consolidated selling, general and administrative expense</b>	<b>\$20,107</b>	\$21,069	(4.6)%
<b>Non-operating adjustments</b>			
Amortization of acquired intangible assets	(496)	(503)	(1.4)
Acquisition-related charges	(13)	2	NM
Non-operating retirement-related (costs)/income	(472)	(253)	86.6
<b>Operating (non-GAAP) selling, general and administrative expense</b>	<b>\$19,126</b>	\$20,315	(5.9)%

NM—Not meaningful

Total selling, general and administrative (SG&A) expense decreased 4.6 percent in 2017 versus 2016, driven primarily by the following factors:

- Lower workforce rebalancing charges (4 points); and
- Lower spending (2 points); partially offset by
- Spending related to acquisitions in the prior 12 months (1 point); and
- Higher retirement-related costs (1 point).

Operating (non-GAAP) expense decreased 5.9 percent year to year driven primarily by the same factors.

Bad debt expense decreased \$32 million in 2017 compared to 2016. The receivables provision coverage was 1.6 percent at December 31, 2017, a decrease of 40 basis points from December 31, 2016.

**Research, Development and Engineering**

	(\$ in millions)		
	Yr.-to-Yr. Percent Change		
For the year ended December 31:	2017	2016	
<b>Total consolidated research, development and engineering</b>			
Non-operating adjustment	\$5,787	\$5,751	0.6%
Non-operating retirement-related (costs)/income	(197)	(29)	575.5
<b>Operating (non-GAAP) research, development and engineering</b>			
	\$5,590	\$5,722	(2.3)%

Research, development and engineering (RD&E) expense was 7.3 percent of revenue in 2017 and 7.2 percent of revenue in 2016.

RD&E expense increased 0.6 percent in 2017 versus 2016 primarily driven by:

- The impact of acquisitions completed in the prior 12-month period (1 point); and
- The effects of currency; partially offset by
- Lower spending, net of higher retirement-related costs (1 point).

Operating (non-GAAP) RD&E expense decreased 2.3 percent in 2017 compared to the prior year, driven primarily by the same factors, excluding higher non-operating retirement-related costs.

**Intellectual Property and Custom Development Income**

	(\$ in millions)		
	Yr.-to-Yr. Percent Change		
For the year ended December 31:	2017	2016	
<b>Licensing of intellectual property including royalty-based fees</b>			
	\$1,193	\$1,390	(14.1)%
<b>Custom development income</b>			
	252	214	17.5
<b>Sales/other transfers of intellectual property</b>			
	21	27	(24.2)
<b>Total</b>			
	\$1,466	\$1,631	(10.2)%

Licensing of intellectual property including royalty-based fees decreased 14.1 percent in 2017 compared to 2016. The company entered into new partnership agreements in 2017, which included three transactions with period income greater than \$100 million, compared to four transactions greater than \$100 million in 2016. The company licenses IP to partners who allocate their skills to extend the value of assets that are high value, but may be in mature markets. The timing and amount of licensing, sales or other transfers of IP may vary significantly from period to period depending upon the timing of licensing agreements, economic conditions, industry consolidation and the timing of new patents and know-how development.

**Other (Income) and Expense**

	(\$ in millions)		
	Yr.-to-Yr. Percent Change		
For the year ended December 31:	2017	2016	
<b>Other (income) and expense</b>			
Foreign currency transaction losses/(gains)	\$ 405	\$(116)	NM
(Gains)/losses on derivative instruments	(341)	260	NM
Interest income	(144)	(108)	33.5%
Net (gains)/losses from securities and investment assets	(20)	23	NM
Other	(116)	85	NM
<b>Total consolidated other (income) and expense</b>			
	\$ (216)	\$ 145	NM
Non-operating adjustment			
Acquisition-related charges	(39)	(7)	444.6
<b>Operating (non-GAAP) other (income) and expense</b>			
	\$ (255)	\$ 138	NM

NM—Not meaningful

Total consolidated other (income) and expense was income of \$216 million in 2017 compared to expense of \$145 million in 2016. The decrease in expense of \$361 million year over year was primarily driven by:

- Real estate capacity charges (reflected in Other in the table above) in the prior year related to workforce transformation (\$328 million);
- Lower net exchange losses (\$81 million);
- Reduced losses from securities and investment assets (\$43 million), primarily related to the sale of Lenovo shares in 2016; and
- Higher interest income (\$36 million); partially offset by
- Lower gains on divestitures (\$61 million).

**Interest Expense**

	(\$ in millions)		
	Yr.-to-Yr. Percent Change		
For the year ended December 31:	2017	2016	
<b>Interest expense</b>			
<b>Total</b>	<b>\$615</b>	<b>\$630</b>	<b>(2.3)%</b>

Interest expense decreased \$15 million compared to 2016. Interest expense is presented in cost of financing in the Consolidated Statement of Earnings only if the related external borrowings are to support the Global Financing external business. Overall interest expense (excluding capitalized interest) in 2017 was \$1,273 million, an increase of \$67 million year to year, primarily driven by higher average interest rates.

**Management Discussion**

International Business Machines Corporation and Subsidiary Companies

**Stock-Based Compensation**

Pre-tax stock-based compensation cost of \$534 million decreased \$10 million compared to 2016. This was due primarily to decreases related to the conversion of stock-based awards previously issued by acquired entities (\$23 million) and performance share units (\$14 million); partially offset by an increase in restricted stock units (\$27 million). Stock-based compensation cost, and the year-to-year change, was reflected in the following categories: Cost: \$91 million, up \$3 million; SG&A expense: \$384 million, down \$16 million and RD&E expense: \$59 million, up \$3 million.

**Retirement-Related Plans**

The following table provides the total pre-tax cost for all retirement-related plans. These amounts are included in the Consolidated Statement of Earnings within the caption (e.g., Cost, SG&A, RD&E) relating to the job function of the plan participants.

(\$ in millions)

For the year ended December 31:	2017	2016	Yr.-to-Yr. Percent Change
<b>Retirement-related plans—cost</b>			
Service cost	\$ 429	\$ 443	(3.0)%
Amortization of prior service costs/(credits)	(88)	(107)	(18.5)
Cost of defined contribution plans	1,046	1,070	(2.2)
<b>Total operating costs/ (income)</b>	<b>\$ 1,388</b>	<b>\$ 1,405</b>	<b>(1.2)%</b>
Interest cost	\$ 2,961	\$ 3,300	(10.3)%
Expected return on plan assets	(4,346)	(5,563)	(21.9)
Recognized actuarial losses	2,871	2,751	4.4
Curtailments/settlements	19	(16)	NM
Multi-employer plan/other	(36)	126	NM
<b>Total non-operating costs/(income)</b>	<b>\$ 1,468</b>	<b>\$ 598</b>	<b>145.6%</b>
<b>Total retirement-related plans—cost</b>	<b>\$ 2,857</b>	<b>\$ 2,003</b>	<b>42.6%</b>

NM—Not meaningful

Total pre-tax retirement-related plan cost increased by \$854 million compared to 2016, primarily driven by lower expected return on plan assets (\$1,217 million) and an increase in recognized actuarial losses (\$120 million); partially offset by lower interest costs (\$339 million) and other costs (\$162 million) primarily due to impacts from pension litigation in both years.

As discussed in the “Operating (non-GAAP) Earnings” section on pages 26 and 27, the company characterizes certain retirement-related costs as operating and others as non-operating. Utilizing this characterization, operating retirement-related costs in 2017 were \$1,388 million, a decrease of \$17 million compared to 2016, primarily driven by lower defined contribution plans cost (\$23 million). Non-operating costs of \$1,468 million increased \$871 million in 2017 compared to 2016, driven primarily by lower expected return on plan assets (\$1,217 million) and an increase in recognized actuarial losses (\$120 million); partially offset by lower interest costs (\$339 million) and other costs (\$162 million) primarily due to impacts from pension litigation in both years. Effective January 1, 2018, the company adopted the new FASB guidance on presentation of net periodic pension and nonpension postretirement benefit costs, and as a result, beginning in 2018, the company will align its presentation of operating and non-operating costs to the FASB presentation. Prior period non-operating cost/(income) will be recast for comparability.

**Income Taxes**

The continuing operations effective tax rate for 2017 was 49.5 percent, an increase of 45.8 points versus the prior year. The fourth quarter charge of \$5.5 billion related to the impact of the enactment of the U.S. Tax Cuts and Jobs Act resulted in an increase to the effective tax rate of 48.0 points. Without this impact, the continuing operations tax rate would have been 1.5 percent compared to a 2016 rate of 3.6 percent, with the remaining change in the rate year to year driven by the following factors:

- An increased benefit year to year in the utilization of foreign tax credits of 5.4 points;
- A benefit related to an intra-entity asset transfer in the first quarter of 2017 of 5.1 points;
- A benefit due to the tax write down of an investment in the fourth quarter of 2017 of 1.7 points; and
- A benefit due to the geographic mix of pre-tax earnings in 2017 of 1.0 points; partially offset by
- The favorable resolution of the longstanding tax matter in Japan in 2016 of 9.5 points; and
- An increase year to year in tax charges related to intercompany payments of 1.5 points.

The continuing operations operating (non-GAAP) effective tax rate was 6.7 percent, an increase of 0.3 points versus 2016, principally driven by the same factors described above. In 2017, the geographic and product mix of pre-tax earnings were more favorable than the company expected and there was increased utilization of foreign tax credits. These impacts drove the underlying continuing operations operating (non-GAAP) effective tax rate to approximately 12 percent before discrete period benefits.

For more information on the Tax Cuts and Jobs Act impact, see note N, “Taxes,” on pages 121 and 124.

## Management Discussion

International Business Machines Corporation and Subsidiary Companies

### Earnings Per Share

Basic earnings per share is computed on the basis of the weighted-average number of shares of common stock outstanding during the period. Diluted earnings per share is computed on the basis of the weighted-average number of shares of common stock outstanding plus the effect of dilutive potential common shares outstanding during the period using the treasury stock method. Dilutive potential common shares include outstanding stock options and stock awards.

			Yr.-to-Yr. Percent Change
For the year ended December 31:	2017	2016	
<b>Earnings per share of common stock from continuing operations</b>			
Assuming dilution	<b>\$ 6.14*</b>	\$12.39	(50.4)%
Basic	<b>\$ 6.17</b>	\$12.44	(50.4)%
Diluted operating (non-GAAP)	<b>\$13.80</b>	\$13.59	1.5%
<b>Weighted-average shares outstanding (in millions)</b>			
Assuming dilution	<b>937.4</b>	958.7	(2.2)%
Basic	<b>932.8</b>	955.4	(2.4)%

\* Includes a charge of \$5.5 billion associated with the enactment of U.S. tax reform, or \$5.84 of diluted earnings per share in 2017.

Actual shares outstanding at December 31, 2017 and 2016 were 922.2 million and 945.9 million, respectively. The average number of common shares outstanding assuming dilution was 21.3 million shares lower in 2017 versus 2016. The decrease was primarily the result of the common stock repurchase program.

### Financial Position

#### Dynamics

At December 31, 2017, the company continued to have the financial flexibility to support the business over the long term. Cash and marketable securities at year end were \$12,580 million. During the year, the company continued to manage the investment portfolio to meet its capital preservation and liquidity objectives.

Total debt of \$46,824 million increased \$4,655 million from prior year-end levels. The commercial paper balance at December 31, 2017, was \$1,496 million, an increase of \$597 million from the prior year end. Within total debt, \$31,434 million is in support of the Global Financing business which is leveraged at a 9.0 to 1 ratio. The company continues to have substantial flexibility in the debt markets. During 2017, the company completed bond issuances totaling \$7,986 million, with terms ranging from 2 to 12 years, and interest rates ranging from 0.95 to 3.30 percent depending on maturity. This includes IBM Credit's first public debt issuance of \$3,000 million in September 2017. The company has consistently generated strong cash flow from operations and continues to have access to additional sources of liquidity through the capital markets and its Credit Facilities.

Consistent with accounting standards, the company remeasured the funded status of its retirement and postretirement plans at December 31. At December 31, 2017, the overall net under-funded position was \$12,890 million, a decrease of \$1,949 million from December 31, 2016 driven by asset returns, partially offset by interest cost and a decrease in discount rates. At year end, the company's qualified defined benefit plans were well funded and the cash requirements related to these plans remain stable going forward at approximately \$400 million per year through 2020. In 2017, the return on the U.S. Personal Pension Plan assets was 9.6 percent and the plan was 104 percent funded at December 31. Overall, global asset returns were 8.3 percent and the qualified defined benefit plans worldwide were 100 percent funded at December 31, 2017.

During 2017, the company generated \$16,724 million in cash from operations, a decrease of \$360 million compared to 2016. In addition, the company generated \$12,992 million in free cash flow, an increase of \$1,293 million versus the prior year. See page 68 for additional information on free cash flow. The company returned \$9,847 million to shareholders in 2017, with \$5,506 million in dividends and \$4,340 million in gross share repurchases. In 2017, the company repurchased 27.2 million shares and had \$3.8 billion remaining in share repurchase authorization at year end. The company's cash generation permits the company to invest and deploy capital to areas with the most attractive long-term opportunities.

### Global Financing Financial Position Key Metrics:

(\$ in millions)

At December 31:	2017	2016
Cash and cash equivalents	<b>\$ 2,696</b>	\$ 1,844
Net investment in sales-type and direct financing leases	<b>7,253</b>	6,893
Equipment under operating leases – external clients <sup>(1)</sup>	<b>477</b>	548
Client loans	<b>12,450</b>	11,478
Total client financing assets	<b>20,180</b>	18,920
Commercial financing receivables	<b>11,590</b>	9,700
Intercompany financing receivables <sup>(2)(3)</sup>	<b>5,056</b>	4,959
<b>Total assets</b>	<b>\$41,096</b>	\$36,492
Debt	<b>31,434</b>	27,859
<b>Total equity</b>	<b>\$ 3,484</b>	\$ 3,812

<sup>(1)</sup> Includes intercompany mark-up, priced on an arm's-length basis, on products purchased from the company's product divisions which is eliminated in IBM's consolidated results.

<sup>(2)</sup> Entire amount eliminated for purposes of IBM's consolidated results and therefore does not appear on page 80.

<sup>(3)</sup> These assets, along with all other financing assets in this table, are leveraged at the value in the table using Global Financing debt.

**Management Discussion**

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At December 31, 2017, substantially all financing assets were IT related assets, and approximately 53 percent of the total external portfolio was with investment-grade clients with no direct exposure to consumers. The improvement in investment-grade year to year (1 point) was driven primarily by rating changes within the existing portfolio, not by changing the company's approach to the market. This investment-grade percentage is based on credit ratings of the companies in the portfolio. Additionally, the company takes actions to transfer exposure to third parties. On that basis, the investment-grade content would increase by 17 points to 70 percent, an increase of 5 points year to year.

The company has a long-standing practice of taking mitigation actions, in certain circumstances, to transfer credit risk to third parties, including credit insurance, financial guarantees, nonrecourse borrowings, transfers of receivables recorded as true sales in accordance with accounting guidance or sales of equipment under operating lease.

**IBM Working Capital**

(\$ in millions)

<b>At December 31:</b>	<b>2017</b>	<b>2016</b>
Current assets	\$49,735	\$43,888
Current liabilities	37,363	36,275
<b>Working capital</b>	<b>\$12,373</b>	<b>\$ 7,613</b>
Current ratio	1.33:1	1.21:1

Working capital increased \$4,760 million from the year-end 2016 position. The key changes are described below:

Current assets increased \$5,847 million (\$3,239 million adjusted for currency), as a result of:

- An increase of \$4,053 million (\$3,105 million adjusted for currency) in cash and marketable securities; and
- An increase of \$2,386 million (\$993 million adjusted for currency) in receivables driven by financing receivables; partially offset by
- A decrease of \$622 million (\$841 million adjusted for currency) in prepaid expenses and other current assets.

Current liabilities increased \$1,087 million (a decrease of \$542 million adjusted for currency), as a result of:

- An increase in taxes of \$984 million (\$849 million adjusted for currency); and
- An increase in deferred income of \$517 million driven by currency-related increases of \$583 million; partially offset by
- A decrease in short-term debt of \$526 million (\$537 million adjusted for currency).

**Receivables and Allowances****Roll Forward of Total IBM Receivables Allowance for Credit Losses**

(\$ in millions)

<b>January 1, 2017</b>	<b>Additions*</b>	<b>Write-offs**</b>	<b>Other<sup>+</sup></b>	<b>December 31, 2017</b>
\$776	\$55	\$(199)	\$37	\$668

\* Additions for Allowance for Credit Losses are charged to expense.

\*\*Refer to note A, "Significant Accounting Policies," on pages 92 and 93 for additional information regarding Allowance for Credit Loss write-offs.

+ Primarily represents translation adjustments.

The total IBM receivables provision coverage was 1.6 percent at December 31, 2017, a decrease of 40 basis points compared to December 31, 2016. The majority of the write-offs during 2017 related to Global Financing receivables, which had been previously reserved.

**Global Financing Receivables and Allowances**

The following table presents external financing receivables excluding residual values, and the allowance for credit losses:

(\$ in millions)

<b>At December 31:</b>	<b>2017</b>	<b>2016</b>
<b>Gross financing receivables</b>	<b>\$31,044</b>	<b>\$28,043</b>
Specific allowance for credit losses	258	335
Unallocated allowance for credit losses	78	103
<b>Total allowance for credit losses</b>	<b>336</b>	<b>438</b>
<b>Net financing receivables</b>	<b>\$30,709</b>	<b>\$27,605</b>
Allowance for credit losses coverage	1.1%	1.6%

The percentage of Global Financing receivables reserved was 1.1 percent at December 31, 2017, compared to 1.6 percent at December 31, 2016. In 2017, write-offs of \$144 million of receivables previously reserved, primarily in China, resulted in a 23 percent reduction in the specific reserves, from \$335 million at December 31, 2016, to \$258 million at December 31, 2017. See note F, "Financing Receivables," on page 107 for additional information. Unallocated reserves decreased 24 percent from \$103 million at December 31, 2016, to \$78 million at December 31, 2017 due to higher general reserve requirements in Brazil in the prior year.

**Roll Forward of Global Financing Receivables Allowance  
for Credit Losses (included in Total IBM)**

(\$ in millions)

January 1, 2017	Additions*	Write-offs**	Other <sup>+</sup>	December 31, 2017
\$438	\$17	\$(144)	\$24	\$336

\* Additions for Allowance for Credit Losses are charged to expense.

\*\*Refer to note A, "Significant Accounting Policies," on pages 92 and 93 for additional information regarding Allowance for Credit Loss write-offs.

+ Primarily represents translation adjustments.

Global Financing's bad debt expense was \$17 million in 2017, compared to \$69 million in 2016. The year-to-year decrease in bad debt expense was primarily due to lower general reserve requirements in Brazil.

**Noncurrent Assets and Liabilities**

(\$ in millions)

At December 31:	2017	2016
Noncurrent assets	\$75,621	\$73,582
Long-term debt	\$39,837	\$34,655
Noncurrent liabilities (excluding debt)	\$30,432	\$28,147

The increase in noncurrent assets of \$2,039 million (a decrease of \$233 million adjusted for currency) was driven by:

- An increase in prepaid pension assets of \$1,609 million (\$1,357 million adjusted for currency) driven by the expected returns on plan assets partially offset by interest costs.

Long-term debt increased \$5,182 million (\$4,120 million adjusted for currency) driven by:

- Bond issuances of \$7,986 million; partially offset by
- Current upcoming maturities of long-term debt of \$5,214 million.

Other noncurrent liabilities, excluding debt, increased \$2,285 million (\$378 million adjusted for currency) primarily driven by:

- An increase of \$2,488 million (\$1,953 million adjusted for currency) in other liabilities driven by the charge associated with the enactment of U.S. tax reform.

**Debt**

The company's funding requirements are continually monitored and strategies are executed to manage the overall asset and liability profile. Additionally, the company maintains sufficient flexibility to access global funding sources as needed.

(\$ in millions)

At December 31:	2017	2016
Total company debt	\$46,824	\$42,169
Total Global Financing segment debt	\$31,434	\$27,859
Debt to support external clients	27,556	24,034
Debt to support internal clients	3,878	3,825
Non-Global Financing debt	15,390	14,309

Global Financing provides financing predominantly for the company's external client assets, as well as for assets under contract by other IBM units. These assets, primarily for Technology Services & Cloud Platforms, generate long-term, stable revenue streams similar to the Global Financing asset portfolio. Based on their attributes, these Technology Services & Cloud Platforms assets are leveraged with the balance of the Global Financing asset base. The increase in debt was consistent with the company's expectations in 2017 to increase leverage in the Global Financing business.

Non-Global Financing debt of \$15,390 million was up \$1,081 million from prior year-end levels.

Consolidated debt-to-capitalization ratio at December 31, 2017 was 72.5 percent, which includes a 5.7 point impact from the one-time charge of \$5.5 billion associated with the enactment of U.S. tax reform in 2017, versus 69.6 percent at December 31, 2016.

Given the significant leverage, the company also presents a debt-to-capitalization ratio which excludes Global Financing debt and equity as management believes this is more representative of the company's core business operations. This ratio can vary from period to period as the company manages its global cash and debt positions. "Core" debt-to-capitalization ratio (excluding Global Financing debt and equity) was 51.9 percent at December 31, 2017, which includes an 8.1 point impact from the charge of \$5.5 billion associated with the enactment of U.S. tax reform in 2017, compared to 49.5 percent at December 31, 2016.

At December 31:	2017	2016
Global Financing debt-to-equity ratio	9.0x	7.3x

The debt used to fund Global Financing assets is composed of intercompany loans and external debt. Total debt changes generally correspond with the level of client and commercial financing receivables, the level of cash and cash equivalents, the change in intercompany and external payables and the change in intercompany investment from IBM. The terms of the intercompany loans are set by the company to substantially match the term, currency and interest rate variability underlying the financing receivable and are based on arm's-length pricing.

**Management Discussion**

International Business Machines Corporation and Subsidiary Companies

Global Financing provides financing predominantly for the company's external client assets, as well as for assets under contract by other IBM units. As previously stated, the company measures Global Financing as a stand-alone entity, and accordingly, interest expense relating to debt supporting Global Financing's external client and internal business is included in the "Global Financing Results of Operations" on page 40 and in note T, "Segment Information," on pages 142 to 146. In the company's Consolidated Statement of Earnings, the external debt-related interest expense supporting Global Financing's internal financing to the company is reclassified from cost of financing to interest expense.

**Equity**

Total equity decreased by \$667 million from December 31, 2016 as a result of an increase in treasury stock of \$4,457 million mainly due to gross common stock repurchases, partially offset by lower accumulated other comprehensive losses of \$2,806 million primarily due to retirement plan remeasurements, an increase in common stock of \$631 million and an increase in retained earnings of \$368 million.

**Cash Flow**

The company's cash flows from operating, investing and financing activities, as reflected in the Consolidated Statement of Cash Flows on page 81 are summarized in the table below. These amounts include the cash flows associated with the Global Financing business.

(\$ in millions)	2017	2016
<b>For the year ended December 31:</b>		
<b>Net cash provided by/(used in) continuing operations</b>		
Operating activities	\$ 16,724	\$ 17,084*
Investing activities	(7,096)	(10,976)
Financing activities	(6,418)	(5,917)*
<b>Effect of exchange rate changes on cash and cash equivalents</b>	937	(51)
<b>Net change in cash and cash equivalents</b>	<b>\$ 4,146</b>	<b>\$ 140</b>

\* Reclassified to reflect adoption of the FASB guidance on share-based compensation.

Net cash provided by operating activities decreased by \$360 million in 2017 driven by the following key factors:

- Performance-related declines within net income; and
- An increase in cash income tax payments of \$519 million; partially offset by
- An increase in cash provided by receivables of \$585 million.

Net cash used in investing activities decreased \$3,881 million driven by:

- A decrease in cash used related to acquisitions of \$5,184 million, partially offset by an increase of net non-operating financing receivables of \$1,137 million.

Net cash used in financing activities increased \$502 million as compared to the prior year driven by the following factors:

- An increase of \$838 million of cash used for gross common share repurchases; partially offset by
- An increase in net cash sourced from debt transactions of \$683 million driven by a higher level of issuances in the current year.

**Global Financing Return on Equity Calculation**

(\$ in millions)	2017	2016
<b>At December 31:</b>	<b>2017</b>	<b>2016</b>
<b>Numerator</b>		
Global Financing after-tax income <sup>(1)*</sup>	\$ 1,116	\$ 1,126
<b>Denominator</b>		
Average Global Financing equity <sup>(2)**</sup>	\$ 3,394	\$ 3,680
<b>Global Financing return on equity<sup>(1)/(2)</sup></b>	<b>32.9%</b>	<b>30.6%</b>

\* Calculated based upon an estimated tax rate principally based on Global Financing's geographic mix of earnings as IBM's provision for income taxes is determined on a consolidated basis.

\*\*Average of the ending equity for Global Financing for the last five quarters.

**Management Discussion**

International Business Machines Corporation and Subsidiary Companies

**GAAP Reconciliation**

The tables below provide a reconciliation of the company's income statement results as reported under GAAP to its operating earnings presentation which is a non-GAAP measure. The company's calculation of operating (non-GAAP) earnings, as presented, may differ from similarly titled measures reported by other companies. Please refer to the "Operating (non-GAAP) Earnings" section on pages 26 and 27 for the company's rationale for presenting operating earnings information.

(\$ in millions except per share amounts)

For the year ended December 31, 2017:	GAAP	Acquisition-Related Adjustments	Retirement-Related Adjustments	Tax Reform One-Time Charge <sup>(1)</sup>	Operating (non-GAAP)
Gross profit	\$36,227	\$ 449	\$ 799	\$ —	\$37,475
Gross profit margin	45.8%	0.6 pts.	1.0 pts.	— pts.	47.4%
SG&A	\$20,107	(\$509)	\$ (472)	\$ —	\$19,126
RD&E	5,787	—	(197)	—	5,590
Other (income) and expense	(216)	(39)	—	—	(255)
Total expense and other (income)	24,827	(548)	(669)	—	23,609
Pre-tax income from continuing operations	11,400	997	1,468	—	13,886
Pre-tax margin from continuing operations	14.4%	1.3 pts.	1.9 pts.	— pts.	17.5%
Provision for income taxes*	\$ 5,642	\$ 279	\$ 485	(\$5,475)	\$ 931
Effective tax rate	49.5%	(1.5) pts.	(1.7) pts.	(39.5) pts.	6.7%
Income from continuing operations	\$ 5,758	\$ 718	\$ 983	\$ 5,475	\$12,935
Income margin from continuing operations	7.3%	0.9 pts.	1.2 pts.	6.9 pts.	16.3%
Diluted earnings per share from continuing operations	\$ 6.14	\$0.77	\$ 1.05	\$ 5.84	\$ 13.80

\* The tax impact on operating (non-GAAP) pre-tax income is calculated under the same accounting principles applied to the GAAP pre-tax income which employs an annual effective tax rate method to the results.

<sup>(1)</sup> Operating (non-GAAP) earnings excludes a charge of \$5.5 billion associated with the enactment of U.S. tax reform due to its unique non-recurring nature.

(\$ in millions except per share amounts)

For the year ended December 31, 2016:	GAAP	Acquisition-Related Adjustments	Retirement-Related Adjustments	Operating (non-GAAP)
Gross profit	\$38,294	\$ 494	\$ 316	\$39,104
Gross profit margin	47.9%	0.6 pts.	0.4 pts.	48.9%
SG&A	\$21,069	\$ (501)	(\$253)	\$20,315
RD&E	5,751	—	(29)	5,722
Other (income) and expense	145	(7)	—	138
Total expense and other (income)	25,964	(508)	(282)	25,174
Pre-tax income from continuing operations	12,330	1,003	598	13,931
Pre-tax margin from continuing operations	15.4%	1.3 pts.	0.7 pts.	17.4%
Provision for income taxes*	\$ 449	\$ 268	\$ 183	\$ 900
Effective tax rate	3.6%	1.7 pts.	1.2 pts.	6.5%
Income from continuing operations	\$11,881	\$ 735	\$ 415	\$13,031
Income margin from continuing operations	14.9%	0.9 pts.	0.5 pts.	16.3%
Diluted earnings per share from continuing operations	\$ 12.39	\$ 0.77	\$ 0.43	\$ 13.59

\* The tax impact on operating (non-GAAP) pre-tax income is calculated under the same accounting principles applied to the GAAP pre-tax income which employs an annual effective tax rate method to the results.

**Management Discussion**

International Business Machines Corporation and Subsidiary Companies

**Consolidated Fourth-Quarter Results**

(\$ and shares in millions except per share amounts)

	2017	2016	Yr.-to-Yr. Percent/ Margin Change
<b>For the fourth quarter:</b>			
Revenue	\$22,543	\$21,770	3.6%*
Gross profit margin	48.2%	50.0%	(1.9) pts.
Total expense and other (income)	\$ 6,393	\$ 5,907	8.2%
Total expense and other (income)-to-revenue ratio	28.4%	27.1%	1.2 pts.
Income from continuing operations before income taxes	\$ 4,469	\$ 4,986	(10.4)%
Provision for income taxes from continuing operations	\$ 5,522**	\$ 480	NM
Income/(loss) from continuing operations	\$ (1,053)**	\$ 4,505	NM
Income/(loss) from continuing operations margin	(4.7)%	20.7%	NM
Loss from discontinued operations, net of tax	\$ (1)	\$ (4)	(71.3)%
Net income/(loss)	\$ (1,054)	\$ 4,501	NM
<b>Earnings/(loss) per share from continuing operations:</b>			
Assuming dilution	\$ (1.14)**	\$ 4.73	NM
Consolidated earnings/(loss) per share—assuming dilution	\$ (1.14)**	\$ 4.72	NM
<b>Weighted-average shares outstanding</b>			
Assuming dilution	924.5	952.7	(3.0)%

\* 0.9 percent adjusted for currency.

\*\*Includes a charge of \$5.5 billion associated with the enactment of U.S. tax reform, or \$5.91 of diluted earnings per share in 2017.

NM—Not meaningful

The following table provides the company's operating (non-GAAP) earnings for the fourth quarter of 2017 and 2016.

(\$ in millions except per share amounts)

	2017	2016	Yr.-to-Yr. Percent Change
<b>For the fourth quarter:</b>			
Net income/(loss) as reported	\$(1,054)**	\$4,501	NM
Loss from discontinued operations, net of tax	(1)	(4)	(71.3)%
Income/(loss) from continuing operations	(1,053)**	4,505	NM
<b>Non-operating adjustments (net of tax)</b>			
Acquisition-related charges	181	193	(6.6)
Non-operating retirement-related costs/(income)	206	77	168.5
U.S. tax reform one-time charge	5,475	—	NM
Operating (non-GAAP) earnings*	\$ 4,809	\$4,776	0.7%
Diluted operating (non-GAAP) earnings per share	\$ 5.18	\$ 5.01	3.4%

\* See page 55 for a more detailed reconciliation of net income to operating (non-GAAP) earnings.

\*\*Includes a charge of \$5.5 billion associated with the enactment of U.S. tax reform in December 2017.

NM—Not meaningful

**Snapshot**

In the fourth quarter of 2017, the company reported \$22.5 billion in revenue and a loss from continuing operations of \$1.1 billion, which included a charge of \$5.5 billion associated with the enactment of U.S. tax reform. Fourth-quarter operating (non-GAAP) earnings was \$4.8 billion, which excludes the one-time charge. Fourth-quarter diluted earnings/(loss) per

share from continuing operations was \$(1.14) as reported and operating (non-GAAP) diluted earnings per share from continuing operations was \$5.18. The company generated \$5.7 billion in cash from operations and \$6.8 billion in free cash flow in the fourth quarter of 2017 and shareholder returns of \$2.1 billion in gross common stock repurchases and dividends.

In the fourth quarter, the company continued to deliver solid growth in its strategic imperatives which generated \$11.1 billion of revenue and grew 17 percent as reported and 14 percent adjusted for currency, led by cloud and security, as the company continues to embed AI and cloud into its offerings. The strategic imperatives are not separate businesses, they are offerings across the segments that address opportunities in analytics, cloud, security and mobile. Strategic imperatives growth in the fourth quarter continued to largely represent organic growth as the acquisitive content has leveled on a year-to-year basis. Total Cloud revenue of \$5.5 billion increased 30 percent as reported and 27 percent adjusted for currency as the company enables clients to implement comprehensive cloud solutions. Cloud-as-a-Service revenue was up 20 percent (18 percent adjusted for currency) and the annual exit run rate for as-a-Service revenue increased to \$10.3 billion in the fourth quarter of 2017 compared to \$9.4 billion in the third quarter of 2017. Analytics revenue of \$6.1 billion increased 9 percent as reported (6 percent adjusted for currency). Mobile revenue increased 23 percent (21 percent adjusted for currency) and Security revenue more than doubled year to year, reflecting the strong demand for the pervasive encryption capabilities in IBM Z and good performance in both managed security services within Technology & Cloud Platforms and in security software.

From a segment perspective, Cognitive Solutions revenue increased 2.5 percent as reported, flat adjusted for currency, led by growth in Transaction Processing Software, driven by middleware as clients continued to invest and grow their high-value, mission critical workloads on the IBM Z platform. Solutions Software revenue increased year to year as reported, but declined adjusted for currency. Cognitive Solutions performance in the fourth quarter included growth in annuity revenue, including double-digit growth in as-a-Service solutions. Global Business Services (GBS) revenue increased 0.7 percent as reported, but decreased 2 percent adjusted for currency. Growth in Consulting, led by the digital offerings was partially offset by declines in Global Process Services and Application Management. This was the second consecutive quarter of revenue growth in Consulting. GBS strategic imperatives revenue increased 9 percent (7 percent adjusted for currency), led by the cloud practice, analytics and mobile. Technology Services & Cloud Platforms revenue decreased 1.2 percent as reported and 4 percent adjusted for currency, primarily driven by a decline in Infrastructure Services. However, within Technology Services & Cloud Platforms, strategic imperatives revenue was up 15 percent as reported and 12 percent adjusted for currency, driven by hybrid cloud services, security and mobile. Systems revenue increased 31.7 percent as reported and 28 percent adjusted for currency with growth in all three brands—IBM Z, Power Systems and Storage Systems. This was the first full quarter of revenue since the announcement of the z14, and with pervasive encryption and the ability to address new technologies such as blockchain, the company is adding new clients and new workloads to the platform.

From a geographic perspective, Americas revenue increased 4.6 percent (4 percent adjusted for currency) year to year, with growth in the U.S., Latin America and Canada. This represented sequential improvement of 6.6 points as reported (6 points adjusted for currency) compared to the year-to-year third quarter 2017 growth rates. EMEA revenue increased 6.3 percent as reported, but decreased 1 percent adjusted for currency. France and Spain had growth as reported and adjusted for currency, but were more than offset by declines in Germany, Italy and the UK, adjusted for currency. Asia Pacific revenue decreased 2.2 percent as reported (2 percent adjusted for currency). Within Asia Pacific, declines in China and Australia were partially offset by growth in Japan and India, as reported and adjusted for currency.

The consolidated gross profit margin of 48.2 percent decreased 1.9 points year to year. Operating (non-GAAP) gross margin of 49.5 percent decreased 1.4 points compared to the prior year. The consolidated gross margin and the operating (non-GAAP) gross margin both improved sequentially compared to the respective third-quarter 2017 gross margins.

Total expense and other (income) increased 8.2 percent in the fourth quarter of 2017 compared to the prior year. The year-to-year increase was primarily driven by the effects of currency (4 points) and lower intellectual property income (3 points). The expense dynamics reflect continued efficiency in the underlying spending, offset by continued investment to build and reinvent new solutions and platforms. Total operating (non-GAAP) expense and other (income) increased 6.2 percent year to year driven primarily by the same factors.

Pre-tax income from continuing operations of \$4.5 billion in the fourth quarter of 2017 decreased 10.4 percent year to year and the pre-tax margin was 19.8 percent, a decrease of 3.1 points. The continuing operations effective tax rate for the fourth quarter of 2017 was 123.6 percent, which included a one-time charge of \$5.5 billion from the enactment of U.S. tax reform. Losses from continuing operations in the fourth quarter of 2017 were \$1.1 billion compared to income from continuing operations of \$4.5 billion in the fourth quarter of 2016. Operating (non-GAAP) pre-tax income from continuing operations of \$5.1 billion decreased 5.2 percent year to year. Operating (non-GAAP) pre-tax margin from continuing operations decreased 2.1 points to 22.7 percent. Operating (non-GAAP) income from continuing operations of \$4.8 billion increased 0.7 percent and the operating (non-GAAP) income margin from continuing operations of 21.3 percent decreased 0.6 points. The operating (non-GAAP) effective tax rate from continuing operations in the fourth quarter of 2017 was 6.1 percent versus 11.5 percent in the prior year.

Diluted earnings/(loss) per share from continuing operations was \$(1.14) in the fourth quarter of 2017, which included the charge associated with the enactment of U.S. tax reform, compared to \$4.73 in the prior year. In the fourth quarter of 2017, the company repurchased 4.4 million shares of its common stock at a cost of \$0.7 billion and had \$3.8 billion remaining in the share repurchase authorization at December 31, 2017. Operating (non-GAAP) diluted earnings per share of \$5.18 increased 3.4 percent versus the fourth quarter of 2016.

**Management Discussion**

International Business Machines Corporation and Subsidiary Companies

**Results of Continuing Operations****Segment Details**

The following is an analysis of the fourth quarter of 2017 versus the fourth quarter of 2016 reportable segment external revenue and gross margin results. Segment pre-tax income includes transactions between the segments that are intended to reflect an arm's-length transfer price and excludes certain unallocated corporate items.

(\$ in millions)

			<b>2017</b>	<b>2016</b>	<b>Yr.-to-Yr. Percent/ Margin Change</b>	<b>Yr.-to-Yr. Percent Change Adjusted for Currency</b>
<b>For the fourth quarter:</b>						
<b>Revenue</b>						
Cognitive Solutions	\$ 5,432	\$ 5,297	2.5%	0.0%		
Gross margin	79.2%	82.7%	(3.5) pts.			
Global Business Services	4,152	4,121	0.7%	(1.5)%		
Gross margin	24.8%	26.9%	(2.1) pts.			
Technology Services & Cloud Platforms	9,198	9,308	(1.2)%	(4.0)%		
Gross margin	40.9%	42.9%	(2.0) pts.			
Systems	3,332	2,530	31.7%	28.5%		
Gross margin	55.7%	56.9%	(1.2) pts.			
Global Financing	450	447	0.8%	(1.8)%		
Gross margin	29.5%	36.2%	(6.8) pts.			
Other	(20)	66	NM	NM		
Gross margin	(1,093.4)%	(289.7)%	NM			
<b>Total consolidated revenue</b>	<b>\$ 22,543</b>	<b>\$21,770</b>	<b>3.6%</b>	<b>0.9%</b>		
<b>Total consolidated gross profit</b>	<b>\$ 10,862</b>	<b>\$10,893</b>	<b>(0.3)%</b>			
Total consolidated gross margin	48.2%	50.0%	(1.9) pts.			
<b>Non-operating adjustments</b>						
Amortization of acquired intangible assets	99	124	(19.8)%			
Retirement-related costs/(income)	209	78	168.2%			
<b>Operating (non-GAAP) gross profit</b>	<b>\$ 11,170</b>	<b>\$11,095</b>	<b>0.7%</b>			
Operating (non-GAAP) gross margin	49.5%	51.0%	(1.4) pts.			

NM—Not meaningful

**Cognitive Solutions**

Cognitive Solutions revenue of \$5,432 million grew 2.5 percent as reported and was flat adjusted for currency in the fourth quarter of 2017 compared to the prior year. These results reflect growth as reported and adjusted for currency in Transaction Processing Software. Within Solutions Software, there was strong performance in the areas the company is shifting to, including Watson offerings and SaaS.

Solutions Software revenue of \$3,791 million grew 1.2 percent as reported (decreased 1 percent adjusted for currency) compared to the prior year. Within Solutions Software, the annuity content, which represents 80 percent of this unit's revenue on an annual basis, grew 5.4 percent as reported (3 percent adjusted for currency) year to year compared to the fourth quarter of 2016. There was continued double-digit growth in SaaS offerings as the company continues to invest to build scale in its as-a-Service businesses. Security contributed to year-to-year growth in the fourth quarter. There was also continued focus on industry verticals and strong performance in areas such as Watson Health and Watson IoT offerings. However, there was weakness in certain more traditional analytics offerings that drove a decline in revenue compared to the prior year. With a larger mix of transactional content in the fourth quarter, this impacted overall revenue performance for Solutions Software. Transaction

Processing Software revenue of \$1,641 million grew 5.8 percent as reported (3 percent adjusted for currency) compared to the fourth quarter of 2016 as clients continue to invest and grow their high-value, mission-critical workloads on the IBM Z platform. This growth reflects clients' ongoing long-term commitment and the value the company's platform provides to them.

Cognitive Solutions total fourth-quarter strategic imperatives revenue of \$3.5 billion was flat year to year as reported and decreased 3 percent adjusted for currency. Cloud revenue of \$0.7 billion grew 8 percent as reported and 6 percent adjusted for currency, with an as-a-Service exit run rate of \$2.1 billion.

Cognitive Solutions gross profit margin decreased 3.5 points to 79.2 percent in the fourth quarter of 2017 compared to the prior year. In the fourth quarter, pre-tax income of \$2,279 million decreased 1.5 percent compared to the prior year with a pre-tax margin decline of 1.1 points to 37.5 percent driven by ongoing investments in strategic areas and a mix of businesses into lower margin offerings. Although SaaS margins continued to expand, the company is not yet at scale for these offerings. There was also lower IP income and an increase in royalty costs associated with IP licensing agreements in the fourth quarter of 2017 compared to the prior year contributing to the pre-tax margin decline.

**Global Business Services**

Global Business Services revenue of \$4,152 million increased 0.7 percent as reported (decreased 2 percent adjusted for currency) in the fourth quarter of 2017 compared to the prior year with growth in Consulting partially offset by declines in Application Management and GPS as reported and at constant currency. In the fourth quarter of 2017, there was growth in GBS signings as reported and adjusted for currency, marking the fourth consecutive quarter of signings growth for the segment.

Consulting revenue of \$1,868 million increased 3.0 percent as reported (1 percent adjusted for currency) led by the company's digital strategy and iX platform. This was the second consecutive quarter of growth in Consulting as reported and adjusted for currency. The Consulting backlog has grown year to year in the third and fourth quarters of 2017. GPS revenue of \$318 million decreased 6.5 percent as reported (8 percent adjusted for currency) compared to the prior year. Application Management revenue of \$1,967 million decreased 0.1 percent as reported (3 percent adjusted for currency) driven by declines in traditional ERP managed services and the successful completion in prior periods of some large contracts. There is continued focus on offerings that help clients modernize their critical application suites by implementing cloud-centric architectures and microservices.

GBS strategic imperatives revenue of \$2.6 billion grew 9 percent as reported (7 percent adjusted for currency) year to year. Cloud revenue of \$1.1 billion grew 19 percent as reported (17 percent adjusted for currency), with an as-a-Service exit run rate of \$1.3 billion.

GBS fourth-quarter gross profit margin decreased 2.1 points to 24.8 percent year to year. Pre-tax income of \$337 million decreased 35.5 percent year to year. The pre-tax margin declined 4.4 points to 7.9 percent. This decline in margins reflects fourth-quarter impacts from currency, continuing investment in skills to transform the GBS business, and continued price and profit pressure in some more traditional areas in Application Management.

**Technology Services & Cloud Platforms**

Technology Services & Cloud Platforms revenue of \$9,198 million decreased 1.2 percent as reported and 4 percent adjusted for currency in the fourth quarter of 2017 compared to the prior year. Although there was an overall year-to-year revenue decline, there was continued double-digit growth as reported and adjusted for currency in strategic imperatives revenue within the segment.

Infrastructure Services revenue of \$5,995 million declined 1.5 percent as reported (4 percent adjusted for currency) compared to the prior year. This decline reflects the continued impact associated with contract conclusions at the end of 2016 and the shift away from certain lower value work within the business. Clients continue to look to cloud offerings to drive efficiency and agility in their infrastructure and create new

business models. Technical Support Services revenue of \$1,840 million increased 0.7 percent as reported (decreased 2 percent adjusted for currency) year to year. Integration Software revenue of \$1,364 million decreased 2.3 percent as reported (5 percent adjusted for currency) compared to the prior year. There was strong double-digit revenue growth as reported and adjusted for currency in SaaS offerings across the portfolio with continued momentum in hybrid integration tools that are important to enterprise cloud deployments. This was offset by declines in on-premise offerings as more of this portfolio shifts to cloud.

Technology Services & Cloud Platforms strategic imperatives revenue of \$2.9 billion grew 15 percent year to year as reported (12 percent adjusted for currency). Cloud revenue of \$2.0 billion grew 13 percent as reported (10 percent adjusted for currency), with an as-a-Service exit run rate of \$6.9 billion.

Technology Services & Cloud Platforms gross profit margin decreased 2.0 points year to year in the fourth quarter to 40.9 percent driven primarily by some of the large contract conclusions and delays in productivity improvements. Pre-tax income of \$1,456 million decreased 22.7 percent. The pre-tax margin declined 4.2 points year to year to 15.6 percent, but improved sequentially compared to the third quarter of 2017. While there has been improvement in spending related to prior-year workforce reduction transformation actions, the company continues to invest to scale its cloud platforms, deliver productivity through automation and infuse AI into its offerings.

**Systems**

Systems revenue of \$3,332 million grew 31.7 percent year to year as reported (28 percent adjusted for currency) in the fourth quarter of 2017. Systems Hardware revenue of \$2,865 million grew 38.2 percent as reported (35 percent adjusted for currency) with strong z14 revenue performance in its first full quarter, growth in Power Systems (as reported and adjusted for currency), and the fourth consecutive quarter of growth in Storage Systems, as reported and adjusted for currency. Operating Systems Software revenue of \$467 million grew 2.3 percent as reported (flat adjusted for currency) compared to the prior year.

Within Systems Hardware, fourth-quarter IBM Z revenue grew 74.9 percent as reported (71 percent adjusted for currency) year to year reflecting the strong client demand for this platform. The z14 adoption was broad based across many countries and industries. In the fourth quarter, there were 14 new clients across 10 countries, with strong revenue performance in North America where clients continue to leverage traditional IT infrastructure together with cloud. The company continues to address emerging workloads across the IBM Z platform, such as blockchain, machine learning, dev ops and instant payments. Overall, the mainframe continues to deliver a high-value, secure and scalable platform that is critical in managing clients' complex environments.

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Power Systems revenue grew 18.0 percent as reported (15 percent adjusted for currency) year to year driven by double-digit growth in the low-end and high-end portfolios, with cloud-enabled offerings serving new markets. The company continues to shift to the growing Linux market and in the fourth quarter released the next-generation Power System, with the new POWER9 processor. These POWER9 systems bring unprecedented speed to AI workloads and enable clients to compete and win in the data-intensive AI era.

Storage Systems revenue increased by 10.9 percent as reported (8 percent adjusted for currency) year to year with double-digit growth (as reported and adjusted for currency) in high-end hardware products primarily from the demand for flash as well as the capacity increase linked to mainframe demand. There was also continued growth as reported and adjusted for currency in all-flash array offerings in this high-growth market.

Systems strategic imperatives revenue of \$2.1 billion grew 91 percent year to year as reported (86 percent adjusted for currency). Cloud revenue of \$1.7 billion grew 90 percent as reported (86 percent adjusted for currency).

The Systems gross profit margin decreased 1.2 points to 55.7 percent in the fourth quarter of 2017 compared to the prior year, but improved sequentially compared to the third quarter of 2017 consistent with product cycle dynamics. The overall decrease year to year was driven by margin declines across all product lines, partially offset by product mix primarily toward the higher-margin IBM Z. In the fourth quarter of 2017, pre-tax income of \$908 million grew 56.8 percent and pre-tax margin increased 4.3 points year to year to 25.9 percent driven by the strong fourth quarter performance in Systems Hardware. The company continues to deliver innovation in its systems and remains focused on continually reinventing this portfolio.

**Global Financing**

Global Financing revenue of \$450 million increased 0.8 percent year to year. Global Financing fourth quarter pre-tax income decreased 1.2 percent to \$443 million and the pre-tax margin of 44.4 percent decreased 4.9 points year to year. The decrease in pre-tax income was driven by a decrease in gross profit and an increase in financing receivable provisions, partially offset by a decrease in SG&A expense.

**Geographic Revenue**

Total geographic revenue of \$22,450 million increased 3.6 percent as reported and 1 percent adjusted for currency in the fourth quarter of 2017 compared to the prior year. Americas revenue of \$10,752 million increased 4.6 percent as reported and 4 percent adjusted for currency. This represented sequential improvement compared to the year-to-year growth rate in the third quarter of 2017 of 6.6 points as reported (6 points adjusted for currency). EMEA fourth quarter revenue of \$7,159 million increased 6.3 percent as reported, but decreased 1 percent adjusted for currency. Asia Pacific revenue of \$4,540 million declined 2.2 percent and 2 percent adjusted for currency.

Within Americas, revenue in the U.S. increased 2.9 percent compared to the prior year. Canada increased 15.7 percent as reported and 10 percent adjusted for currency. Latin America increased 6.8 percent as reported and 6 percent adjusted for currency. Within Latin America, Brazil increased 13.1 percent as reported and 12 percent adjusted for currency.

In the fourth quarter, EMEA revenue performance by country varied. The UK increased 2.4 percent as reported, but decreased 4 percent adjusted for currency. Germany increased 0.5 percent as reported, but decreased 8 percent adjusted for currency. France increased 20.8 percent as reported and 10 percent adjusted for currency. Spain was up 18.9 percent as reported and 8 percent adjusted for currency and Italy was essentially flat as reported, but down 9 percent adjusted for currency. Russia was up 12.3 percent (12 percent adjusted for currency).

Within Asia Pacific, China decreased 16.2 percent as reported and 18 percent adjusted for currency primarily due to strong sales in the banking industry in the prior year. Japan increased 1.0 percent as reported and 4 percent adjusted for currency and India increased 7.7 percent as reported and 3 percent adjusted for currency.

**Total Expense and Other (Income)**

(\$ in millions)

For the fourth quarter:	2017	2016	Yr.-to-Yr. Percent/ Margin Change
<b>Total consolidated expense and other (income)</b>	<b>\$6,393</b>	<b>\$5,907</b>	<b>8.2%</b>
Non-operating adjustments			
Amortization of acquired intangible assets	(115)	(132)	(13.5)
Acquisition-related charges	(33)	(4)	NM
Non-operating retirement-related (costs)/income	(195)	(76)	156.9
<b>Operating (non-GAAP) expense and other (income)</b>	<b>\$6,050</b>	<b>\$5,696</b>	<b>6.2%</b>
Total consolidated expense-to-revenue ratio	28.4%	27.1%	1.2 pts.
Operating (non-GAAP) expense-to-revenue ratio	26.8%	26.2%	0.7 pts.

NM—Not meaningful

Total expense and other (income) increased 8.2 percent in the fourth quarter with an expense-to-revenue ratio of 28.4 percent compared to 27.1 percent in the fourth quarter of 2016. Total operating (non-GAAP) expense and other (income) increased 6.2 percent year to year. The year-to-year increase in total expense and other (income) was primarily the result of the effects of currency (4 points) and lower intellectual property income (3 points). The expense dynamics reflected continued efficiency in the underlying spending offset by continued investment to build and reinvent new solutions and platforms.

**Cash Flow**

The company generated \$5.7 billion in cash flow from operating activities in the fourth quarter of 2017, an increase of \$1.8 billion compared to the fourth quarter of 2016, primarily due to improved working capital. Net cash used in investing activities of \$3.8 billion was \$0.1 billion higher than the prior year, primarily driven by an increase in cash from net purchases of marketable securities and other investments (\$0.3 billion). Net cash used in financing activities of \$0.9 billion decreased \$0.4 billion compared to the prior year, primarily driven by higher net debt issuances (\$0.3 billion) and lower common stock repurchases (\$0.2 billion).

**GAAP Reconciliation**

The tables below provide a reconciliation of the company's income statement results as reported under GAAP to its operating earnings presentation which is a non-GAAP measure. The company's calculation of operating (non-GAAP) earnings, as presented, may differ from similarly titled measures reported by other companies. Refer to the "Operating (non-GAAP) Earnings" section on pages 26 and 27 for the company's rationale for presenting operating earnings information.

(\$ in millions except per share amounts)

For the fourth quarter 2017:	GAAP	Acquisition-Related Adjustments	Retirement-Related Adjustments	Tax Reform One-Time Charge <sup>(1)</sup>	Operating (non-GAAP)
Gross profit	\$10,862	\$ 99	\$ 209	\$ —	\$11,170
Gross profit margin	48.2%	0.4 pts.	0.9 pts.	— pts.	49.5%
SG&A	\$ 5,147	(\$116)	(\$145)	\$ —	\$ 4,886
RD&E	1,427	—	(50)	—	1,378
Other (income) and expense	2	(32)	—	—	(30)
Total expense and other (income)	6,393	(148)	(195)	—	6,050
Pre-tax income from continuing operations	4,469	247	404	—	5,120
Pre-tax margin from continuing operations	19.8%	1.1 pts.	1.8 pts.	— pts.	22.7%
Provision for income taxes*	\$ 5,522	\$ 67	\$ 197	(\$5,475)	\$ 310
Effective tax rate	123.6%	(4.7) pts.	(5.9) pts.	(106.9) pts.	6.1%
Income/(loss) from continuing operations	\$ (1,053)	\$ 181	\$ 206	\$ 5,475	\$ 4,809
Income/(loss) margin from continuing operations	(4.7)%	0.8 pts.	0.9 pts.	24.3 pts.	21.3%
Diluted earnings/(loss) per share from continuing operations	\$ (1.14)	\$ 0.19	\$ 0.22	\$ 5.91	\$ 5.18

\* The tax impact on operating (non-GAAP) pre-tax income from continuing operations is calculated under the same accounting principles applied to the GAAP pre-tax income which employs an annual effective tax rate method to the results.

<sup>(1)</sup> Operating (non-GAAP) earnings excludes a charge of \$5.5 billion associated with the enactment of U.S. tax reform due to its unique non-recurring nature.

(\$ in millions except per share amounts)

For the fourth quarter 2016:	GAAP	Acquisition-Related Adjustments	Retirement-Related Adjustments	Operating (non-GAAP)
Gross profit	\$10,893	\$ 124	\$ 78	\$11,095
Gross profit margin	50.0%	0.6 pts.	0.4 pts.	51.0%
SG&A	\$ 4,976	(\$136)	\$ (69)	\$ 4,771
RD&E	1,431	—	(6)	1,425
Other (income) and expense	(136)	0	—	(136)
Total expense and other (income)	5,907	(136)	(76)	5,696
Pre-tax income from continuing operations	4,986	260	154	5,399
Pre-tax margin from continuing operations	22.9%	1.2 pts.	0.7 pts.	24.8%
Provision for income taxes*	\$ 480	\$ 66	\$ 77	\$ 623
Effective tax rate	9.6%	0.8 pts.	1.2 pts.	11.5%
Income from continuing operations	\$ 4,505	\$ 193	\$ 77	\$ 4,776
Income margin from continuing operations	20.7%	0.9 pts.	0.4 pts.	21.9%
Diluted earnings per share from continuing operations	\$ 4.73	\$ 0.20	\$ 0.08	\$ 5.01

\* The tax impact on operating (non-GAAP) pre-tax income from continuing operations is calculated under the same accounting principles applied to the GAAP pre-tax income which employs an annual effective tax rate method to the results.

**Management Discussion**

International Business Machines Corporation and Subsidiary Companies

**PRIOR YEAR IN REVIEW**

This section provides a summary of the company's financial performance in 2016 as compared to 2015. For additional information, see the company's 2016 Annual Report.

(\$ and shares in millions except per share amounts)

	2016	2015	<b>Yr.-to-Yr. Percent/ Margin Change</b>
<b>For the year ended December 31:</b>			
Revenue	\$ 79,919	\$ 81,741	(2.2)%*
Gross profit margin	47.9%	49.8%	(1.9) pts.
Total expense and other (income)	\$ 25,964	\$ 24,740	4.9%
Total expense and other (income)-to-revenue ratio	32.5%	30.3%	2.2 pts.
Income from continuing operations before income taxes	\$ 12,330	\$ 15,945	(22.7)%
Provision for income taxes from continuing operations	\$ 449	\$ 2,581	(82.6)%
Income from continuing operations	\$ 11,881	\$ 13,364	(11.1)%
Income from continuing operations margin	14.9%	16.3%	(1.5) pts.
Loss from discontinued operations, net of tax	\$ (9)	\$ (174)	(95.1)%
Net income	\$ 11,872	\$ 13,190	(10.0)%
Earnings per share from continuing operations:			
Assuming dilution	\$ 12.39	\$ 13.60	(8.9)%
Consolidated earnings per share—assuming dilution	\$ 12.38	\$ 13.42	(7.7)%
Weighted-average shares outstanding			
Assuming dilution	958.7	982.7	(2.4)%
Assets**	\$117,470	\$110,495	6.3%
Liabilities**	\$ 99,078	\$ 96,071	3.1%
Equity**	\$ 18,392	\$ 14,424	27.5%

\* (1.6) percent adjusted for currency.

\*\*At December 31

The following table provides the company's operating (non-GAAP) earnings for 2016 and 2015.

(\$ in millions except per share amounts)

	2016	2015	<b>Yr.-to-Yr. Percent Change</b>
<b>For the year ended December 31:</b>			
Net income as reported	\$11,872	\$13,190	(10.0)%
Loss from discontinued operations, net of tax	(9)	(174)	(95.1)%
Income from continuing operations	\$11,881	\$13,364	(11.1)%
Non-operating adjustments (net of tax)			
Acquisition-related charges	735	562	30.9
Non-operating retirement-related costs/(income)	415	734	(43.5)
Operating (non-GAAP) earnings*	\$13,031	\$14,659	(11.1)%
Diluted operating (non-GAAP) earnings per share	\$ 13.59	\$ 14.92	(8.9)%

\* See page 65 for a more detailed reconciliation of net income to operating earnings.

**Snapshot**

In 2016, the company delivered \$79.9 billion in revenue, \$11.9 billion in income from continuing operations and \$13.0 billion in operating (non-GAAP) earnings, resulting in diluted earnings per share from continuing operations of \$12.39 as reported and \$13.59 on an operating (non-GAAP) basis. On a consolidated basis, net income in 2016 was \$11.9 billion, with diluted earnings per share of \$12.38. The company generated \$17.0 billion in cash from operations and \$11.6 billion in free cash flow in 2016 and shareholder returns of \$8.8 billion in gross common stock repurchases and dividends.

In 2016, the company:

- Delivered strong results in the strategic imperatives;
- Made progress in building new businesses and creating new markets;
- Delivered innovation in the more traditional businesses and monetized core technologies; and
- Continued to return capital to shareholders.

Total consolidated revenue in 2016 decreased 2.2 percent as reported and 1.6 percent year to year adjusted for currency. Annuity revenue increased as reported and adjusted for currency while transactional revenue declined year to year. In addition, acquisitions completed in the prior 12-month period contributed to revenue growth.

In 2016, the company had continued strong revenue growth in cloud, analytics, mobile and security, which together grew 13 percent year to year as reported and 14 percent adjusted for currency. The strategic imperatives generated \$32.8 billion in revenue, which represented 41 percent of the company's revenue, an increase of 6 points from 2015. Total Cloud revenue of \$13.7 billion increased 35 percent both as reported and adjusted for currency, with cloud as-a-Service revenue up 55 percent as reported and 57 percent adjusted for currency. The company exited 2016 with an annual run rate for cloud as-a-Service revenue of \$8.6 billion, up from \$5.3 billion at the end of 2015. Analytics revenue of \$19.5 billion increased 9 percent as reported and adjusted for currency. Mobile revenue increased 34 percent year to year as reported (35 percent adjusted for currency) and Security revenue increased 13 percent as reported (14 percent adjusted for currency).

From a segment perspective, Cognitive Solutions revenue increased 1.9 percent as reported and 3 percent adjusted for currency with growth in Solutions Software, led by an increase in Analytics and Security revenue; partially offset by a decline in Transaction Processing Software. GBS revenue decreased 2.7 percent as reported and 3 percent adjusted for currency primarily driven by a decline in Consulting revenue. Revenue performance continued to be impacted by the company's shift away from traditional businesses, such as ERP implementations. GBS strategic imperatives revenue had double-digit growth year to year as reported and adjusted for currency. Technology Services & Cloud Platforms revenue increased 0.6 percent as

reported and 1 percent adjusted for currency led by growth in Infrastructure Services as the company assisted clients in modernizing and transforming their infrastructures. Technology Services & Cloud Platforms strategic imperatives revenue was up 39 percent (40 percent adjusted for currency) year to year. Systems revenue decreased 19.2 percent (19 percent adjusted for currency) with IBM Z down 27.1 percent (27 percent adjusted for currency) and Power Systems down 27.1 percent (27 percent adjusted for currency).

The consolidated gross profit margin of 47.9 percent decreased 1.9 points year to year and reflected the impact of the company's investments, including acquisitions, and mix to as-a-Service. The operating (non-GAAP) gross margin of 48.9 percent decreased 1.9 points compared to 2015 driven primarily by the same factors.

Total expense and other (income) increased 4.9 percent in 2016 compared to the prior year. Total operating (non-GAAP) expense and other (income) increased 5.6 percent compared to 2015. The year-to-year increase in total expense was driven primarily by the impact of acquisitions completed in the prior 12 months (5 points) and the impact from currency (2 points). Total expense and other (income) in 2016 also included charges for actions taken to accelerate the transformation of the company's workforce and shift its skill base, as well as increased investments in the strategic areas of cognitive, security and cloud. This included a higher level of workforce rebalancing charges (\$451 million) year to year and real estate capacity charges (\$291 million) related to the workforce transformation. Partially offsetting these increases was a higher level of IP income (\$950 million) year to year driven primarily by the company's software licensing arrangements.

Pre-tax income from continuing operations of \$12.3 billion decreased 22.7 percent year to year and the pre-tax margin was 15.4 percent, a decrease of 4.1 points versus 2015. The continuing operations effective tax rate for 2016 was 3.6 percent, a decrease of 12.5 points versus 2015. The tax rate in 2016 was primarily the result of a refund (\$1.0 billion) of previously paid non-U.S. taxes plus interest in the first quarter of 2016. Income from continuing operations of \$11.9 billion decreased 11.1 percent and the net income margin was 14.9 percent, a decrease of 1.5 points versus 2015. Losses from discontinued operations, net of tax, were \$9 million in 2016 compared to \$174 million in 2015. Net income of \$11.9 billion decreased 10.0 percent year to year. Operating (non-GAAP) pre-tax income from continuing operations of \$13.9 billion decreased 21.3 percent year to year and the operating (non-GAAP) pre-tax margin from continuing operations decreased 4.2 points to 17.4 percent. Operating (non-GAAP) income from continuing operations of \$13.0 billion decreased 11.1 percent and the operating (non-GAAP) income margin from continuing operations of 16.3 percent decreased 1.6 points. The operating (non-GAAP) effective tax rate from continuing operations in 2016 was 6.5 percent versus 17.2 percent in 2015.

**Management Discussion**

International Business Machines Corporation and Subsidiary Companies

Diluted earnings per share from continuing operations of \$12.39 in 2016 decreased 8.9 percent year to year. In 2016, the company repurchased 23.3 million shares of its common stock at a cost of \$3.5 billion. Operating (non-GAAP) diluted earnings per share of \$13.59 decreased 8.9 percent versus 2015. Diluted earnings/(loss) per share from discontinued operations was \$(0.01) in 2016 compared to \$(0.18) in 2015.

At December 31, 2016, the company continued to have the financial flexibility to support the business over the long term. Cash and marketable securities at December 31, 2016 were \$8.5 billion, an increase of \$0.3 billion from December 31, 2015. Key drivers in the balance sheet and total cash flows were:

Total assets increased \$7.0 billion (\$7.7 billion adjusted for currency) from December 31, 2015 driven by:

- Increases in goodwill (\$4.2 billion), retirement plan assets (\$1.3 billion), net intangible assets (\$1.2 billion), deferred taxes (\$0.4 billion) and cash and marketable securities (\$0.3 billion).

Total liabilities increased \$3.0 billion (\$3.9 billion adjusted for currency) from December 31, 2015 driven by:

- Increases in total debt (\$2.3 billion), retirement-related liabilities (\$0.6 billion), and taxes (\$0.4 billion).

Total equity of \$18.4 billion increased \$4.0 billion from December 31, 2015 as a result of:

- Increases from net income (\$11.9 billion) and stock-based compensation (\$0.5 billion); partially offset by
- Decreases from dividends (\$5.3 billion) and share repurchases (\$3.5 billion).

The company generated \$17.0 billion in cash flow provided by operating activities, essentially flat compared to 2015, driven primarily by operational performance; offset by lower income tax payments. Net cash used in investing activities of \$11.0 billion was \$2.8 billion higher than 2015, primarily driven by an increase in cash used related to acquisitions (\$2.3 billion). Net cash used in financing activities of \$5.8 billion decreased \$3.4 billion compared to the prior year, driven primarily by higher net debt issuances (\$2.7 billion) and a decline in cash used for common share repurchases (\$1.1 billion).

**Results of Continuing Operations****Segment Details**

The following is an analysis of the 2016 versus 2015 reportable segment results. The table below presents each reportable segment's external revenue and gross margin results. Segment pre-tax income includes transactions between segments that are intended to reflect an arm's-length transfer price and excludes certain unallocated corporate items.

For the year ended December 31:	2016	2015	Yr-to-Yr. Percent/ Margin Change	Yr-to-Yr. Percent Change Adjusted for Currency
<b>Revenue</b>				
Cognitive Solutions	\$18,187	\$17,841	1.9%	2.7%
Gross margin	81.9%	85.1%	(3.3) pts.	
Global Business Services	16,700	17,166	(2.7)%	(2.5)%
Gross margin	27.0%	28.2%	(1.2) pts.	
Technology Services & Cloud Platforms	35,337	35,142	0.6%	1.4%
Gross margin	41.9%	42.7%	(0.8) pts.	
Systems	7,714	9,547	(19.2)%	(18.9)%
Gross margin	55.7%	55.8%	(0.1) pts.	
Global Financing	1,692	1,840	(8.0)%	(6.9)%
Gross margin	38.7%	45.6%	(6.9) pts.	
Other	289	206	40.4%	41.3%
Gross margin	(293.9)%	(253.0)%	(41.0) pts.	
<b>Total consolidated revenue</b>	<b>\$79,919</b>	<b>\$81,741</b>	<b>(2.2)%</b>	<b>(1.6)%</b>
<b>Total consolidated gross profit</b>	<b>\$38,294</b>	<b>\$40,684</b>	<b>(5.9)%</b>	
Total consolidated gross margin	47.9%	49.8%	(1.9) pts.	
<b>Non-operating adjustments</b>				
Amortization of acquired intangible assets	494	373	32.6%	
Retirement-related costs/(income)	316	469	(32.7)%	
<b>Operating (non-GAAP) gross profit</b>	<b>\$39,104</b>	<b>\$41,526</b>	<b>(5.8)%</b>	
Operating (non-GAAP) gross margin	48.9%	50.8%	(1.9) pts.	

**Management Discussion**

International Business Machines Corporation and Subsidiary Companies

**Cognitive Solutions**

(\$ in millions)

For the year ended December 31:	2016	2015	Yr.-to-Yr. Percent Change	Yr.-to-Yr. Percent Change Adjusted for Currency
<b>Cognitive Solutions external revenue</b>	<b>\$18,187</b>	<b>\$17,841</b>	<b>1.9%</b>	<b>2.7%</b>
Solutions Software	\$12,589	\$12,021	4.7%	5.5%
Transaction Processing Software	5,598	5,819	(3.8)	(3.1)

The growth in Solutions Software revenue, which addresses many of the company's strategic areas, was led by analytics and security offerings. Analytics continued to grow in key areas including Watson offerings such as Watson Health. Security also contributed to year-to-year growth, as the company continued to invest to build its security platform. There was strong SaaS performance during the year with double-digit growth in revenue as reported and adjusted for currency. In 2016, five acquisitions, including The Weather Company and Truven, added substantial new capabilities to the Solutions Software portfolio. Transaction Processing Software revenue declined as reported and adjusted for currency compared to the prior year. The majority of the Transaction Processing Software is on-premise and annuity in nature which is not a growing part of the software opportunity.

Within Cognitive Solutions, total 2016 strategic imperatives revenue of \$11.7 billion grew 7 percent as reported (8 percent adjusted for currency) year to year. Cloud revenue of \$2.1 billion grew 53 percent as reported (54 percent adjusted for currency), with an as-a-Service exit run rate of \$1.8 billion.

**Global Business Services**

(\$ in millions)

For the year ended December 31:	2016	2015	Yr.-to-Yr. Percent Change	Yr.-to-Yr. Percent Change Adjusted for Currency
<b>Global Business Services external revenue</b>	<b>\$16,700</b>	<b>\$17,166</b>	<b>(2.7)%</b>	<b>(2.5)%</b>
Consulting	\$ 7,332	\$ 7,678	(4.5)%	(4.8)%
Global Process Services	1,388	1,435	(3.3)	(2.0)
Application Management	7,980	8,053	(0.9)	(0.5)

Global Business Services revenue decreased in 2016 compared to the prior year with declines across all services lines. The company continued to aggressively shift the GBS business in 2016 to the strategic imperatives which made up more than half of GBS revenue in 2016. Within GBS, total 2016 strategic imperatives revenue of \$8.9 billion grew 16 percent as reported and adjusted for currency year to year. Cloud revenue of \$3.0 billion grew 68 percent as reported (66 percent adjusted for currency), with an as-a-Service exit run rate of \$1.1 billion. This growth was more than offset by declines in the more traditional areas that the company is shifting away from, such as large ERP implementations.

(\$ in millions)

For the year ended December 31:	2016	2015	Yr.-to-Yr. Percent/ Margin Change
<b>Cognitive Solutions</b>			
External gross profit	\$14,890	\$15,189	(2.0)%
External gross profit margin	81.9%	85.1%	(3.3) pts.
Pre-tax income	\$ 6,352	\$ 7,245	(12.3)%
Pre-tax margin	30.5%	36.1%	(5.6) pts.

Profit performance in Cognitive Solutions in 2016 reflected impacts of the company's continued investment into strategic areas, including acquisition content, and the mix toward the SaaS business which was not yet at scale, partially offset by the impact of IP partnership agreements entered into during the year.

(\$ in millions)

For the year ended December 31:	2016	2015	Yr.-to-Yr. Percent/ Margin Change
<b>Global Business Services</b>			
External gross profit	\$4,501	\$4,837	(6.9)%
External gross profit margin	27.0%	28.2%	(1.2) pts.
Pre-tax income	\$1,732	\$2,602	(33.4)%
Pre-tax margin	10.1%	14.7%	(4.6) pts.

**Management Discussion**

International Business Machines Corporation and Subsidiary Companies

Profit performance for 2016 reflected the company's investments, additional spending in certain accounts to deliver on client commitments, and price and profit pressure in more traditional engagements. The company continued to invest

and shift resources to higher-value services around digital and cognitive. The company invested in enablement, hiring top talent and bringing in new skills through acquisitions, and focused on integrating and scaling these new skills.

**Technology Services & Cloud Platforms**

(\$ in millions)

	2016	2015	Yr.-to-Yr. Percent Change	Percent Adjusted for Currency
<b>For the year ended December 31:</b>				
<b>Technology Services &amp; Cloud Platforms external revenue</b>	\$35,337	\$35,142	0.6%	1.4%
Infrastructure Services	\$23,543	\$23,075	2.0%	2.7%
Technical Support Services	7,272	7,426	(2.1)	(1.0)
Integration Software	4,521	4,641	(2.6)	(1.5)

In Technology Services & Cloud Platforms the business has been shifting from systems integration to services integration, which provided momentum in its new offerings. Infrastructure Services revenue grew as reported and adjusted for currency, partially offset by declines in Technical Support Services and Integration Software. Within Technology Services & Cloud Platforms, total 2016 strategic imperatives revenue of \$8.7 billion grew 39 percent as reported (40 percent adjusted for currency) year to year. Cloud revenue of \$5.9 billion grew 49 percent as reported (50 percent adjusted for currency), with an as-a-Service exit run rate of \$5.8 billion.

(\$ in millions)

	2016	2015	Yr.-to-Yr. Percent/ Margin Change
<b>For the year ended December 31:</b>			
<b>Technology Services &amp; Cloud Platforms</b>			
External Technology Services gross profit	\$10,969	\$11,008	(0.4)%
External Technology Services gross profit margin	35.6%	36.1%	(0.5) pts.
External Integration Software gross profit	\$ 3,830	\$ 4,005	(4.4)%
External Integration Software gross profit margin	84.7%	86.3%	(1.6) pts.
External total gross profit	\$14,800	\$15,014	(1.4)%
External total gross profit margin	41.9%	42.7%	(0.8) pts.
Pre-tax income	\$ 4,707	\$ 5,669	(17.0)%
Pre-tax margin	13.1%	15.8%	(2.8) pts.

The Technology Services & Cloud Platforms gross profit margin year-to-year decline was partially due to mix within the segment and margin declines in Technical Support Services and Integration Software, partially offset by an improved margin in Infrastructure Services. The margin improvement in Infrastructure Services reflected the benefits from delivery transformation and ongoing productivity actions related to automation, process optimization and leveraging the company's scale, technology and talent. The company invested in cognitive capabilities to further improve

its delivery model and drive efficiencies. The Technical Support Services margin decline reflected the mix to multi-vendor support offerings. The Integration Software margin declined as the portfolio continued to shift to an as-a-Service model. The pre-tax margin reflected the dynamics impacting gross profit and the continued investments to build out the cloud platform, partially offset by the impact of IP partnership agreements entered into during the year.

### Systems

(\$ in millions)

	2016	2015	Yr.-to-Yr. Percent Change	Percent Change Adjusted for Currency
<b>For the year ended December 31:</b>				
<b>Systems external revenue</b>	\$ 7,714	\$ 9,547	(19.2)%	(18.9)%
Systems Hardware	\$ 5,926	\$ 7,574	(21.8)%	(21.6)%
IBM Z			(27.1)	(26.8)
Power Systems			(27.1)	(26.8)
Storage Systems			(10.0)	(10.0)
Operating Systems Software	1,788	1,973	(9.4)	(8.7)

The year-to-year decline in Systems revenue in 2016 reflected market shifts and product cycle dynamics. Within Systems Hardware, the IBM Z revenue decline reflected product cycle dynamics. Throughout 2016, the company continued to optimize IBM Z to drive new workloads such as blockchain and instant payments. The year-to-year decline in Power Systems revenue reflected the underlying dynamics of a declining market for UNIX, where IBM continued to be the market leader, partially offset by growth in the expanding Linux market. The decline in Storage Systems revenue year to year reflected the weakness in the traditional disk storage market. Within Systems, total 2016 strategic imperatives revenue of \$3.4 billion decreased 15 percent as reported and adjusted for currency year to year. Cloud revenue of \$2.7 billion decreased 11 percent as reported and adjusted for currency as a result of a strong 2015 with the mainframe cycle.

(\$ in millions)

	2016	2015	Yr.-to-Yr. Percent/ Margin Change
<b>For the year ended December 31:</b>			
<b>Systems</b>			
External Systems			
Hardware gross profit	\$ 2,720	\$ 3,536	(23.1)%
External Systems			
Hardware gross profit margin	45.9%	46.7%	(0.8) pts.
External Operating			
Systems Software gross profit	\$ 1,577	\$ 1,790	(11.9)%
External Operating			
Systems Software gross profit margin	88.2%	90.7%	(2.5) pts.
External total gross profit	\$ 4,298	\$ 5,326	(19.3)%
External total gross profit margin	55.7%	55.8%	(0.1) pts.
Pre-tax income	\$ 933	\$ 1,722	(45.8)%
Pre-tax margin	11.0%	16.7%	(5.7) pts.

The Systems gross profit margin decline year to year was driven by declines in Power and Storage partially offset by expansion in IBM Z margins. The pre-tax income performance was consistent with the product cycle and portfolio transition dynamics impacting revenue and profit.

**Management Discussion**

International Business Machines Corporation and Subsidiary Companies

**Global Financing**

(\$ in millions)

For the year ended December 31:	2016	2015	Yr.-to-Yr. Percent Change
<b>Results of Operations</b>			
External revenue	\$1,692	\$1,840	(8.0)%
Internal revenue	1,802	2,637	(31.7)
Total revenue	\$3,494	\$4,477	(22.0)%
Pre-tax income	\$1,656	\$2,364	(29.9)%

The decline in Global Financing total revenue was due to declines in both external revenue and internal revenue. External revenue decreased year to year due to a decrease in financing revenue (down 11.2 percent), partially offset by an increase in used equipment sales (up 1.6 percent). The decrease in external financing revenue was due to lower asset yields, a decrease in average asset balance and a decline in remarketing lease revenue. Internal revenue decreased due to lower used equipment sales (down 35.5 percent) and financing revenue (down 5.2 percent). The decrease in internal financing revenue was primarily due to lower asset yields, partially offset by an increase in average asset balance. The decrease in Global Financing pre-tax income was driven by a decrease in gross profit and an increase in SG&A expense, partially offset by a decrease in financing receivables provisions.

**Geographic Revenue**

In addition to the revenue presentation by reportable segment, the company also measures revenue performance on a geographic basis. The following geographic, regional and country-specific revenue performance excludes OEM revenue.

(\$ in millions)

For the year ended December 31:	2016	2015	Yr.-to-Yr. Percent Change	Percent Change Adjusted for Currency*
<b>Total revenue</b>	\$79,919	\$81,741	(2.2)%	(1.6)%
Geographies	\$79,594	\$81,430	(2.3)%	(1.6)%
Americas	37,513	38,486	(2.5)	(1.4)
Europe/Middle East/Africa	24,769	26,073	(5.0)	(2.1)
Asia Pacific	17,313	16,871	2.6	(1.2)

Americas revenue decreased year to year as reported and adjusted for currency with declines in North America and Latin America as reported and adjusted for currency. Within North America, the U.S. decreased 0.9 percent and Canada decreased 6.2 percent (3 percent adjusted for currency). In Latin America, Brazil decreased 10.5 percent (7 percent adjusted for currency) and Mexico decreased 14.5 percent (7 percent adjusted for currency).

EMEA revenue decreased as reported and adjusted for currency. The UK decreased 12.8 percent (1 percent adjusted for currency). Germany decreased 5.1 percent (5 percent adjusted for currency). Revenue declined in France 3.4 percent (3 percent adjusted for currency). Italy increased 4.0 percent (4 percent adjusted for currency) year to year. The Middle East and Africa region grew 0.6 percent (3 percent adjusted for currency), while there was a decline in the Central and Eastern European region as reported and adjusted for currency including a year-to-year decline in Russia of 27.1 percent.

Asia Pacific revenue increased as reported, but declined adjusted for currency. Japan grew 10.5 percent as reported, but declined 1 percent adjusted for currency. India grew 5.2 percent as reported and 10 percent adjusted for currency. China decreased 2.4 percent as reported, but was flat on an adjusted for currency basis. Australia decreased 9.7 percent (8 percent adjusted for currency).

**Total Expense and Other (Income)**

(\$ in millions)

For the year ended December 31:	2016	2015	Yr.-to-Yr. Percent/ Margin Change
<b>Total consolidated expense and other (income)</b>	\$25,964	\$24,740	4.9%
Non-operating adjustments			
Amortization of acquired intangible assets	(503)	(304)	65.7
Acquisition-related charges	(5)	(26)	(81.0)
Non-operating retirement- related (costs)/income	(282)	(581)	(51.4)
<b>Operating (non-GAAP) expense and other (income)</b>	\$25,174	\$23,830	5.6%
Total consolidated expense- to-revenue ratio	32.5%	30.3%	2.2 pts.
Operating (non-GAAP) expense-to-revenue ratio	31.5%	29.2%	2.3 pts.

**Management Discussion**

International Business Machines Corporation and Subsidiary Companies

**Selling, General and Administrative**

(\$ in millions)

For the year ended December 31:	2016	2015	Yr.-to-Yr. Percent Change
<b>Selling, general and administrative expense</b>			
Selling, general and administrative—other	\$16,971	\$16,643	2.0%
Advertising and promotional expense	1,327	1,290	2.8
Workforce rebalancing charges	1,038	587	76.7
Retirement-related costs	742	1,052	(29.5)
Amortization of acquired intangible assets	503	304	65.7
Stock-based compensation	401	322	24.3
Bad debt expense	87	231	(62.3)
<b>Total consolidated selling, general and administrative expense</b>	<b>\$21,069</b>	<b>\$20,430</b>	<b>3.1%</b>
Non-operating adjustments			
Amortization of acquired intangible assets	(503)	(304)	65.7
Acquisition-related charges	2	(21)	NM
Non-operating retirement-related (costs)/income	(253)	(533)	(52.6)
<b>Operating (non-GAAP) selling, general and administrative expense</b>	<b>\$20,315</b>	<b>\$19,573</b>	<b>3.8%</b>

NM—Not meaningful

Total SG&A expense increased 3.1 percent in 2016 versus 2015, driven primarily by the following factors:

- The impact of acquisitions completed in the prior 12-month period (4 points); and
- Higher workforce rebalancing charges (2 points); partially offset by
- The effects of currency (1 point); and
- A year-to-year decrease in charges for pension obligations related to litigation in Spain (1 point).

Operating (non-GAAP) expense increased 3.8 percent year to year driven primarily by the same factors excluding the year-to-year decrease in charges for pension obligations related to litigation which is not reflected in operating (non-GAAP) expense.

Bad debt expense decreased \$144 million in 2016 compared to 2015. The receivables provision coverage was 2.0 percent at December 31, 2016, a decrease of 60 basis points from December 31, 2015 due to write-offs of previously reserved receivables in 2016.

**Research, Development and Engineering**

(\$ in millions)

For the year ended December 31:	2016	2015	Yr.-to-Yr. Percent Change
<b>Total consolidated research, development and engineering</b>			
	\$5,751	\$5,247	9.6%
Non-operating adjustment			
Non-operating retirement-related (costs)/income	(29)	(48)	(38.6)
<b>Operating (non-GAAP) research, development and engineering</b>	<b>\$5,722</b>	<b>\$5,200</b>	<b>10.1%</b>

RD&E expense was 7.2 percent of revenue in 2016 and 6.4 percent of revenue in 2015.

RD&E expense increased 9.6 percent in 2016 versus 2015 primarily driven by:

- The impact of acquisitions completed in the prior 12-month period (7 points); and
- Increased investment (4 points); partially offset by
- The effects of currency (1 point).

Operating (non-GAAP) RD&E expense increased 10.1 percent in 2016 compared to the prior year, driven primarily by the same factors.

**Intellectual Property and Custom Development Income**

(\$ in millions)

For the year ended December 31:	2016	2015	Yr.-to-Yr. Percent Change
<b>Licensing of intellectual property including royalty-based fees</b>			
	\$1,390	\$407	241.8%
<b>Custom development income</b>			
	214	262	(18.4)
<b>Sales/other transfers of intellectual property</b>			
	27	13	113.4
<b>Total</b>	<b>\$1,631</b>	<b>\$682</b>	<b>139.3%</b>

**Management Discussion**

International Business Machines Corporation and Subsidiary Companies

Licensing of intellectual property including royalty-based fees increased year to year, primarily due to licensing of certain intellectual property in 2016 within the company's Integration Software and Cognitive Solutions software portfolio, which included four transactions each with period income greater than \$100 million. The company licenses IP to partners who allocate their skills to extend the value of assets that are high value, but may be in mature markets. There were no significant individual IP transactions in 2015. The timing and amount of licensing, sales or other transfers of IP may vary significantly from period to period depending upon the timing of licensing agreements, economic conditions, industry consolidation and the timing of new patents and know-how development.

**Other (Income) and Expense**

(\$ in millions)

<b>For the year ended December 31:</b>	<b>2016</b>	<b>2015</b>	<b>Yr-to-Yr. Percent Change</b>
<b>Other (income) and expense</b>			
Foreign currency transaction losses/(gains)	\$ (116)	\$ 414	NM
(Gains)/losses on derivative instruments	260	(853)	NM
Interest income	(108)	(72)	49.1%
Net (gains)/losses from securities and investment assets	23	47	(50.5)
Other	85	(260)	NM
<b>Total consolidated other (income) and expense</b>	<b>\$ 145</b>	<b>\$ (724)</b>	<b>NM</b>
Non-operating adjustment			
Acquisition-related charges	(7)	(5)	35.2
<b>Operating (non-GAAP) other (income) and expense</b>	<b>\$ 138</b>	<b>\$ (729)</b>	<b>NM</b>

NM—Not meaningful

Total consolidated other (income) and expense was expense of \$145 million in 2016 compared to income of \$724 million in 2015. The decrease in income of \$869 million year over year was primarily driven by:

- Lower net exchange gains (\$593 million); and
- Real estate capacity charges related to the first-quarter 2016 workforce transformation (\$291 million).

**Interest Expense**

(\$ in millions)

<b>For the year ended December 31:</b>	<b>2016</b>	<b>2015</b>	<b>Yr-to-Yr. Percent Change</b>
Interest expense			
<b>Total</b>	<b>\$ 630</b>	<b>\$ 468</b>	<b>34.4%</b>

The increase in interest expense compared to 2015 was primarily driven by higher average debt levels and higher average interest rates. Overall interest expense (excluding capitalized interest) in 2016 was \$1,206 million, an increase of \$197 million year to year.

**Income Taxes**

The continuing operations effective tax rate for 2016 was 3.6 percent, a decrease of 12.5 points versus the prior year. The benefit resulting from the favorable resolution of the Japan tax matter drove a 9.5 point reduction in the rate in 2016. Without that discrete item, the continuing operations effective tax rate for 2016 would have been 13.1 percent, with the remaining change in the rate year to year driven primarily by the following factors:

- A benefit due to the year-to-year decrease in tax charges related to intercompany payments made by foreign subsidiaries and the intercompany licensing of certain IP of 5.7 points; and
- A reduced benefit year to year related to audit settlements of 2.3 points.

The continuing operations operating (non-GAAP) effective tax rate was 6.5 percent, a decrease of 10.7 points versus 2015 principally driven by the same factors described above. Without the Japan benefits, the continuing operations (non-GAAP) effective tax rate would have been 14.9 percent.

**Financial Position**

Cash and marketable securities at year end were \$8,527 million. During the year, the company continued to manage the investment portfolio to meet its capital preservation and liquidity objectives.

Total debt of \$42,169 million increased \$2,279 million from December 31, 2015. The commercial paper balance at December 31, 2016, was \$899 million, an increase of \$299 million from the prior-year level. Within total debt, \$27,859 million was in support of the Global Financing business which was leveraged at a 7.3 to 1 ratio. The company continued to have substantial flexibility in the debt markets. During 2016, the company completed bond issuances totaling \$7,873 million, with terms ranging from 1.5 to 30 years, and interest rates ranging from 0.50 to 4.70 percent depending on maturity. The company generated strong cash flow from operations and continued to have access to additional sources of liquidity through the capital markets and its \$10.25 billion global credit facility.

Consistent with accounting standards, the company remeasured the funded status of its retirement and postretirement plans at December 31. At December 31, 2016, the overall net underfunded position was \$14,840 million, a decrease of \$674 million from December 31, 2015 driven by asset returns partially offset by a decrease in discount rates. At December 31, 2016, the company's qualified defined benefit plans were well funded. In 2016, the return on the U.S. Personal Pension Plan assets was 6.2 percent and the plan was 102 percent funded at December 31. Overall, global asset returns were 8.5 percent and

the qualified defined benefit plans worldwide were 98 percent funded at December 31, 2016.

During 2016, the company generated \$17,084 million in cash from operations, a decrease of \$171 million compared to 2015. In addition, the company generated \$11,700 million in free cash flow, a decrease of \$1,623 million versus the prior year. The company returned \$8,758 million to shareholders in 2016, with \$5,256 million in dividends and \$3,502 million in gross share repurchases. In 2016, the company repurchased 23.3 million shares.

#### GAAP Reconciliation

The tables below provide a reconciliation of the company's income statement results as reported under GAAP to its operating earnings presentation which is a non-GAAP measure. The company's calculation of operating (non-GAAP) earnings, as presented, may differ from similarly titled measures reported by other companies. Please refer to the "Operating (non-GAAP) Earnings" section on pages 26 and 27 for the company's rationale for presenting operating earnings information.

(\$ in millions except per share amounts)

For the year ended December 31, 2016:	GAAP	Acquisition-Related Adjustments	Retirement-Related Adjustments	Operating (non-GAAP)
Gross profit	\$38,294	\$ 494	\$ 316	\$39,104
Gross profit margin	47.9%	0.6 pts.	0.4 pts.	48.9%
SG&A	\$21,069	\$ (501)	\$(253)	\$20,315
RD&E	5,751	—	(29)	5,722
Other (income) and expense	145	(7)	—	138
Total expense and other (income)	25,964	(508)	(282)	25,174
Pre-tax income from continuing operations	12,330	1,003	598	13,931
Pre-tax margin from continuing operations	15.4%	1.3 pts.	0.7 pts.	17.4%
Provision for income taxes*	\$ 449	\$ 268	\$ 183	\$ 900
Effective tax rate	3.6%	1.7 pts.	1.2 pts.	6.5%
Income from continuing operations	\$11,881	\$ 735	\$ 415	\$13,031
Income margin from continuing operations	14.9%	0.9 pts.	0.5 pts.	16.3%
Diluted earnings per share from continuing operations	\$ 12.39	\$ 0.77	\$ 0.43	\$ 13.59

\* The tax impact on operating (non-GAAP) pre-tax income is calculated under the same accounting principles applied to the GAAP pre-tax income which employs an annual effective tax rate method to the results.

(\$ in millions except per share amounts)

For the year ended December 31, 2015:	GAAP	Acquisition-Related Adjustments	Retirement-Related Adjustments	Operating (non-GAAP)
Gross profit	\$40,684	\$ 373	\$ 469	\$41,526
Gross profit margin	49.8%	0.5 pts.	0.6 pts.	50.8%
SG&A	\$20,430	\$(324)	\$(533)	\$19,573
RD&E	5,247	—	(48)	5,200
Other (income) and expense	(724)	(5)	—	(729)
Total expense and other (income)	24,740	(330)	(581)	23,830
Pre-tax income from continuing operations	15,945	703	1,050	17,697
Pre-tax margin from continuing operations	19.5%	0.9 pts.	1.3 pts.	21.6%
Provision for income taxes*	\$ 2,581	\$ 141	\$ 316	\$ 3,037
Effective tax rate	16.2%	0.2 pts.	0.9 pts.	17.2%
Income from continuing operations	\$13,364	\$ 562	\$ 734	\$14,659
Income margin from continuing operations	16.3%	0.7 pts.	0.9 pts.	17.9%
Diluted earnings per share from continuing operations	\$ 13.60	\$ 0.57	\$ 0.75	\$ 14.92

\* The tax impact on operating (non-GAAP) pre-tax income is calculated under the same accounting principles applied to the GAAP pre-tax income which employs an annual effective tax rate method to the results.

**OTHER INFORMATION****Looking Forward**

The company's strategies, investments and actions are all made with an objective of optimizing long-term performance. A long-term perspective ensures that the company is well-positioned to take advantage of the major shifts in technology, business and the global economy.

As part of its strategic model, the company expects to continue to allocate capital efficiently and effectively to investments, and to return value to shareholders through a combination of dividends and share repurchases. Over the long term, in consideration of the opportunities it will continue to develop, the company expects to have the ability to generate low single-digit revenue growth, and with a higher-value business mix, high single-digit operating (non-GAAP) earnings per share growth, with free cash flow realization of GAAP net income in the 90 to 100 percent range.

The company's 2017 results reflect the work that has been done to reposition the business through investment, shifting skills and reallocating capital—all to enable clients to move to the future. In Cognitive Solutions, performance will be driven by the shift to AI, Watson, security and industry vertical solutions. The company continued to move its offerings to as-a-Service delivery models, and in 2018 will continue to build scale. In the services segments, there is momentum in Consulting driven by digital, and strong revenue growth in cloud, as the company continues to assist clients to build out hybrid environments. The company's expectations from the current services backlog point to an improved revenue trajectory in 2018 versus 2017. The Systems segment had a strong second half of 2017, with the introduction of the z14 with pervasive encryption. The company is ahead of the historical product cycle in the first two quarters since its introduction and in the fourth quarter shipped the most MIPS in history, providing evidence that the market has capacity demand and understands the value in the platform. In addition, the introduction of the new POWER9 processor will bring unprecedented speed to AI workloads and the company has the most competitive storage offerings in some time. As a result, the company enters 2018 with a stronger revenue profile than in 2017.

For full-year 2018, the company expects revenue growth, at mid-January spot rates, and margin stabilization, driven by continued scale in the cloud business and yield from services' productivity improvements. The company expects year-to-year revenue growth in the first quarter of 2018 versus 2017, at both mid-January spot rates and constant currency, with growth rates relatively consistent with the fourth quarter of 2017.

Consistent with the long-term model, the company also expects, over the course of 2018, to continue to acquire key capabilities, remix skills, invest in areas of growth and return value to shareholders. The company will continue to invest to drive growth in the strategic areas and expects a year-to-year headwind in expense in 2018 due to currency hedges. A high level of investment is important as the company continues to build its capabilities in AI, cloud, security and blockchain, among others. Additionally, the company will continue to look for more productivity in spending, especially in the services businesses, along with a remix of skills to the new opportunities. This is all taken into account in the full-year view.

Overall, the company expects GAAP earnings per share from continuing operations for 2018 to be at least \$11.70. Excluding acquisition-related charges of \$0.78 per share and non-operating retirement-related items of \$1.32 per share, operating (non-GAAP) earnings per share is expected to be at least \$13.80. For the first quarter of 2018, the company expects operating (non-GAAP) earnings per share to be approximately 17 percent to 18 percent of the full-year expectation. In each of the first quarters of 2017 and 2016, the company had a discrete tax benefit. The company expects a potential benefit again in the first quarter of 2018, and as in the past, will likely take actions that will offset some portion of the benefit. Two accounting changes, revenue recognition and pension cost, that were adopted beginning January 1, 2018, are expected to essentially offset each other within the full-year 2018 operating (non-GAAP) earnings per share expectation. These items are reflected in the first-quarter skew expectations.

Free cash flow realization, which is defined as free cash flow to income from continuing operations (GAAP), is expected to be over 100%. The company expects free cash flow to be approximately \$12 billion in 2018. Free cash flow expectations include a year-to-year headwind from strong receivables collections in 2017, an approximate \$600 million year-to-year headwind from cash tax payments and an expected growth in capital expenditures.

For 2018, the company expects the GAAP tax rate to be approximately 2 points lower than the operating (non-GAAP) tax rate expectation. The company expects its operating (non-GAAP) tax rate for 2018 to be 16 percent, plus or minus 2 points (excluding discrete items), which is a 4-point headwind year to year. The tax rates reflect the implementation of U.S. tax reform, which includes a lower U.S. corporate tax rate, offset by the broader tax base and reduced foreign tax credit utilization. The rate will change year to year based on nonrecurring events, such as the settlement of income tax audits and changes in tax laws, as well as recurring factors including the geographic mix of income before taxes, state and local taxes and the effects of various global income tax strategies.

The company expects 2018 pre-tax retirement-related plan cost to be approximately \$3.2 billion, an increase of approximately \$300 million compared to 2017. This estimate reflects current pension plan assumptions at December 31, 2017. Consistent with the newly adopted FASB guidance for the presentation of net periodic pension and postretirement benefit costs, within total retirement-related plan cost, operating retirement-related plan cost is expected to be approximately \$1.5 billion, approximately flat versus 2017. Non-operating retirement-related plan cost is expected to be approximately \$1.7 billion, an increase of approximately \$300 million compared to 2017, driven by lower income from expected return on assets and a year-to-year impact due to the pension obligation adjustment resulting from UK litigation in 2017. Contributions for all retirement-related plans are expected to be approximately \$2.4 billion in 2018, approximately flat compared to 2017.

For a discussion of new accounting standards that the company will adopt in future periods, please see note B, "Accounting Changes," beginning on page 94. For discussion of the company's presentation of non-operating retirement-related cost, refer to the "Operating (non-GAAP) Earnings" section on pages 26 and 27.

#### Liquidity and Capital Resources

The company has consistently generated strong cash flow from operations, providing a source of funds ranging between \$16.7 billion and \$17.8 billion per year over the past five years. The company provides for additional liquidity through several sources: maintaining an adequate cash balance, access to global funding sources, committed global credit facilities and other committed and uncommitted lines of credit worldwide. In 2017, the company and IBM Credit entered into a \$2.5 billion 364-day Credit Agreement and a \$2.5 billion three-year Credit Agreement. These new agreements permit borrowings up to an aggregate of \$5 billion on a revolving basis. The following table provides a summary of the major sources of liquidity for the years ended December 31, 2013 through 2017.

#### Cash Flow and Liquidity Trends

(\$ in billions)

	2017	2016	2015	2014	2013
Net cash from operating activities	\$16.7	\$17.1*	\$17.3*	\$17.1*	\$17.8*
Cash and short-term marketable securities	\$12.6	\$ 8.5	\$ 8.2	\$ 8.5	\$11.1
Committed global credit facility	\$15.3	\$10.3	\$10.0	\$10.0	\$10.0

\* Reclassified to reflect adoption of the FASB guidance on share-based compensation.

The major rating agencies' ratings on the company's debt securities at December 31, 2017 appear in the following table. On May 3, 2017, Moody's Investors Service lowered its ratings on the company's senior long-term debt from Aa3 to A1, while reaffirming its rating on commercial paper. On May 5, 2017,

Standard and Poor's lowered its ratings on the company's senior long-term debt to A+ from AA- and commercial paper to A-1 from A-1+. The Fitch ratings remain unchanged from December 31, 2016. IBM remains a strong investment grade company with significant flexibility to execute its strategy and capital allocation plans. The company's indenture governing its debt securities and its various credit facilities each contain significant covenants which obligate the company to promptly pay principal and interest, limit the aggregate amount of secured indebtedness and sale and leaseback transactions to 10 percent of the company's consolidated net tangible assets, and restrict the company's ability to merge or consolidate unless certain conditions are met. The credit facilities also include a covenant on the company's consolidated net interest expense ratio, which cannot be less than 2.20 to 1.0, as well as a cross default provision with respect to other defaulted indebtedness of at least \$500 million.

The company is in compliance with all of its significant debt covenants and provides periodic certification to its lenders. The failure to comply with its debt covenants could constitute an event of default with respect to the debt to which such provisions apply. If certain events of default were to occur, the principal and interest on the debt to which such event of default applied would become immediately due and payable.

The company does not have "ratings trigger" provisions in its debt covenants or documentation, which would allow the holders to declare an event of default and seek to accelerate payments thereunder in the event of a change in credit rating. The company's contractual agreements governing derivative instruments contain standard market clauses which can trigger the termination of the agreement if the company's credit rating were to fall below investment grade. At December 31, 2017, the fair value of those instruments that were in a liability position was \$415 million, before any applicable netting, and this position is subject to fluctuations in fair value period to period based on the level of the company's outstanding instruments and market conditions. The company has no other contractual arrangements that, in the event of a change in credit rating, would result in a material adverse effect on its financial position or liquidity.

IBM and IBM Credit Ratings	Standard and Poor's	Moody's Investors Service	Fitch Ratings
Senior long-term debt	A+	A1	A+
Commercial paper	A-1	Prime-1	F1

The company prepares its Consolidated Statement of Cash Flows in accordance with applicable accounting standards for cash flow presentation on page 81 and highlights causes and events underlying sources and uses of cash in that format on page 48. For the purpose of running its business, the company manages, monitors and analyzes cash flows in a different format.

**Management Discussion**

International Business Machines Corporation and Subsidiary Companies

Management uses free cash flow as a measure to evaluate its operating results, plan share repurchase levels, strategic investments and assess its ability and need to incur and service debt. The entire free cash flow amount is not necessarily available for discretionary expenditures. The company defines free cash flow as net cash from operating activities less the change in Global Financing receivables and net capital expenditures, including the investment in software. A key objective of the Global Financing business is to generate strong returns on equity, and increasing receivables is the basis for growth. Accordingly, management considers Global Financing receivables as a profit-generating investment, not as working capital that should be minimized for efficiency. Therefore, management includes presentations of both free cash flow and net cash from operating activities that exclude the effect of Global Financing receivables. Free cash flow guidance is derived using an estimate of profit, working capital and operational cash outflows. As previously noted, the company views Global Financing receivables as a profit generating investment which it seeks to maximize and therefore it is not considered when formulating guidance for free cash flow. As a result, the company does not estimate a GAAP Net Cash from Operations expectation metric.

From the perspective of how management views cash flow, in 2017, after investing \$3.3 billion in capital investments primarily in cloud and in support of the services business, the company generated free cash flow of \$13.0 billion, an increase

of \$1.3 billion compared to 2016. The increase was primarily driven by lower capital expenditures and strong working capital performance due to mix of business and collections.

In 2017, the company continued to focus its cash utilization on returning value to shareholders including \$5.5 billion in dividends and \$4.3 billion in gross common stock repurchases (27.2 million shares).

Over the past five years, the company generated over \$65 billion in free cash flow. During that period, the company invested over \$13 billion in strategic acquisitions and returned \$64 billion to shareholders through dividends and gross share repurchases. The company's performance during this period demonstrates that there is fungibility across the elements of share repurchases, dividends and acquisitions. The amount of prospective returns to shareholders in the form of dividends and share repurchases will vary based upon several factors including each year's operating results, capital expenditure requirements, research and development investments and acquisitions, as well as the factors discussed on page 69.

The company's Board of Directors considers the dividend payment on a quarterly basis. In the second quarter of 2017, the Board of Directors increased the company's quarterly common stock dividend from \$1.40 to \$1.50 per share.

The table below represents the way in which management reviews cash flow as described above.

(\$ in billions)	2017	2016	2015	2014	2013
<b>For the year ended December 31:</b>					
Net cash from operating activities per GAAP	<b>\$16.7</b>	\$17.1*	\$17.3*	\$ 17.1*	\$ 17.8*
Less: the change in Global Financing receivables	<b>0.4</b>	1.7	0.2	0.7	(1.3)
Net cash from operating activities, excluding Global Financing receivables	<b>16.3</b>	15.4*	17.1*	16.4*	19.1*
Capital expenditures, net	(3.3)	(3.7)	(3.8)	(3.8)	(3.8)
Free cash flow (FCF)	<b>13.0</b>	11.7*	13.3*	12.6*	15.4*
Acquisitions	(0.5)	(5.7)	(3.3)	(0.7)	(3.1)
Divestitures	(0.2)	(0.5)	(0.4)	2.4	0.3
Share repurchase	(4.3)	(3.5)	(4.6)	(13.7)	(13.9)
Common stock repurchases for tax withholdings	(0.2)	(0.1)*	(0.2)*	(0.2)*	(0.3)*
Dividends	(5.5)	(5.3)	(4.9)	(4.3)	(4.1)
Non-Global Financing debt	<b>1.1</b>	1.3	(0.1)	(1.3)	3.2
Other (includes Global Financing receivables and Global Financing debt)	<b>0.7</b>	2.3	0.0	2.6	2.4
<b>Change in cash, cash equivalents and short-term marketable securities</b>	<b>\$ 4.1</b>	\$ 0.3	\$ (0.3)	\$ (2.6)	\$ (0.1)
<b>FCF as percent of Income from Continuing Operations</b>	<b>226%**</b>	98%*	100%*	80%*	91%*

\* Reclassified to reflect adoption of the FASB guidance on share-based compensation.

\*\*116% excluding the one-time charge of \$5.5 billion associated with the enactment of U.S. tax reform in 2017.

## Management Discussion

### International Business Machines Corporation and Subsidiary Companies

Events that could temporarily change the historical cash flow dynamics discussed previously include significant changes in operating results, material changes in geographic sources of cash, unexpected adverse impacts from litigation, future pension funding requirements during periods of severe downturn in the capital markets or the timing of tax payments. Whether any litigation has such an adverse impact will depend on a number of variables, which are more completely described in note M, "Contingencies and Commitments," on pages 119 to 121. With respect to pension funding, in 2017, the company contributed \$409 million to its non-U.S. defined benefit plans compared to \$507 million in 2016. As highlighted in the Contractual Obligations table, the company expects to make legally mandated pension plan contributions to certain non-U.S. plans of approximately \$1.8 billion in the next five years. The 2018 contributions are currently expected to be approximately \$400 million. Contributions related to all retirement-related plans is expected to be approximately \$2.4 billion in 2018, approximately flat compared to 2017. Financial market performance could increase the legally mandated minimum

contributions in certain non-U.S. countries that require more frequent remeasurement of the funded status. The company is not quantifying any further impact from pension funding because it is not possible to predict future movements in the capital markets or pension plan funding regulations.

In 2018, the company is not legally required to make any contributions to the U.S. defined benefit pension plans.

The company's U.S. cash flows continue to be sufficient to fund its current domestic operations and obligations, including investing and financing activities such as dividends and debt service. The company's U.S. operations generate substantial cash flows, and, in those circumstances where the company has additional cash requirements in the U.S., the company has several liquidity options available. These options may include the ability to borrow additional funds at reasonable interest rates, utilizing its committed global credit facility, repatriating certain foreign earnings and utilizing intercompany loans with certain foreign subsidiaries.

#### Contractual Obligations

(\$ in millions)

	Total Contractual Payment Stream	Payments Due In			
		2018	2019–20	2021–22	After 2022
Long-term debt obligations	\$45,435	\$ 5,215	\$13,365	\$ 9,481	\$17,374
Interest on long-term debt obligations	10,021	1,202	1,854	1,363	5,602
Capital (finance) lease obligations	10	3	4	3	—
Operating lease obligations	6,568	1,614	2,596	1,462	896
Purchase obligations	3,404	1,048	1,285	895	177
Other long-term liabilities:					
Minimum defined benefit plan pension funding (mandated)*	1,800	400	800	600	—
Excess 401(k) Plus Plan	1,771	188	412	460	711
Long-term termination benefits	1,069	173	172	127	598
Tax reserves**	4,630	1,062			
Other	1,264	131	291	101	740
<b>Total</b>	<b>\$75,973</b>	<b>\$11,034</b>	<b>\$20,779</b>	<b>\$14,492</b>	<b>\$26,098</b>

\* As funded status on plans will vary, obligations for mandated minimum pension payments after 2022 could not be reasonably estimated.

\*\*These amounts represent the liability for unrecognized tax benefits. The company estimates that approximately \$1,062 million of the liability is expected to be settled within the next 12 months. The settlement period for the noncurrent portion of the income tax liability cannot be reasonably estimated as the timing of the payments will depend on the progress of tax examinations with the various tax authorities; however, it is not expected to be due within the next 12 months.

**Management Discussion**

International Business Machines Corporation and Subsidiary Companies

Total contractual obligations are reported in the previous table excluding the effects of time value and therefore, may not equal the amounts reported in the Consolidated Statement of Financial Position. Certain noncurrent liabilities are excluded from the previous table as their future cash outflows are uncertain. This includes deferred taxes, derivatives, deferred income, disability benefits and other sundry items. Certain obligations related to the company's divestitures are included.

Purchase obligations include all commitments to purchase goods or services of either a fixed or minimum quantity that meet any of the following criteria: (1) they are noncancelable, (2) the company would incur a penalty if the agreement was canceled, or (3) the company must make specified minimum payments even if it does not take delivery of the contracted products or services (take-or-pay). If the obligation to purchase goods or services is noncancelable, the entire value of the contract is included in the previous table. If the obligation is cancelable, but the company would incur a penalty if canceled, the dollar amount of the penalty is included as a purchase obligation. Contracted minimum amounts specified in take-or-pay contracts are also included in the table as they represent the portion of each contract that is a firm commitment.

In the ordinary course of business, the company enters into contracts that specify that the company will purchase all or a portion of its requirements of a specific product, commodity or service from a supplier or vendor. These contracts are generally entered into in order to secure pricing or other negotiated terms. They do not specify fixed or minimum quantities to be purchased and, therefore, the company does not consider them to be purchase obligations.

Interest on floating-rate debt obligations is calculated using the effective interest rate at December 31, 2017, plus the interest rate spread associated with that debt, if any.

**Off-Balance Sheet Arrangements**

From time to time, the company may enter into off-balance sheet arrangements as defined by SEC Financial Reporting Release 67 (FRR-67), "Disclosure in Management's Discussion and Analysis about Off-Balance Sheet Arrangements and Aggregate Contractual Obligations."

At December 31, 2017, the company had no off-balance sheet arrangements that have, or are reasonably likely to have, a material current or future effect on financial condition, changes in financial condition, revenues or expenses, results of operations, liquidity, capital expenditures or capital resources. See the table on page 69 for the company's contractual obligations, and note M, "Contingencies and Commitments," on page 119, for detailed information about the company's guarantees, financial commitments and indemnification arrangements. The company does not have retained interests in assets transferred to unconsolidated entities or other material off-balance sheet interests or instruments.

**Critical Accounting Estimates**

The application of GAAP requires the company to make estimates and assumptions about certain items and future events that directly affect its reported financial condition. The accounting estimates and assumptions discussed in this section are those that the company considers to be the most critical to its financial statements. An accounting estimate is considered critical if both (a) the nature of the estimate or assumption is material due to the levels of subjectivity and judgment involved, and (b) the impact within a reasonable range of outcomes of the estimate and assumption is material to the company's financial condition. Senior management has discussed the development, selection and disclosure of these estimates with the Audit Committee of the company's Board of Directors. The company's significant accounting policies are described in note A, "Significant Accounting Policies," on pages 84 to 93.

A quantitative sensitivity analysis is provided where that information is reasonably available, can be reliably estimated and provides material information to investors. The amounts used to assess sensitivity (e.g., 1 percent, 10 percent, etc.) are included to allow users of the Annual Report to understand a general direction cause and effect of changes in the estimates and do not represent management's predictions of variability. For all of these estimates, it should be noted that future events rarely develop exactly as forecasted, and estimates require regular review and adjustment.

**Pension Assumptions**

For the company's defined benefit pension plans, the measurement of the benefit obligation to employees and net periodic pension (income)/cost requires the use of certain assumptions, including, among others, estimates of discount rates and expected return on plan assets.

Changes in the discount rate assumptions would impact the (gain)/loss amortization and interest cost components of the net periodic pension (income)/cost calculation and the projected benefit obligation (PBO). The company decreased the discount rate assumption for the IBM Personal Pension Plan (PPP), a U.S.-based defined benefit plan, by 40 basis points to 3.40 percent on December 31, 2017. This change will increase pre-tax cost and expense recognized in 2018 by an estimated \$120 million. If the discount rate assumption for the PPP had increased by 40 basis points on December 31, 2017, pre-tax cost and expense recognized in 2018 would have decreased by an estimated \$125 million. Further changes in the discount rate assumptions would impact the PBO which, in turn, may impact the company's funding decisions if the PBO exceeds plan assets. A 25 basis point increase or decrease in the discount rate would cause a corresponding decrease or increase, respectively, in the PPP's PBO of an estimated \$1.2 billion based upon December 31, 2017 data.

The expected long-term return on plan assets assumption is used in calculating the net periodic pension (income)/cost. Expected returns on plan assets are calculated based on the market-related value of plan assets, which recognizes changes in the fair value of plan assets systematically over a five-year period in the expected return on plan assets line in net periodic pension (income)/cost. The differences between the actual return on plan assets and the expected long-term return on plan assets are recognized over five years in the expected return on plan assets line in net periodic pension (income)/cost and also as a component of actuarial (gains)/losses, which are recognized over the service lives or life expectancy of the participants, depending on the plan, provided such amounts exceed thresholds which are based upon the benefit obligation or the value of plan assets, as provided by accounting standards.

To the extent the outlook for long-term returns changes such that management changes its expected long-term return on plan assets assumption, each 50 basis point increase or decrease in the expected long-term return on PPP plan assets assumption would have an estimated decrease or increase, respectively, of \$258 million on the following year's pre-tax net periodic pension (income)/cost (based upon the PPP's plan assets at December 31, 2017 and assuming no contributions are made in 2018).

The company may voluntarily make contributions or be required, by law, to make contributions to its pension plans. Actual results that differ from the estimates may result in more or less future company funding into the pension plans than is planned by management. Impacts of these types of changes on the company's pension plans in other countries worldwide would vary depending upon the status of each respective plan.

In addition to the above, the company evaluates other pension assumptions involving demographic factors, such as retirement age and mortality, and updates these assumptions to reflect experience and expectations for the future. Actual results in any given year can differ from actuarial assumptions because of economic and other factors.

For additional information on the company's pension plans and the development of these assumptions, see note S, "Retirement-Related Benefits," on pages 135 and 136.

#### **Revenue Recognition**

Application of the various accounting principles in GAAP related to the measurement and recognition of revenue requires the company to make judgments and estimates. Specifically, complex arrangements with nonstandard terms and conditions may require significant contract interpretation to determine the appropriate accounting, including whether the deliverables specified in a multiple-deliverable arrangement should be treated as separate units of accounting. Other significant judgments include determining whether IBM or a reseller is acting as the principal in a transaction and whether separate contracts are considered part of one arrangement.

Revenue recognition is also impacted by the company's ability to estimate sales incentives, expected returns and collectability. The company considers various factors, including a review of specific transactions, the creditworthiness of the customers, historical experience and market and economic conditions when calculating these provisions and allowances. Evaluations are conducted each quarter to assess the adequacy of the estimates. If these estimates were changed by 10 percent in 2017, net income would have been impacted by \$40 million (excluding Global Financing receivables).

#### **Costs to Complete Service Contracts**

The company enters into numerous service contracts through its services businesses. During the contractual period, revenue, cost and profits may be impacted by estimates of the ultimate profitability of each contract, especially contracts for which the company uses the percentage-of-completion (POC) method of accounting. If at any time these estimates indicate the POC contract will be unprofitable, the entire estimated loss for the remainder of the contract is recorded immediately in cost. The company performs ongoing profitability analyses of its POC-based services contracts in order to determine whether the latest estimates require updating. Key factors reviewed by the company to estimate the future costs to complete each contract are future labor costs and product costs and expected productivity efficiencies. Contract loss provisions recorded as a component of other accrued expenses and liabilities were \$25 million and \$13 million at December 31, 2017 and 2016, respectively.

#### **Income Taxes**

The company is subject to income taxes in the U.S. and numerous foreign jurisdictions. Significant judgments are required in determining the consolidated provision for income taxes.

During the ordinary course of business, there are many transactions and calculations for which the ultimate tax determination is uncertain. As a result, the company recognizes tax liabilities based on estimates of whether additional taxes and interest will be due. These tax liabilities are recognized when, despite the company's belief that its tax return positions are supportable, the company believes that certain positions may not be fully sustained upon review by tax authorities. The company believes that its accruals for tax liabilities are adequate for all open audit years based on its assessment of many factors, including past experience and interpretations of tax law. This assessment relies on estimates and assumptions, and may involve a series of complex judgments about future events. To the extent that new information becomes available which causes the company to change its judgment regarding the adequacy of existing tax liabilities, such changes to tax liabilities will impact income tax expense in the period in which such determination is made.

## Management Discussion

### International Business Machines Corporation and Subsidiary Companies

Significant judgment is also required in determining any valuation allowance recorded against deferred tax assets. In assessing the need for a valuation allowance, management considers all available evidence for each jurisdiction including past operating results, estimates of future taxable income and the feasibility of ongoing tax planning strategies. In the event that the company changes its determination as to the amount of deferred tax assets that can be realized, the company will adjust its valuation allowance with a corresponding impact to income tax expense in the period in which such determination is made.

The consolidated provision for income taxes will change period to period based on nonrecurring events, such as the settlement of income tax audits and changes in tax laws, as well as recurring factors including the geographic mix of income before taxes, the timing and amount of foreign dividend repatriation, state and local taxes and the effects of various global income tax strategies.

To the extent that the provision for income taxes increases/decreases by 1 percent of income from continuing operations before income taxes, consolidated net income would have decreased/improved by \$114 million in 2017.

#### Valuation of Assets

The application of business combination and impairment accounting requires the use of significant estimates and assumptions. The acquisition method of accounting for business combinations requires the company to estimate the fair value of assets acquired including separately identifiable intangible assets, liabilities assumed, and any noncontrolling interest in the acquiree to properly allocate purchase price consideration. Impairment testing for assets, other than goodwill and indefinite-lived intangible assets, requires the allocation of cash flows to those assets or group of assets and if required, an estimate of fair value for the assets or group of assets. The company's estimates are based upon assumptions believed to be reasonable, but which are inherently uncertain and unpredictable. These valuations require the use of management's assumptions, which would not reflect unanticipated events and circumstances that may occur.

#### Valuation of Goodwill

The company reviews goodwill for impairment annually and whenever events or changes in circumstances indicate the carrying value of goodwill may not be recoverable. In 2017, the company assessed the qualitative risk factors to determine whether it is more likely than not that the fair value of a reporting unit is less than its carrying amount.

The company assesses qualitative factors in each of its reporting units that carry goodwill including relevant events and circumstances that affect the fair value of reporting units. Examples include, but are not limited to, macroeconomic, industry and market conditions; as well as other individual factors such as:

- A loss of key personnel;
- A significant adverse shift in the operating environment of the reporting unit such as unanticipated competition;

- A significant pending litigation;
- A more likely than not expectation that a reporting unit or a significant portion of a reporting unit will be sold or otherwise disposed of; and
- An adverse action or assessment by a regulator.

The company assesses these qualitative factors to determine whether it is necessary to perform the two-step quantitative goodwill impairment test. This quantitative test is required only if the company concludes that it is more likely than not that a reporting unit's fair value is less than its carrying amount.

In the fourth quarter, the company performed its annual goodwill impairment analysis. The qualitative assessment illustrated evidence of a potential impairment triggering event as a result of the financial performance of the Systems reporting unit. The quantitative analysis resulted in no impairment as the reporting unit's estimated fair value exceeded the carrying amount by over 100 percent.

#### Loss Contingencies

The company is currently involved in various claims and legal proceedings. At least quarterly, the company reviews the status of each significant matter and assesses its potential financial exposure. If the potential loss from any claim or legal proceeding is considered probable and the amount can be reasonably estimated, the company accrues a liability for the estimated loss. Significant judgment is required in both the determination of probability and the determination as to whether an exposure is reasonably estimable. Because of uncertainties related to these matters, accruals are based only on the best information available at the time. As additional information becomes available, the company reassesses the potential liability related to its pending claims and litigation, and may revise its estimates. These revisions in the estimates of the potential liabilities could have a material impact on the company's results of operations and financial position.

#### Global Financing Receivables Allowance for Credit Losses

The Global Financing business reviews its financing receivables portfolio on a regular basis in order to assess collectibility and records adjustments to the allowance for credit losses at least quarterly. A description of the methods used by management to estimate the amount of uncollectible receivables is included in note A, "Significant Accounting Policies," on page 93. Factors that could result in actual receivable losses that are materially different from the estimated reserve include significant changes in the economy, or a sudden change in the economic health of a significant client that represents a concentration in Global Financing's receivables portfolio.

To the extent that actual collectibility differs from management's estimates currently provided for by 10 percent, Global Financing's segment pre-tax income and the company's income from continuing operations before income taxes would be higher or lower by an estimated \$34 million depending upon whether the actual collectibility was better or worse, respectively, than the estimates.

#### **Residual Value**

Residual value represents the estimated fair value of equipment under lease as of the end of the lease. Residual value estimates impact the determination of whether a lease is classified as operating or capital. Global Financing estimates the future fair value of leased equipment by using historical models, analyzing the current market for new and used equipment, and obtaining forward-looking product information such as marketing plans and technological innovations. Residual value estimates are periodically reviewed and "other than temporary" declines in estimated future residual values are recognized upon identification. Anticipated increases in future residual values are not recognized until the equipment is remarketed.

Factors that could cause actual results to materially differ from the estimates include significant changes in the used-equipment market brought on by unforeseen changes in technology innovations and any resulting changes in the useful lives of used equipment.

To the extent that actual residual value recovery is lower than management's estimates by 10 percent, Global Financing's segment pre-tax income and the company's income from continuing operations before income taxes for 2017 would have been lower by an estimated \$72 million. If the actual residual value recovery is higher than management's estimates, the increase in income will be realized at the end of lease when the equipment is remarketed.

#### **Currency Rate Fluctuations**

Changes in the relative values of non-U.S. currencies to the U.S. dollar affect the company's financial results and financial position. At December 31, 2017, currency changes resulted in assets and liabilities denominated in local currencies being translated into more dollars than at year-end 2016. The company uses financial hedging instruments to limit specific currency risks related to financing transactions and other foreign currency-based transactions.

During periods of sustained movements in currency, the marketplace and competition adjust to the changing rates. For example, when pricing offerings in the marketplace, the company may use some of the advantage from a weakening U.S. dollar to improve its position competitively, and price more aggressively to win the business, essentially passing on a portion of the currency advantage to its customers. Competition will frequently take the

same action. Consequently, the company believes that some of the currency-based changes in cost impact the prices charged to clients. The company also maintains currency hedging programs for cash management purposes which temporarily mitigate, but do not eliminate, the volatility of currency impacts on the company's financial results.

The company translates revenue, cost and expense in its non-U.S. operations at current exchange rates in the reported period. References to "adjusted for currency" or "constant currency" reflect adjustments based upon a simple mathematical formula. However, this constant currency methodology that the company utilizes to disclose this information does not incorporate any operational actions that management could take to mitigate fluctuating currency rates. Currency movements impacted the company's year-to-year revenue and earnings per share growth in 2017. Based on the currency rate movements in 2017, total revenue decreased 1.0 percent as reported and 1.3 percent at constant currency versus 2016. On an income from continuing operations before income taxes basis, these translation impacts offset by the net impact of hedging activities resulted in a theoretical maximum (assuming no pricing or sourcing actions) increase of approximately \$100 million in 2017, on both an as-reported basis and operating (non-GAAP) basis. The same mathematical exercise resulted in an increase of approximately \$125 million in 2016 on an as-reported basis and an increase of approximately \$150 million on an operating (non-GAAP) basis. The company views these amounts as a theoretical maximum impact to its as-reported financial results. Considering the operational responses mentioned above, movements of exchange rates, and the nature and timing of hedging instruments, it is difficult to predict future currency impacts on any particular period, but the company believes it could be substantially less than the theoretical maximum given the competitive pressure in the marketplace.

For non-U.S. subsidiaries and branches that operate in U.S. dollars or whose economic environment is highly inflationary, translation adjustments are reflected in results of operations. Generally, the company manages currency risk in these entities by linking prices and contracts to U.S. dollars.

The company continues to monitor the economic conditions and currency exchange mechanisms in Venezuela. The company recorded a pre-tax loss of \$43 million in the first quarter of 2016 in other (income) and expense in the Consolidated Statement of Earnings as a result of the elimination of the SICAD exchange and devaluation of the new exchange. Total pre-tax loss for 2017 was \$10 million compared to \$48 million in 2016. The company's operations in Venezuela comprised less than 1 percent of total 2017, 2016 and 2015 revenue, respectively.

## Management Discussion

International Business Machines Corporation and Subsidiary Companies

### Market Risk

In the normal course of business, the financial position of the company is routinely subject to a variety of risks. In addition to the market risk associated with interest rate and currency movements on outstanding debt and non-U.S. dollar denominated assets and liabilities, other examples of risk include collectibility of accounts receivable and recoverability of residual values on leased assets.

The company regularly assesses these risks and has established policies and business practices to protect against the adverse effects of these and other potential exposures. As a result, the company does not anticipate any material losses from these risks.

The company's debt, in support of the Global Financing business and the geographic breadth of the company's operations, contains an element of market risk from changes in interest and currency rates. The company manages this risk, in part, through the use of a variety of financial instruments including derivatives, as described in note D, "Financial Instruments—Derivative Financial Instruments," on pages 102 to 107.

To meet disclosure requirements, the company performs a sensitivity analysis to determine the effects that market risk exposures may have on the fair values of the company's debt and other financial instruments.

The financial instruments that are included in the sensitivity analysis are comprised of the company's cash and cash equivalents, marketable securities, short-term and long-term loans, commercial financing and installment payment receivables, investments, long-term and short-term debt and derivative financial instruments. The company's derivative financial instruments generally include interest rate swaps, foreign currency swaps and forward contracts.

To perform the sensitivity analysis, the company assesses the risk of loss in fair values from the effect of hypothetical changes in interest rates and foreign currency exchange rates on market-sensitive instruments. The market values for interest and foreign currency exchange risk are computed based on the present value of future cash flows as affected by the changes in rates that are attributable to the market risk being measured. The discount rates used for the present value computations were selected based on market interest and foreign currency exchange rates in effect at December 31, 2017 and 2016. The differences in this comparison are the hypothetical gains or losses associated with each type of risk.

Information provided by the sensitivity analysis does not necessarily represent the actual changes in fair value that the company would incur under normal market conditions because, due to practical limitations, all variables other than the specific market risk factor are held constant. In addition, the results of the model are constrained by the fact that certain items are specifically excluded from the analysis, while the financial instruments relating to the financing or hedging of those items are included by definition. Excluded items include short-term and long-term receivables from sales-type and direct financing leases, forecasted foreign currency cash flows and the company's net investment in foreign operations. As a consequence, reported changes in the values of some of the financial instruments impacting the results of the sensitivity analysis are not matched with the offsetting changes in the values of the items that those instruments are designed to finance or hedge.

The results of the sensitivity analysis at December 31, 2017 and 2016, are as follows:

### Interest Rate Risk

At December 31, 2017, a 10 percent decrease in the levels of interest rates with all other variables held constant would result in a decrease in the fair value of the company's financial instruments of \$201 million as compared with a decrease of \$147 million at December 31, 2016. A 10 percent increase in the levels of interest rates with all other variables held constant would result in an increase in the fair value of the company's financial instruments of \$232 million as compared to an increase of \$142 million at December 31, 2016. Changes in the relative sensitivity of the fair value of the company's financial instrument portfolio for these theoretical changes in the level of interest rates are primarily driven by changes in the company's debt maturities, interest rate profile and amount.

### Foreign Currency Exchange Rate Risk

At December 31, 2017, a 10 percent weaker U.S. dollar against foreign currencies, with all other variables held constant, would result in an increase in the fair value of the company's financial instruments of \$120 million as compared with a decrease of \$132 million at December 31, 2016. Conversely, a 10 percent stronger U.S. dollar against foreign currencies, with all other variables held constant, would result in a decrease in the fair value of the company's financial instruments of \$120 million compared with an increase of \$132 million at December 31, 2016.

### Financing Risks

See the "Description of Business" on page 33 for a discussion of the financing risks associated with the Global Financing business and management's actions to mitigate such risks.

## Management Discussion

International Business Machines Corporation and Subsidiary Companies

### Cybersecurity

While cybersecurity risk can never be completely eliminated, the company's approach draws on the depth and breadth of its global capabilities, both in terms of its offerings to clients and its internal approaches to risk management. The company offers commercial solutions that deliver capabilities in areas such as identity and access management, data security, application security, network security and endpoint security. IBM's solutions include pervasive encryption, security intelligence, analytics, cognitive and artificial intelligence, and forensic tools that can process information on customer IT security events and vulnerabilities and provide detailed information to customers about potential threats and security posture. The company also offers professional solutions for security from assessment and incident response to deployment and resource augmentation. In addition, the company offers managed and outsourced security solutions from multiple security operations centers around the world. Finally, security is embedded in a multitude of IBM offerings through secure engineering processes and by critical functions (encryption, access control, etc.) in servers, storage, software, service, and other solutions.

From an enterprise perspective, IBM implements a multi-faceted risk-management approach to identify and address cybersecurity risks. The company has established policies and procedures that provide the foundation upon which IBM's infrastructure and data are managed. IBM performs ongoing assessments regarding its technical controls and its methods for identifying emerging risks related to cybersecurity. The company uses a layered approach with overlapping controls to defend against cybersecurity attacks and threats on networks, end-user devices, servers, applications and cloud solutions. The company also has a security monitoring program and a global incident response process to respond to cybersecurity threats and attacks. In addition, the company utilizes a combination of online training, educational tools, videos and other awareness initiatives to foster a culture of security awareness and responsibility among its workforce.

### Employees and Related Workforce

(In thousands)

For the year ended December 31:	2017
IBM/wholly owned subsidiaries	366.6
Less-than-wholly owned subsidiaries	9.3
Complementary	21.9

As a globally integrated enterprise, the company operates in more than 175 countries and is continuing to shift its business to the higher-value segments of enterprise IT. The company continues to remix its skills and people needs to match the best opportunities in the marketplace.

The complementary workforce is an approximation of equivalent full-time employees hired under temporary, part-time and limited-term employment arrangements to meet specific business needs in a flexible and cost-effective manner.

**Report of Management**

International Business Machines Corporation and Subsidiary Companies

**Management Responsibility  
for Financial Information**

Responsibility for the integrity and objectivity of the financial information presented in this Annual Report rests with IBM management. The accompanying financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America, applying certain estimates and judgments as required.

IBM maintains an effective internal control structure. It consists, in part, of organizational arrangements with clearly defined lines of responsibility and delegation of authority, and comprehensive systems and control procedures. An important element of the control environment is an ongoing internal audit program. Our system also contains self-monitoring mechanisms, and actions are taken to correct deficiencies as they are identified.

To assure the effective administration of internal controls, we carefully select and train our employees, develop and disseminate written policies and procedures, provide appropriate communication channels and foster an environment conducive to the effective functioning of controls. We believe that it is essential for the company to conduct its business affairs in accordance with the highest ethical standards, as set forth in the IBM Business Conduct Guidelines. These guidelines, translated into numerous languages, are distributed to employees throughout the world, and reemphasized through internal programs to assure that they are understood and followed.

The Audit Committee of the Board of Directors is composed solely of independent, non-management directors, and is responsible for recommending to the Board the independent registered public accounting firm to be retained for the coming year, subject to stockholder ratification. The Audit Committee meets regularly and privately with the independent registered public accounting firm, with the company's internal auditors, as well as with IBM management, to review accounting, auditing, internal control structure and financial reporting matters.

**Management's Report on Internal Control  
Over Financial Reporting**

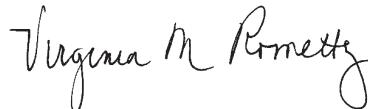
Management is responsible for establishing and maintaining adequate internal control over financial reporting of the company. Internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with accounting principles generally accepted in the United States of America.

The company's internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with accounting principles generally accepted in the United States of America, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) 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.

Management conducted an evaluation of the effectiveness of internal control over financial reporting based on the criteria established in *Internal Control—Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Based on this evaluation, management concluded that the company's internal control over financial reporting was effective as of December 31, 2017.

PricewaterhouseCoopers LLP, an independent registered public accounting firm, is retained to audit IBM's Consolidated Financial Statements and the effectiveness of the internal control over financial reporting. Its accompanying report is based on audits conducted in accordance with the standards of the Public Company Accounting Oversight Board (United States).


**Virginia M. Rometty**

Chairman, President and Chief Executive Officer  
February 27, 2018


**James J. Kavanaugh**

Senior Vice President and Chief Financial Officer  
February 27, 2018

**To the Board of Directors and Stockholders of  
International Business Machines Corporation:**

**Opinions on the Financial Statements and Internal Control  
over Financial Reporting**

We have audited the accompanying Consolidated Statement of Financial Position of International Business Machines Corporation and its subsidiaries as of December 31, 2017 and 2016, and the related Consolidated Statements of Earnings, Comprehensive Income, Changes in Equity, and Cash Flows for each of the three years in the period ended December 31, 2017, including the related notes (collectively referred to as the "consolidated 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 consolidated 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 their operations and their 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 the COSO.

**Basis for Opinions**

The Company's management is responsible for these consolidated 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 appearing on page 76. Our responsibility is to express opinions on the Company's consolidated financial statements and 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 consolidated 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 consolidated financial statements included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated 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 consolidated 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 (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) 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 (iii) 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.

*PricewaterhouseCoopers LLP*

**PricewaterhouseCoopers LLP**  
New York, New York  
February 27, 2018

We, or firms we have ultimately acquired, have served as the Company's auditor since 1923. For the period from 1923 to 1958, the Company was audited by firms that a predecessor firm to PricewaterhouseCoopers LLP ultimately acquired.

**Consolidated Statement of Earnings**

International Business Machines Corporation and Subsidiary Companies

(\$ in millions except per share amounts)

For the year ended December 31:	Notes	2017	2016	2015
<b>Revenue</b>				
Services		\$50,709	\$51,268	\$49,911
Sales		26,715	26,942	29,967
Financing		1,715	1,710	1,864
<b>Total revenue</b>	T	79,139	79,919	81,741
<b>Cost</b>				
Services		34,447	34,021	33,126
Sales		7,256	6,559	6,920
Financing		1,210	1,044	1,011
<b>Total cost</b>		42,913	41,625	41,057
<b>Gross profit</b>		36,227	38,294	40,684
<b>Expense and other (income)</b>				
Selling, general and administrative		20,107	21,069	20,430
Research, development and engineering	O	5,787	5,751	5,247
Intellectual property and custom development income		(1,466)	(1,631)	(682)
Other (income) and expense		(216)	145	(724)
Interest expense	D&J	615	630	468
<b>Total expense and other (income)</b>		24,827	25,964	24,740
<b>Income from continuing operations before income taxes</b>		11,400	12,330	15,945
Provision for income taxes	N	5,642	449	2,581
<b>Income from continuing operations</b>		5,758	11,881	13,364
Loss from discontinued operations, net of tax	C	(5)	(9)	(174)
<b>Net income</b>		\$ 5,753	\$11,872	\$13,190
<b>Earnings/(loss) per share of common stock</b>				
<b>Assuming dilution</b>				
Continuing operations	P	\$ 6.14	\$ 12.39	\$ 13.60
Discontinued operations	P	0.00	(0.01)	(0.18)
<b>Total</b>	P	\$ 6.14	\$ 12.38	\$ 13.42
<b>Basic</b>				
Continuing operations	P	\$ 6.17	\$ 12.44	\$ 13.66
Discontinued operations	P	0.00	(0.01)	(0.18)
<b>Total</b>	P	\$ 6.17	\$ 12.43	\$ 13.48
<b>Weighted-average number of common shares outstanding</b>				
Assuming dilution		937,385,625	958,714,097	982,700,267
Basic		932,828,295	955,422,530	978,744,523

Amounts may not add due to rounding.

The accompanying notes on pages 84 through 146 are an integral part of the financial statements.

**Consolidated Statement of Comprehensive Income**  
 International Business Machines Corporation and Subsidiary Companies

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(\$ in millions)		Notes	2017	2016	2015
<b>For the year ended December 31:</b>					
<b>Net income</b>			<b>\$5,753</b>	\$11,872	\$13,190
<b>Other comprehensive income/(loss), before tax</b>					
<b>Foreign currency translation adjustments</b>	L		<b>152</b>	(20)	(1,379)
<b>Net changes related to available-for-sale securities</b>	L				
Unrealized gains/(losses) arising during the period			1	(38)	(54)
Reclassification of (gains)/losses to net income			1	34	86
<b>Total net changes related to available-for-sale securities</b>	2		(3)	32	
<b>Unrealized gains/(losses) on cash flow hedges</b>	L				
Unrealized gains/(losses) arising during the period			(58)	243	618
Reclassification of (gains)/losses to net income			(363)	102	(1,072)
<b>Total unrealized gains/(losses) on cash flow hedges</b>	(421)		345	(454)	
<b>Retirement-related benefit plans</b>	L				
Prior service costs/(credits)			0	—	6
Net (losses)/gains arising during the period			682	(2,490)	(2,963)
Curtailments and settlements			19	(16)	33
Amortization of prior service (credits)/costs			(88)	(107)	(100)
Amortization of net (gains)/losses			2,889	2,764	3,304
<b>Total retirement-related benefit plans</b>	3,502		150	279	
<b>Other comprehensive income/(loss), before tax</b>	L		<b>3,235</b>	472	(1,523)
<b>Income tax (expense)/benefit related to items of other comprehensive income</b>	L		(429)	(263)	(208)
<b>Other comprehensive income/(loss)</b>	L		<b>2,806</b>	209	(1,731)
<b>Total comprehensive income</b>			<b>\$8,559</b>	\$12,081	\$11,459

Amounts may not add due to rounding.

The accompanying notes on pages 84 through 146 are an integral part of the financial statements.

**Consolidated Statement of Financial Position**  
 International Business Machines Corporation and Subsidiary Companies

(\$ in millions except per share amounts)

At December 31:	Notes	2017	2016
<b>Assets</b>			
<b>Current assets</b>			
Cash and cash equivalents		\$ 11,972	\$ 7,826
Marketable securities	D	608	701
Notes and accounts receivable—trade (net of allowances of \$297 in 2017 and \$290 in 2016)		8,928	9,182
Short-term financing receivables (net of allowances of \$261 in 2017 and \$337 in 2016)	F	21,721	19,006
Other accounts receivable (net of allowances of \$36 in 2017 and \$48 in 2016)		981	1,057
Inventories	E	1,583	1,553
Prepaid expenses and other current assets		3,942	4,564
Total current assets		49,735	43,888
Property, plant and equipment	G	32,331	30,133
Less: Accumulated depreciation	G	21,215	19,303
Property, plant and equipment—net	G	11,116	10,830
Long-term financing receivables (net of allowances of \$74 in 2017 and \$101 in 2016)	F	9,550	9,021
Prepaid pension assets	S	4,643	3,034
Deferred taxes	N	4,862	5,224
Goodwill	I	36,788	36,199
Intangible assets—net	I	3,742	4,688
Investments and sundry assets	H	4,919	4,585
<b>Total assets</b>		<b>\$ 125,356</b>	<b>\$ 117,470</b>
<b>Liabilities and equity</b>			
<b>Current liabilities</b>			
Taxes	N	\$ 4,219	\$ 3,235
Short-term debt	D&J	6,987	7,513
Accounts payable		6,451	6,209
Compensation and benefits		3,644	3,577
Deferred income		11,552	11,035
Other accrued expenses and liabilities		4,510	4,705
Total current liabilities		37,363	36,275
Long-term debt	D&J	39,837	34,655
Retirement and nonpension postretirement benefit obligations	S	16,720	17,070
Deferred income		3,746	3,600
Other liabilities	K	9,965	7,477
<b>Total liabilities</b>		<b>107,631</b>	<b>99,078</b>
Contingencies and commitments	M		
Equity	L		
<b>IBM stockholders' equity</b>			
Common stock, par value \$.20 per share, and additional paid-in capital		54,566	53,935
Shares authorized: 4,687,500,000			
Shares issued (2017—2,229,428,813; 2016—2,225,116,815)			
Retained earnings		153,126	152,759
Treasury stock, at cost (shares: 2017—1,307,249,588; 2016—1,279,249,412)		(163,507)	(159,050)
Accumulated other comprehensive income/(loss)		(26,592)	(29,398)
Total IBM stockholders' equity		17,594	18,246
Noncontrolling interests	A	131	146
<b>Total equity</b>		<b>17,725</b>	<b>18,392</b>
<b>Total liabilities and equity</b>		<b>\$ 125,356</b>	<b>\$ 117,470</b>

Amounts may not add due to rounding.

The accompanying notes on pages 84 through 146 are an integral part of the financial statements.

**Consolidated Statement of Cash Flows**  
 International Business Machines Corporation and Subsidiary Companies

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(\$ in millions)	2017	2016	2015
<b>For the year ended December 31:</b>			
<b>Cash flows from operating activities</b>			
Net income	\$ 5,753	\$ 11,872	\$13,190
Adjustments to reconcile net income to cash provided by operating activities			
Depreciation	3,021	2,837	2,662
Amortization of intangibles	1,520	1,544	1,193
Stock-based compensation	534	544	468
Deferred taxes	(931)	(1,132)	1,387
Net (gain)/loss on asset sales and other	14	62	481
Loss on microelectronics business disposal	—	—	71
Change in operating assets and liabilities, net of acquisitions/divestitures			
Receivables (including financing receivables)	1,297	712	812
Retirement related	1,014	54	(22)
Inventories	18	(14)	133
Other assets/other liabilities	4,437	408*	(3,200)*
Accounts payable	47	197	81
<b>Net cash provided by operating activities</b>	<b>16,724</b>	<b>17,084*</b>	<b>17,255*</b>
<b>Cash flows from investing activities</b>			
Payments for property, plant and equipment	(3,229)	(3,567)	(3,579)
Proceeds from disposition of property, plant and equipment	460	424	370
Investment in software	(544)	(583)	(572)
Purchases of marketable securities and other investments	(4,964)	(5,917)	(3,073)
Proceeds from disposition of marketable securities and other investments	3,910	5,692	2,842
Non-operating finance receivables—net	(2,028)	(891)	(398)
Acquisition of businesses, net of cash acquired	(496)	(5,679)	(3,349)
Divestiture of businesses, net of cash transferred	(205)	(454)	(401)
<b>Net cash used in investing activities</b>	<b>(7,096)</b>	<b>(10,976)</b>	<b>(8,159)</b>
<b>Cash flows from financing activities</b>			
Proceeds from new debt	9,643	9,132	5,540
Payments to settle debt	(6,816)	(6,395)	(5,622)
Short-term borrowings/(repayments) less than 90 days—net	620	26	101
Common stock repurchases	(4,340)	(3,502)	(4,609)
Common stock repurchases for tax withholdings	(193)	(126)*	(248)*
Common stock transactions—other	175	204	322
Cash dividends paid	(5,506)	(5,256)	(4,897)
<b>Net cash used in financing activities</b>	<b>(6,418)</b>	<b>(5,917)*</b>	<b>(9,413)*</b>
Effect of exchange rate changes on cash and cash equivalents	937	(51)	(473)
Net change in cash and cash equivalents	4,146	140	(790)
Cash and cash equivalents at January 1	7,826	7,686	8,476
<b>Cash and cash equivalents at December 31</b>	<b>\$11,972</b>	<b>\$ 7,826</b>	<b>\$ 7,686</b>
<b>Supplemental data</b>			
Income taxes paid—net of refunds received	\$ 1,597	\$ 1,078	\$ 2,657
Interest paid on debt	\$ 1,208	\$ 1,158	\$ 995

\* Reclassified to reflect adoption of the FASB guidance on share-based compensation.

Amounts may not add due to rounding.

The accompanying notes on pages 84 through 146 are an integral part of the financial statements.

**Consolidated Statement of Changes in Equity**

International Business Machines Corporation and Subsidiary Companies

(\$ in millions)

	<b>Common Stock and Additional Paid-In Capital</b>	<b>Retained Earnings</b>	<b>Treasury Stock</b>	<b>Accumulated Other Comprehensive Income/(Loss)</b>	<b>Total IBM Stockholders' Equity</b>	<b>Non- Controlling Interests</b>	<b>Total Equity</b>
<b>2015</b>							
Equity, January 1, 2015	\$52,666	\$137,793	\$(150,715)	\$(27,875)	\$11,868	\$146	\$12,014
Net income plus other comprehensive income/(loss)							
Net income		13,190			13,190		13,190
Other comprehensive income/(loss)				(1,731)	(1,731)		(1,731)
Total comprehensive income/(loss)					\$11,459		\$11,459
Cash dividends paid— common stock		(4,897)			(4,897)		(4,897)
Common stock issued under employee plans (6,013,875 shares)	606				606		606
Purchases (1,625,820 shares) and sales (1,155,558 shares) of treasury stock under employee plans—net		39	(102)		(63)		(63)
Other treasury shares purchased, not retired (30,338,647 shares)			(4,701)		(4,701)		(4,701)
Changes in other equity	(10)				(10)		(10)
Changes in noncontrolling interests					16		16
<b>Equity, December 31, 2015</b>	<b>\$53,262</b>	<b>\$146,124</b>	<b>\$(155,518)</b>	<b>\$(29,607)</b>	<b>\$14,262</b>	<b>\$162</b>	<b>\$14,424</b>

Amounts may not add due to rounding.

The accompanying notes on pages 84 through 146 are an integral part of the financial statements.

(\$ in millions)

	<b>Common Stock and Additional Paid-In Capital</b>	<b>Retained Earnings</b>	<b>Treasury Stock</b>	<b>Accumulated Other Comprehensive Income/(Loss)</b>	<b>Total IBM Stockholders' Equity</b>	<b>Non- Controlling Interests</b>	<b>Total Equity</b>
<b>2016</b>							
Equity, January 1, 2016	\$53,262	\$146,124	\$(155,518)	\$(29,607)	\$14,262	\$162	\$14,424
Net income plus other comprehensive income/(loss)							
Net income		11,872			11,872		11,872
Other comprehensive income/(loss)				209	209		209
Total comprehensive income/(loss)					\$12,081		\$12,081
Cash dividends paid— common stock		(5,256)			(5,256)		(5,256)
Common stock issued under employee plans (3,893,366 shares)	695				695		695
Purchases (854,365 shares) and sales (383,077 shares) of treasury stock under employee plans—net		18	(77)		(59)		(59)
Other treasury shares purchased, not retired (23,283,400 shares)			(3,455)		(3,455)		(3,455)
Changes in other equity	(22)	0			(22)		(22)
Changes in noncontrolling interests					(16)		(16)
<b>Equity, December 31, 2016</b>	<b>\$53,935</b>	<b>\$152,759</b>	<b>\$(159,050)</b>	<b>\$(29,398)</b>	<b>\$18,246</b>	<b>\$146</b>	<b>\$18,392</b>

Amounts may not add due to rounding.

The accompanying notes on pages 84 through 146 are an integral part of the financial statements.

**Consolidated Statement of Changes in Equity**  
 International Business Machines Corporation and Subsidiary Companies

(\$ in millions)

	Common Stock and Additional Paid-In Capital	Retained Earnings	Treasury Stock	Accumulated Other Comprehensive Income/(Loss)	Total IBM Stockholders' Equity	Non-Controlling Interests	Total Equity
<b>2017</b>							
Equity, January 1, 2017	\$53,935	\$152,759	\$(159,050)	\$(29,398)	\$18,246	\$146	\$18,392
Cumulative effect of change in accounting principle*		102			102		102
Net income plus other comprehensive income/(loss)							
Net income		5,753			5,753		5,753
Other comprehensive income/(loss)				2,806	2,806		2,806
Total comprehensive income/(loss)					\$ 8,559		\$ 8,559
Cash dividends paid—common stock		(5,506)			(5,506)		(5,506)
Common stock issued under employee plans (4,311,998 shares)		631			631		631
Purchases (1,226,080 shares) and sales (463,083 shares) of treasury stock under employee plans—net		18	(134)		(116)		(116)
Other treasury shares purchased, not retired (27,237,179 shares)			(4,323)		(4,323)		(4,323)
Changes in other equity		0			0		0
Changes in noncontrolling interests						(15)	(15)
<b>Equity, December 31, 2017</b>	<b>\$54,566</b>	<b>\$153,126</b>	<b>\$(163,507)</b>	<b>\$(26,592)</b>	<b>\$17,594</b>	<b>\$131</b>	<b>\$17,725</b>

\* Reflects the adoption of the FASB guidance on intra-entity transfers of assets in the first quarter of 2017.

Amounts may not add due to rounding.

The accompanying notes on pages 84 through 146 are an integral part of the financial statements.

**Notes to Consolidated Financial Statements**

International Business Machines Corporation and Subsidiary Companies

**NOTE A. SIGNIFICANT ACCOUNTING POLICIES****Basis of Presentation**

The accompanying Consolidated Financial Statements and footnotes of the International Business Machines Corporation (IBM or the company) have been prepared in accordance with accounting principles generally accepted in the United States of America (GAAP).

Within the financial statements and tables presented, certain columns and rows may not add due to the use of rounded numbers for disclosure purposes. Percentages presented are calculated from the underlying whole-dollar amounts. Certain prior year amounts have been reclassified to conform to the current year presentation. This is annotated where applicable.

On December 22, 2017, the Tax Cuts and Jobs Act ("U.S. tax reform") was enacted in the U.S. This Act introduced many changes, including lowering the U.S. corporate tax rate to 21 percent, changes in incentives, provisions to prevent U.S. base erosion and significant changes in the taxation of international income, including provisions which allow for the repatriation of foreign earnings without U.S. tax.

The enactment of U.S. tax reform resulted in a provisional charge of \$5,475 million to tax expense in the fourth-quarter and year-ended December 31, 2017. The charge was primarily the result of the one-time U.S. transition tax, and any foreign tax costs on undistributed foreign earnings, as well as the remeasurement of deferred tax balances to the new U.S. Federal tax rate. Refer to note N, "Taxes," on pages 121 to 124 for additional information.

Noncontrolling interest amounts of \$17 million, \$16 million and \$8 million, net of tax, for the years ended December 31, 2017, 2016 and 2015, respectively, are included as a reduction within other (income) and expense in the Consolidated Statement of Earnings.

**Principles of Consolidation**

The Consolidated Financial Statements include the accounts of IBM and its controlled subsidiaries, which are primarily majority owned. Any noncontrolling interest in the equity of a subsidiary is reported in Equity in the Consolidated Statement of Financial Position. Net income and losses attributable to the noncontrolling interest is reported as described above in the Consolidated Statement of Earnings. The accounts of variable interest entities (VIEs) are included in the Consolidated Financial Statements, if required. Investments in business entities in which the company does not have control, but has the ability to exercise significant influence over operating and financial policies, are accounted for using the equity method and the company's proportionate share of income or loss is recorded in other (income) and expense. The accounting policy for other investments in equity securities is on page 92 within "Marketable Securities." Equity investments in non-publicly traded entities are primarily accounted for using the cost method. All intercompany transactions and accounts have been eliminated in consolidation.

**Use of Estimates**

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the amounts of assets, liabilities, revenue, costs, expenses and other comprehensive income/(loss) (OCI) that are reported in the Consolidated Financial Statements and

accompanying disclosures. These estimates are based on management's best knowledge of current events, historical experience, actions that the company may undertake in the future and on various other assumptions that are believed to be reasonable under the circumstances. As a result, actual results may be different from these estimates. See "Critical Accounting Estimates" on pages 70 to 73 for a discussion of the company's critical accounting estimates.

**Revenue**

The company recognizes revenue when it is realized or realizable and earned. The company considers revenue realized or realizable and earned when it has persuasive evidence of an arrangement, delivery has occurred, the sales price is fixed or determinable and collectibility is reasonably assured. Delivery does not occur until products have been shipped or services have been provided to the client, risk of loss has transferred to the client, and either client acceptance has been obtained, client acceptance provisions have lapsed, or the company has objective evidence that the criteria specified in the client acceptance provisions have been satisfied. The sales price is not considered to be fixed or determinable until all contingencies related to the sale have been resolved.

The company recognizes revenue on sales to solution providers, resellers and distributors (herein referred to as "resellers") when the reseller has: economic substance apart from the company, credit risk, risk of loss to the inventory; and, the fee to the company is not contingent upon resale or payment by the end user, the company has no further obligations related to bringing about resale or delivery and all other revenue recognition criteria have been met.

The company reduces revenue for estimated client returns, price protection, rebates and other similar allowances. (See Schedule II, "Valuation and Qualifying Accounts and Reserves" included in the company's Annual Report on Form 10-K). Revenue is recognized only if these estimates can be reasonably and reliably determined. The company bases its estimates on historical results taking into consideration the type of client, the type of transaction and the specifics of each arrangement. Payments made under cooperative marketing programs are recognized as an expense only if the company receives from the client an identifiable benefit sufficiently separable from the product sale whose fair value can be reasonably and reliably estimated. If the company does not receive an identifiable benefit sufficiently separable from the product sale whose fair value can be reasonably estimated, such payments are recorded as a reduction of revenue.

Revenue from sales of third-party vendor products or services is recorded net of costs when the company is acting as an agent between the client and the vendor, and gross when the company is the principal for the transaction. Several factors are considered to determine whether the company is an agent or principal, most notably whether the company is the primary obligor to the client, or has inventory risk. Consideration is also given to whether the company adds meaningful value to the vendor's product or service, was involved in the selection of the vendor's product or service, has latitude in establishing the sales price or has credit risk.

The company reports revenue net of any revenue-based taxes assessed by governmental authorities that are imposed on and concurrent with specific revenue-producing transactions. In addition to the aforementioned general policies, the following are the specific revenue recognition policies for multiple-deliverable arrangements and for each major category of revenue.

#### Multiple-Deliverable Arrangements

The company's global capabilities as a cognitive solutions and cloud platform company include services, software, hardware, and/or related financing. For example, a client may purchase a server that includes operating system software. In addition, the arrangement may include post-contract support for the software and a contract for post-warranty maintenance service for the hardware. These types of arrangements can also include financing provided by the company. These arrangements consist of multiple deliverables, with the hardware and software delivered in one reporting period, and the software support and hardware maintenance services delivered across multiple reporting periods. In another example, the company may assist the client in building and running an enterprise information technology (IT) environment utilizing a private cloud on a long-term basis and the client periodically purchases hardware and/or software products from the company to upgrade or expand the facility. The services delivered on the cloud are provided on a continuous basis across multiple reporting periods, and the hardware and software products are delivered in one reporting period. To the extent that a deliverable in a multiple-deliverable arrangement is subject to specific accounting guidance that deliverable is accounted for in accordance with such specific guidance. Examples of such arrangements may include leased hardware which is subject to specific leasing guidance or software which is subject to specific software revenue recognition guidance on whether and/or how to separate multiple-deliverable arrangements into separate units of accounting (separability) and how to allocate the arrangement consideration among those separate units of accounting (allocation). For all other deliverables in multiple-deliverable arrangements, the guidance below is applied for separability and allocation. A multiple-deliverable arrangement is separated into more than one unit of accounting if the following criteria are met:

- The delivered item(s) has value to the client on a stand-alone basis; and
- If the arrangement includes a general right of return relative to the delivered item(s), delivery or performance of the undelivered item(s) is considered probable and substantially in the control of the company.

If these criteria are not met, the arrangement is accounted for as one unit of accounting which would result in revenue being recognized ratably over the contract term or being deferred until the earlier of when such criteria are met or when the last undelivered element is delivered. If these criteria are met for each element and there is a relative selling price for all units of accounting in an arrangement, the arrangement consideration is allocated to the separate units of accounting based on each unit's relative selling price. The following revenue policies are then applied to each unit of accounting, as applicable.

Revenue from the company's cloud, analytics, mobile, security, and cognitive offerings follow the specific revenue recognition policies for multiple-deliverable arrangements and for each major category of revenue depending on the type of offering which can be comprised of services, hardware and/or software.

#### Services

The company's primary services offerings include IT datacenter and business process outsourcing, application management services, consulting and systems integration, technology infrastructure and system maintenance, hosting and the design and development of complex IT systems to a client's specifications (design and build). Many of these services can be delivered entirely or partially through as-a-Service or cloud delivery models. These services are provided on a time-and-material basis, as a fixed-price contract or as a fixed-price per measure of output contract and the contract terms range from less than one year to over 10 years.

Revenue from IT datacenter and business process outsourcing contracts is recognized in the period the services are provided using either an objective measure of output or on a straight-line basis over the term of the contract. Under the output method, the amount of revenue recognized is based on the services delivered in the period.

Revenue from application management services, technology infrastructure, and system maintenance and hosting contracts is recognized on a straight-line basis over the terms of the contracts. Revenue from time-and-material contracts is recognized as labor hours are delivered and direct expenses are incurred. Revenue related to extended warranty and product maintenance contracts is recognized on a straight-line basis over the delivery period.

Revenue from fixed-price design and build contracts is recognized under the percentage-of-completion (POC) method. Under the POC method, revenue is recognized based on the labor costs incurred to date as a percentage of the total estimated labor costs to fulfill the contract. If circumstances arise that change the original estimates of revenues, costs, or extent of progress toward completion, revisions to the estimates are made. These revisions may result in increases or decreases in estimated revenues or costs, and such revisions are reflected in income in the period in which the circumstances that gave rise to the revision become known by the company.

The company performs ongoing profitability analyses of its services contracts accounted for under the POC method in order to determine whether the latest estimates of revenues, costs and profits require updating. If at any time these estimates indicate that the contract will be unprofitable, the entire estimated loss for the remainder of the contract is recorded immediately. For non-POC method services contracts, losses are recorded as incurred.

In some services contracts, the company bills the client prior to recognizing revenue from performing the services. Deferred income of \$5,870 million and \$5,873 million at December 31, 2017 and 2016, respectively, is included in the Consolidated Statement of Financial Position. In other services contracts, the company performs the services prior to billing the client. Unbilled accounts receivable of \$1,756 million and \$1,611 million at December 31, 2017 and 2016, respectively, is included in notes and accounts receivable-trade in the Consolidated Statement of Financial Position.

Billing usually occur in the month after the company performs the services or in accordance with specific contractual provisions.

## Notes to Consolidated Financial Statements

International Business Machines Corporation and Subsidiary Companies

### **Hardware**

The company's hardware offerings include the sale or lease of system servers and storage solutions. These products can also be delivered through as-a-Service or cloud delivery models such as Storage-as-a-Service. The company also offers installation services for its more complex hardware products.

Revenue from hardware sales and sales-type leases is recognized when risk of loss has transferred to the client and there are no unfulfilled company obligations that affect the client's final acceptance of the arrangement. Any cost of standard warranties and remaining obligations that are inconsequential or perfunctory are accrued when the corresponding revenue is recognized. Revenue from as-a-Service arrangements is recognized as the service is delivered. Revenue from rentals and operating leases is recognized on a straight-line basis over the term of the rental or lease.

### **Software**

The company's software offerings include solutions software, which provides the basis for many of the company's strategic areas including analytics, security and social; transaction processing software, which primarily runs mission-critical systems for clients; integration software, which help clients to create, connect and optimize their applications data and infrastructure; and operating systems software, which provides operating systems for IBM Z and Power Systems hardware. Many of these offerings can be delivered entirely or partially through as-a-Service or cloud delivery models, while others are delivered as on-premise software licenses.

Revenue from perpetual (one-time charge) license software is recognized at the inception of the license term if all revenue recognition criteria have been met. Revenue from post-contract support, which may include unspecified upgrades on a when-and-if-available basis, is recognized on a straight-line basis over the period such items are delivered. Revenue from software hosting or Software-as-a-Service arrangements is recognized as the service is delivered. In software hosting arrangements, the rights provided to the customer (e.g., ownership of a license, contract termination provisions and the feasibility of the customer to operate the software) are considered in determining whether the arrangement includes a license. In arrangements which include a software license, the associated revenue is recognized according to whether the license is perpetual or term. Revenue from term (recurring license charge) license software is recognized over the period that the client is entitled to use the license as usage occurs.

In multiple-deliverable arrangements that include software that is more than incidental to the products or services as a whole (software multiple-deliverable arrangements), software and software-related elements are accounted for in accordance with software revenue recognition guidance. Software-related elements include software products and services for which a software deliverable is essential to its functionality. Tangible products containing software components and non-software components that function together to deliver the tangible product's essential functionality are not within the scope of software revenue recognition guidance and are accounted for based on other applicable revenue recognition guidance.

A software multiple-deliverable arrangement is separated into more than one unit of accounting if all of the following criteria are met:

- The functionality of the delivered element(s) is not dependent on the undelivered element(s);
- There is vendor-specific objective evidence (VSOE) of fair value of the undelivered element(s). VSOE of fair value is based on the price charged when the deliverable is sold separately by the company on a regular basis and not as part of the multiple-deliverable arrangement; and
- Delivery of the delivered element(s) represents the culmination of the earnings process for that element(s).

If any one of these criteria is not met, the arrangement is accounted for as one unit of accounting which would result in revenue being recognized ratably over the contract term or being deferred until the earlier of when such criteria are met or when the last undelivered element is delivered. If these criteria are met for each element and there is VSOE of fair value for all units of accounting in an arrangement, the arrangement consideration is allocated to the separate units of accounting based on each unit's relative VSOE of fair value. There may be cases, however, in which there is VSOE of fair value of the undelivered item(s) but no such evidence for the delivered item(s). In these cases, the residual method is used to allocate the arrangement consideration. Under the residual method, the amount of consideration allocated to the delivered item(s) equals the total arrangement consideration less the aggregate VSOE of fair value of the undelivered elements.

The company's multiple-deliverable arrangements may have a stand-alone software deliverable that is subject to the existing software revenue recognition guidance. The revenue for these multiple-deliverable arrangements is allocated to the software deliverable and the non-software deliverables based on the relative selling prices of all of the deliverables in the arrangement using the hierarchy: VSOE, third-party evidence (TPE) or best estimate of selling price (BESP). In circumstances where the company cannot determine VSOE or TPE of the selling price for all of the deliverables in the arrangement, including the software deliverable, BESP is used for the purpose of performing this allocation.

### **Financing**

Financing income attributable to sales-type leases, direct financing leases and loans is recognized on the accrual basis using the effective interest method. Operating lease income is recognized on a straight-line basis over the term of the lease.

### **Best Estimate of Selling Price**

In certain instances, the company is not able to establish VSOE for all elements in a multiple-deliverable arrangement. When VSOE cannot be established, the company attempts to establish the selling price of each element based on TPE. TPE is determined based on competitor prices for similar deliverables when sold separately.

When the company is unable to establish selling price using VSOE or TPE, the company uses BESP in its allocation of arrangement consideration. The objective of BESP is to determine the price at which the company would transact a sale if the product or service were sold on a stand-alone basis. BESP may be used,

for example, if a product is not sold on a stand-alone basis or when the company sells a new product, for which VSOE and TPE does not yet exist, in a multiple-deliverable arrangement prior to selling the new product on a stand-alone basis.

The company determines BESP by considering multiple factors including, but not limited to, overall market conditions, including geographic or regional specific factors, competitive positioning, competitor actions, internal costs, profit objectives and pricing practices. The determination of BESP is a formal process that includes review and approval by the company's management. In addition, the company regularly reviews VSOE and TPE for its products and services, in addition to BESP.

#### **Services Costs**

Recurring operating costs for services contracts are recognized as incurred. For fixed-price design and build contracts, the costs of external hardware and software accounted for under the POC method are deferred and recognized based on the labor costs incurred to date, as a percentage of the total estimated labor costs to fulfill the contract. Certain eligible, nonrecurring costs incurred in the initial phases of outsourcing or other cloud-based services contracts are deferred and subsequently amortized. These costs consist of transition and setup costs related to the installation of systems and processes and are amortized on a straight-line basis over the expected period of benefit, not to exceed the term of the contract. Additionally, fixed assets associated with these contracts are capitalized and depreciated on a straight-line basis over the expected useful life of the asset. If an asset is contract specific, then the depreciation period is the shorter of the useful life of the asset or the contract term. Amounts paid to clients in excess of the fair value of acquired assets used in outsourcing arrangements are deferred and amortized on a straight-line basis as a reduction of revenue over the expected period of benefit not to exceed the term of the contract. The company performs periodic reviews to assess the recoverability of deferred contract transition and setup costs. This review is done by comparing the estimated minimum remaining undiscounted cash flows of a contract to the unamortized contract costs. If such minimum undiscounted cash flows are not sufficient to recover the unamortized costs, an impairment loss is recognized.

Deferred services transition and setup costs were \$2,121 million and \$2,072 million at December 31, 2017 and 2016, respectively. Amortization of deferred services transition and setup costs was estimated at December 31, 2017 to be \$695 million in 2018, \$517 million in 2019, \$354 million in 2020, \$232 million in 2021 and \$323 million thereafter.

Deferred amounts paid to clients in excess of the fair value of acquired assets used in outsourcing or other cloud-based services arrangements were \$163 million and \$160 million at December 31, 2017 and 2016, respectively. Amortization of deferred amounts paid to clients in excess of the fair value of acquired assets is recorded as an offset of revenue and was estimated at December 31, 2017 to be \$65 million in 2018, \$51 million in 2019, \$29 million in 2020, \$13 million in 2021 and \$5 million thereafter. In situations in which an outsourcing contract is terminated, the terms of the contract may require the client to reimburse the company for the recovery of unbilled accounts receivable, unamortized deferred costs incurred to purchase specific assets utilized in the delivery of services and to pay any additional costs incurred by the company to transition the services.

#### **Software Costs**

Costs that are related to the conceptual formulation and design of licensed software programs are expensed as incurred to research, development and engineering expense; costs that are incurred to produce the finished product after technological feasibility has been established are capitalized as an intangible asset. Capitalized amounts are amortized on a straight-line basis over periods ranging up to three years and are recorded in software cost within cost of sales. The company performs periodic reviews to ensure that unamortized program costs remain recoverable from future revenue. Costs to support or service licensed programs are charged to software cost within cost of sales as incurred.

The company capitalizes certain costs that are incurred to purchase or to create and implement internal-use software programs, including software coding, installation, testing and certain data conversions. These capitalized costs are amortized on a straight-line basis over periods ranging up to three years and are recorded in selling, general and administrative expense.

Certain eligible, non-recurring costs incurred in the initial phases of Software-as-a-Service contracts are deferred and amortized over the expected period of benefit, consistent with the policy described for Services Costs. Recurring operating costs in these contracts are recognized as incurred.

#### **Product Warranties**

The company offers warranties for its hardware products that generally range up to three years, with the majority being either one or three years. Estimated costs for standard warranty terms are recognized when revenue is recorded for the related deliverable. The company estimates its warranty costs standard to the deliverable based on historical warranty claim experience and estimates of future spending, and applies this estimate to the revenue stream for products under warranty. Estimated future costs for warranties applicable to revenue recognized in the current period are charged to cost of sales. The warranty liability is reviewed quarterly to verify that it properly reflects the remaining obligation based on the anticipated expenditures over the balance of the obligation period. Adjustments are made when actual warranty claim experience differs from estimates. Costs from fixed-price support or maintenance contracts, including extended warranty contracts, are recognized as incurred.

Revenue from extended warranty contracts is initially recorded as deferred income and subsequently recognized on a straight-line basis over the delivery period. Changes in deferred income for extended warranty contracts, and in the warranty liability for standard warranties, which are included in other accrued expenses and liabilities and other liabilities in the Consolidated Statement of Financial Position, are presented in the following tables:

#### **Standard Warranty Liability**

(\$ in millions)

	2017	2016
Balance at January 1	\$ 156	\$ 181
Current period accruals	172	145
Accrual adjustments to reflect experience	(10)	(6)
Charges incurred	(165)	(164)
<b>Balance at December 31</b>	<b>\$ 152</b>	<b>\$ 156</b>

**Notes to Consolidated Financial Statements**

International Business Machines Corporation and Subsidiary Companies

**Extended Warranty Liability (Deferred Income)**

(\$ in millions)

	2017	2016
Balance at January 1	\$ 531	\$ 538
Revenue deferred for new extended warranty contracts	267	263
Amortization of deferred revenue	(260)	(267)
Other*	28	(4)
<b>Balance at December 31</b>	<b>\$ 566</b>	<b>\$ 531</b>
Current portion	\$ 277	\$ 264
Noncurrent portion	\$ 289	\$ 267

\* Other consists primarily of foreign currency translation adjustments.

**Shipping and Handling**

Costs related to shipping and handling are recognized as incurred and included in cost in the Consolidated Statement of Earnings.

**Expense and Other Income****Selling, General and Administrative**

Selling, general and administrative (SG&A) expense is charged to income as incurred. Expenses of promoting and selling products and services are classified as selling expense and include such items as compensation, advertising, sales commissions and travel. General and administrative expense includes such items as compensation, legal costs, office supplies, non-income taxes, insurance and office rental. In addition, general and administrative expense includes other operating items such as an allowance for credit losses, workforce rebalancing charges for contractually obligated payments to employees terminated in the ongoing course of business, acquisition costs related to business combinations, amortization of certain intangible assets and environmental remediation costs.

**Advertising and Promotional Expense**

The company expenses advertising and promotional costs as incurred. Cooperative advertising reimbursements from vendors are recorded net of advertising and promotional expense in the period in which the related advertising and promotional expense is incurred. Advertising and promotional expense, which includes media, agency and promotional expense, was \$1,445 million, \$1,327 million and \$1,290 million in 2017, 2016 and 2015, respectively, and is recorded in SG&A expense in the Consolidated Statement of Earnings.

**Research, Development and Engineering**

Research, development and engineering (RD&E) costs are expensed as incurred. Software costs that are incurred to produce the finished product after technological feasibility has been established are capitalized as an intangible asset.

**Intellectual Property and Custom Development Income**

The company licenses and sells the rights to certain of its intellectual property (IP) including internally developed patents, trade secrets and technological know-how. Certain IP transactions to third parties are licensing/royalty-based and others are transaction-based sales/other transfers. Income from licensing arrangements is recognized at the inception of the perpetual license term if all revenue recognition criteria have been met. Licensing arrangements include IP partnerships whereby a business partner licenses source code from the company and becomes responsible for developing, maintaining and enhancing the product. The company retains its customers

and go-to-market capability and any royalty cost due to the partner is recognized in cost of sales. The IP partner has the rights to market the product and its derivative works under its own brand and remits royalty to the company on those sales, which are recorded as royalty-based fees. Income from any royalty-based fee arrangements is recognized over time or as the licensee sells future related products (i.e., variable royalty, based upon licensee's revenue). The company also enters into cross-licensing arrangements of patents, and income from these arrangements is recognized when earned. In addition, the company earns income from certain custom development projects for strategic technology partners and specific clients. The company records the income from these projects if the fee is not refundable, is not dependent upon the success of the project and when all recognition criteria have been met.

**Other (Income) and Expense**

Other (income) and expense includes interest income (other than from Global Financing external transactions), gains and losses on certain derivative instruments, gains and losses from securities and other investments, gains and losses from certain real estate transactions, foreign currency transaction gains and losses, gains and losses from the sale of businesses, other than reported as discontinued operations, and amounts related to accretion of asset retirement obligations.

**Business Combinations and****Intangible Assets Including Goodwill**

The company accounts for business combinations using the acquisition method and accordingly, the identifiable assets acquired, the liabilities assumed, and any noncontrolling interest in the acquiree are recorded at their acquisition date fair values. Goodwill represents the excess of the purchase price over the fair value of net assets, including the amount assigned to identifiable intangible assets. The primary drivers that generate goodwill are the value of synergies between the acquired entities and the company and the acquired assembled workforce, neither of which qualifies as a separately identifiable intangible asset. Goodwill recorded in an acquisition is assigned to applicable reporting units based on expected revenues. Identifiable intangible assets with finite lives are amortized over their useful lives. Amortization of completed technology is recorded in cost, and amortization of all other intangible assets is recorded in SG&A expense. Acquisition-related costs, including advisory, legal, accounting, valuation and other costs, are expensed in the periods in which the costs are incurred. The results of operations of acquired businesses are included in the Consolidated Financial Statements from the acquisition date.

**Impairment**

Long-lived assets, other than goodwill and indefinite-lived intangible assets, are tested for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. The impairment test is based on undiscounted cash flows and, if impaired, the asset is written down to fair value based on either discounted cash flows or appraised values. Goodwill and indefinite-lived intangible assets are tested at least annually, in the fourth quarter, for impairment and whenever changes in circumstances indicate an impairment may exist. Goodwill is tested at the reporting unit level which is the operating segment, or a business, which is one level below that operating segment (the "component" level) if discrete financial information is prepared and regularly

reviewed by management at the segment level. Components are aggregated as a single reporting unit if they have similar economic characteristics.

#### **Depreciation and Amortization**

Property, plant and equipment are carried at cost and depreciated over their estimated useful lives using the straight-line method. The estimated useful lives of certain depreciable assets are as follows: buildings, 30 to 50 years; building equipment, 10 to 20 years; land improvements, 20 years; production, engineering, office and other equipment, 2 to 20 years; and information technology equipment, 1.5 to 5 years. Leasehold improvements are amortized over the shorter of their estimated useful lives or the related lease term, rarely exceeding 25 years.

Capitalized software costs incurred or acquired after technological feasibility has been established are amortized over periods ranging up to 3 years. Capitalized costs for internal-use software are amortized on a straight-line basis over periods ranging up to 3 years. Other intangible assets are amortized over periods between 1 and 7 years.

#### **Environmental**

The cost of internal environmental protection programs that are preventative in nature are expensed as incurred. When a cleanup program becomes likely, and it is probable that the company will incur cleanup costs and those costs can be reasonably estimated, the company accrues remediation costs for known environmental liabilities. The company's maximum exposure for all environmental liabilities cannot be estimated and no amounts are recorded for environmental liabilities that are not probable or estimable.

#### **Asset Retirement Obligations**

Asset retirement obligations (ARO) are legal obligations associated with the retirement of long-lived assets. These liabilities are initially recorded at fair value and the related asset retirement costs are capitalized by increasing the carrying amount of the related assets by the same amount as the liability. Asset retirement costs are subsequently depreciated over the useful lives of the related assets. Subsequent to initial recognition, the company records period-to-period changes in the ARO liability resulting from the passage of time in interest expense and revisions to either the timing or the amount of the original expected cash flows to the related assets.

#### **Defined Benefit Pension and Nonpension Postretirement Benefit Plans**

The funded status of the company's defined benefit pension plans and nonpension postretirement benefit plans (retirement-related benefit plans) is recognized in the Consolidated Statement of Financial Position. The funded status is measured as the difference between the fair value of plan assets and the benefit obligation at December 31, the measurement date. For defined benefit pension plans, the benefit obligation is the projected benefit obligation (PBO), which represents the actuarial present value of benefits expected to be paid upon retirement based on employee services already rendered and estimated future compensation levels. For the nonpension postretirement benefit plans, the benefit obligation is the accumulated postretirement benefit obligation (APBO), which represents the actuarial present value of postretirement benefits attributed to employee services already rendered. The fair value of plan assets represents the current market value of assets held in an irrevocable trust fund,

held for the sole benefit of participants, which are invested by the trust fund. Overfunded plans, with the fair value of plan assets exceeding the benefit obligation, are aggregated and recorded as a prepaid pension asset equal to this excess. Underfunded plans, with the benefit obligation exceeding the fair value of plan assets, are aggregated and recorded as a retirement and nonpension postretirement benefit obligation equal to this excess.

The current portion of the retirement and nonpension post-retirement benefit obligations represents the actuarial present value of benefits payable in the next 12 months exceeding the fair value of plan assets, measured on a plan-by-plan basis. This obligation is recorded in compensation and benefits in the Consolidated Statement of Financial Position.

Net periodic pension and nonpension postretirement benefit cost/(income) is recorded in the Consolidated Statement of Earnings and includes service cost, interest cost, expected return on plan assets, amortization of prior service costs/(credits) and (gains)/losses previously recognized as a component of OCI and amortization of the net transition asset remaining in accumulated other comprehensive income/(loss) (AOCI). Service cost represents the actuarial present value of participant benefits earned in the current year. Interest cost represents the time value of money cost associated with the passage of time. Certain events, such as changes in the employee base, plan amendments and changes in actuarial assumptions, result in a change in the benefit obligation and the corresponding change in OCI. The result of these events is amortized as a component of net periodic cost/(income) over the service lives or life expectancy of the participants, depending on the plan, provided such amounts exceed thresholds which are based upon the benefit obligation or the value of plan assets. Net periodic cost/(income) is recorded in Cost, SG&A and RD&E in the Consolidated Statement of Earnings based on the employees' respective functions. Refer to note B, "Accounting Changes", on pages 94 to 96, for additional information on the presentation change relating to pension costs beginning on January 1, 2018.

(Gains)/losses and prior service costs/(credits) are not recognized as a component of net periodic cost/(income) in the Consolidated Statement of Earnings as they arise, but are recognized as a component of OCI in the Consolidated Statement of Comprehensive Income. Those (gains)/losses and prior service costs/(credits) are subsequently recognized as a component of net periodic cost/(income) pursuant to the recognition and amortization provisions of applicable accounting guidance. (Gains)/losses arise as a result of differences between actual experience and assumptions or as a result of changes in actuarial assumptions. Prior service costs/(credits) represent the cost of benefit changes attributable to prior service granted in plan amendments.

The measurement of benefit obligations and net periodic cost/(income) is based on estimates and assumptions approved by the company's management. These valuations reflect the terms of the plans and use participant-specific information such as compensation, age and years of service, as well as certain assumptions, including estimates of discount rates, expected return on plan assets, rate of compensation increases, interest crediting rates and mortality rates.

## Notes to Consolidated Financial Statements

International Business Machines Corporation and Subsidiary Companies

### **Defined Contribution Plans**

The company's contribution for defined contribution plans is recorded when the employee renders service to the company. The charge is recorded in Cost, SG&A and RD&E in the Consolidated Statement of Earnings based on the employees' respective functions.

### **Stock-Based Compensation**

Stock-based compensation represents the cost related to stock-based awards granted to employees. The company measures stock-based compensation cost at the grant date, based on the estimated fair value of the award and recognizes the cost on a straight-line basis (net of estimated forfeitures) over the employee requisite service period. The company grants its employees Restricted Stock Units (RSUs), including Retention Restricted Stock Units (RRSUs) and Performance Share Units (PSUs) and periodically grants stock options. RSUs are stock awards granted to employees that entitle the holder to shares of common stock as the award vests, typically over a one- to five-year period. The fair value of the awards is determined and fixed on the grant date based on the company's stock price, adjusted for the exclusion of dividend equivalents. The company estimates the fair value of stock options using a Black-Scholes valuation model. Stock-based compensation cost is recorded in Cost, SG&A, and RD&E in the Consolidated Statement of Earnings based on the employees' respective functions.

The company records deferred tax assets for awards that result in deductions on the company's income tax returns, based on the amount of compensation cost recognized and the statutory tax rate in the jurisdiction in which it will receive a deduction. The differences between the deferred tax assets recognized for financial reporting purposes and the actual tax deduction reported on the income tax return are recorded as a benefit or expense to the provision for income taxes in the Consolidated Statement of Earnings.

### **Income Taxes**

Income tax expense is based on reported income before income taxes. Deferred income taxes reflect the tax effect of temporary differences between asset and liability amounts that are recognized for financial reporting purposes and the amounts that are recognized for income tax purposes. These deferred taxes are measured by applying currently enacted tax laws. Valuation allowances are recognized to reduce deferred tax assets to the amount that will more likely than not be realized. In assessing the need for a valuation allowance, management considers all available evidence for each jurisdiction including past operating results, estimates of future taxable income and the feasibility of ongoing tax planning strategies. When the company changes its determination as to the amount of deferred tax assets that can be realized, the valuation allowance is adjusted with a corresponding impact to income tax expense in the period in which such determination is made.

The company recognizes tax liabilities when, despite the company's belief that its tax return positions are supportable, the company believes that certain positions may not be fully sustained upon review by tax authorities. Benefits from tax positions are measured at the largest amount of benefit that is greater than 50 percent likely of being realized upon settlement. The current portion of tax liabilities is included in taxes and the noncurrent portion of tax liabilities is included in other liabilities in the Consolidated Statement of Financial Position. To

the extent that new information becomes available which causes the company to change its judgment regarding the adequacy of existing tax liabilities, such changes to tax liabilities will impact income tax expense in the period in which such determination is made. Interest and penalties, if any, related to accrued liabilities for potential tax assessments are included in income tax expense.

### **Translation of Non-U.S. Currency Amounts**

Assets and liabilities of non-U.S. subsidiaries that have a local functional currency are translated to United States (U.S.) dollars at year-end exchange rates. Translation adjustments are recorded in OCI. Income and expense items are translated at weighted-average rates of exchange prevailing during the year.

Inventories, property, plant and equipment—net and other non-monetary assets and liabilities of non-U.S. subsidiaries and branches that operate in U.S. dollars are translated at the approximate exchange rates prevailing when the company acquired the assets or liabilities. All other assets and liabilities denominated in a currency other than U.S. dollars are translated at year-end exchange rates with the transaction gain or loss recognized in other (income) and expense. Income and expense items are translated at the weighted-average rates of exchange prevailing during the year. These translation gains and losses are included in net income for the period in which exchange rates change.

### **Derivative Financial Instruments**

Derivatives are recognized in the Consolidated Statement of Financial Position at fair value and are reported in prepaid expenses and other current assets, investments and sundry assets, other accrued expenses and liabilities or other liabilities. Classification of each derivative as current or noncurrent is based upon whether the maturity of the instrument is less than or greater than 12 months. To qualify for hedge accounting, the company requires that the instruments be effective in reducing the risk exposure that they are designated to hedge. For instruments that hedge cash flows, hedge designation criteria also require that it be probable that the underlying transaction will occur. Instruments that meet established accounting criteria are formally designated as hedges. These criteria demonstrate that the derivative is expected to be highly effective at offsetting changes in fair value or cash flows of the underlying exposure both at inception of the hedging relationship and on an ongoing basis. The method of assessing hedge effectiveness and measuring hedge ineffectiveness is formally documented at hedge inception. The company assesses hedge effectiveness and measures hedge ineffectiveness at least quarterly throughout the designated hedge period.

Where the company applies hedge accounting, the company designates each derivative as a hedge of: (1) the fair value of a recognized financial asset or liability, or of an unrecognized firm commitment (fair value hedge attributable to interest rate or foreign currency risk); (2) the variability of anticipated cash flows of a forecasted transaction, or the cash flows to be received or paid related to a recognized financial asset or liability (cash flow hedge attributable to interest rate or foreign currency risk); or (3) a hedge of a long-term investment (net investment hedge) in a foreign operation. In addition, the company may enter into derivative contracts that economically hedge certain of its risks, even though hedge accounting does not apply or the company elects not to apply hedge accounting. In these cases, there exists

a natural hedging relationship in which changes in the fair value of the derivative, which are recognized currently in net income, act as an economic offset to changes in the fair value of the underlying hedged item(s).

Changes in the fair value of a derivative that is designated as a fair value hedge, along with offsetting changes in the fair value of the underlying hedged exposure, are recorded in earnings each period. For hedges of interest rate risk, the fair value adjustments are recorded as adjustments to interest expense and cost of financing in the Consolidated Statement of Earnings. For hedges of currency risk associated with recorded financial assets or liabilities, derivative fair value adjustments are recognized in other (income) and expense in the Consolidated Statement of Earnings. Changes in the fair value of a derivative that is designated as a cash flow hedge are recorded, net of applicable taxes, in OCI, in the Consolidated Statement of Comprehensive Income. When net income is affected by the variability of the underlying cash flow, the applicable offsetting amount of the gain or loss from the derivative that is deferred in AOCI is released to net income and reported in interest expense, cost, SG&A expense or other (income) and expense in the Consolidated Statement of Earnings based on the nature of the underlying cash flow hedged. Effectiveness for net investment hedging derivatives is measured on a spot-to-spot basis. The effective portion of changes in the fair value of net investment hedging derivatives and other non-derivative financial instruments designated as net investment hedges are recorded as foreign currency translation adjustments in AOCI. Changes in the fair value of the portion of a net investment hedging derivative excluded from the effectiveness assessment are recorded in interest expense. If the underlying hedged item in a fair value hedge ceases to exist, all changes in the fair value of the derivative are included in net income each period until the instrument matures. When the derivative transaction ceases to exist, a hedged asset or liability is no longer adjusted for changes in its fair value except as required under other relevant accounting standards.

Derivatives that are not designated as hedges, as well as changes in the fair value of derivatives that do not effectively offset changes in the fair value of the underlying hedged item throughout the designated hedge period (collectively, “ineffectiveness”), are recorded in earnings for each period and are primarily reported in other (income) and expense. When a cash flow hedging relationship is discontinued, the net gain or loss in AOCI must generally remain in AOCI until the item that was hedged affects earnings. However, when it is probable that a forecasted transaction will not occur by the end of the originally specified time period or within an additional two-month period thereafter, the net gain or loss in AOCI must be reclassified into earnings immediately.

The company reports cash flows arising from derivative financial instruments designated as fair value or cash flow hedges consistent with the classification of cash flows from the underlying hedged items that these derivatives are hedging. Accordingly, the cash flows associated with derivatives designated as fair value or cash flow hedges are classified in cash flows from operating activities in the Consolidated Statement of Cash Flows. Cash flows from derivatives designated as net investment hedges and derivatives that do not qualify as hedges are reported in cash flows from investing activities in the Consolidated Statement of Cash Flows. For currency swaps

designated as hedges of foreign currency denominated debt (included in the company’s debt risk management program as addressed in note D, “Financial Instruments,” on pages 100 to 107), cash flows directly associated with the settlement of the principal element of these swaps are reported in payments to settle debt in cash flows from financing activities in the Consolidated Statement of Cash Flows.

#### **Financial Instruments**

In determining the fair value of its financial instruments, the company uses a variety of methods and assumptions that are based on market conditions and risks existing at each balance sheet date. See note D, “Financial Instruments,” on pages 100 to 107 for further information. All methods of assessing fair value result in a general approximation of value, and such value may never actually be realized.

#### **Fair Value Measurement**

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. Under this guidance, the company is required to classify certain assets and liabilities based on the following fair value hierarchy:

- Level 1—Quoted prices (unadjusted) in active markets for identical assets or liabilities that can be accessed at the measurement date;
- Level 2—Inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly; and
- Level 3—Unobservable inputs for the asset or liability.

The guidance requires the use of observable market data if such data is available without undue cost and effort.

When available, the company uses unadjusted quoted market prices in active markets to measure the fair value and classifies such items within Level 1. If quoted market prices are not available, fair value is based upon internally developed models that use current market-based or independently sourced market parameters such as interest rates and currency rates. Items valued using internally generated models are classified according to the lowest level input or value driver that is significant to the valuation.

The determination of fair value considers various factors including interest rate yield curves and time value underlying the financial instruments. For derivatives and debt securities, the company uses a discounted cash flow analysis using discount rates commensurate with the duration of the instrument.

In determining the fair value of financial instruments, the company considers certain market valuation adjustments to the “base valuations” calculated using the methodologies described below for several parameters that market participants would consider in determining fair value:

- Counterparty credit risk adjustments are applied to financial instruments, taking into account the actual credit risk of a counterparty as observed in the credit default swap market to determine the true fair value of such an instrument.

## Notes to Consolidated Financial Statements

International Business Machines Corporation and Subsidiary Companies

- Credit risk adjustments are applied to reflect the company's own credit risk when valuing all liabilities measured at fair value. The methodology is consistent with that applied in developing counterparty credit risk adjustments, but incorporates the company's own credit risk as observed in the credit default swap market.

As an example, the fair value of derivatives is derived utilizing a discounted cash flow model that uses observable market inputs such as known notional value amounts, yield curves, spot and forward exchange rates as well as discount rates. These inputs relate to liquid, heavily traded currencies with active markets which are available for the full term of the derivative.

Certain financial assets are measured at fair value on a non-recurring basis. These assets include equity method investments that are recognized at fair value at the measurement date to the extent that they are deemed to be other-than-temporarily impaired. Certain assets that are measured at fair value on a recurring basis can be subject to nonrecurring fair value measurements. These assets include available-for-sale equity investments that are deemed to be other-than-temporarily impaired. In the event of an other-than-temporary impairment of a financial instrument, fair value is measured using a model described above.

Accounting guidance permits the measurement of eligible financial assets, financial liabilities and firm commitments at fair value, on an instrument-by-instrument basis, that are otherwise not permitted to be accounted for at fair value under other accounting standards. This election is irrevocable. The company has not applied the fair value option to any eligible assets or liabilities.

### Cash Equivalents

All highly liquid investments with maturities of three months or less at the date of purchase are considered to be cash equivalents.

### Marketable Securities

Debt securities included in current assets represent securities that are expected to be realized in cash within one year of the balance sheet date. Long-term debt securities that are not expected to be realized in cash within one year and alliance equity securities are included in investments and sundry assets. Debt and marketable equity securities are considered available for sale and are reported at fair value with unrealized gains and losses, net of applicable taxes, in OCI. The realized gains and losses for available-for-sale securities are included in other (income) and expense in the Consolidated Statement of Earnings. Realized gains and losses are calculated based on the specific identification method.

In determining whether an other-than-temporary decline in market value has occurred, the company considers the duration that, and extent to which, the fair value of the investment is below its cost, the financial condition and near-term prospects of the issuer or underlying collateral of a security; and the company's intent and ability to retain the security in order to allow for an anticipated recovery in fair value. Other-than-temporary declines in fair value from amortized cost for available-for-sale equity and debt securities that the company intends to sell or would more likely than not be required to sell before the expected recovery of the amortized cost basis are charged to other (income) and

expense in the period in which the loss occurs. For debt securities that the company has no intent to sell and believes that it more likely than not will not be required to sell prior to recovery, only the credit loss component of the impairment is recognized in other (income) and expense, while the remaining loss is recognized in OCI. The credit loss component recognized in other (income) and expense is identified as the amount of the principal cash flows not expected to be received over the remaining term of the debt security as projected using the company's cash flow projections.

### Inventories

Raw materials, work in process and finished goods are stated at the lower of average cost or net realizable value. Cash flows related to the sale of inventories are reflected in net cash provided by operating activities in the Consolidated Statement of Cash Flows.

### Allowance for Credit Losses

Receivables are recorded concurrent with billing and shipment of a product and/or delivery of a service to customers. A reasonable estimate of probable net losses on the value of customer receivables is recognized by establishing an allowance for credit losses.

### Notes and Accounts Receivable—Trade

An allowance for uncollectible trade receivables is estimated based on a combination of write-off history, aging analysis and any specific, known troubled accounts.

### Factored Receivables

The company enters into various factoring agreements with third-party financial institutions to sell its receivables (includes notes and accounts receivable-trade, financing receivables and other accounts receivables) under non-recourse agreements. These transactions are accounted for as a reduction in receivables and are considered sold when: (1) they are transferred beyond the reach of the company and its creditors; (2) the purchaser has the right to pledge or exchange the receivables; and (3) the company has surrendered control over the transferred receivables. The proceeds from these arrangements are reflected as cash provided by operating activities in the Consolidated Statement of Cash Flows.

The gross amounts factored (the gross proceeds) under these programs (primarily relating to notes and accounts receivable-trade) for the three and twelve months ended December 31, 2017 were \$0.7 billion and \$1.9 billion, respectively, compared to \$0.4 billion and \$1.2 billion for the three and twelve months ended December 31, 2016, respectively. The fees and the net gains and losses associated with the transfer of receivables were not material for any of the periods presented.

### Financing Receivables

Financing receivables include sales-type leases, direct financing leases and loans. Leases are accounted for in accordance with lease accounting standards. Loan receivables, including installment payment plans, which are generally unsecured, are primarily for software and services. Loans are financial assets which are recorded at amortized cost which approximates fair value. Commercial financing receivables are carried at amortized

cost, which approximates fair value. These receivables are for working capital financing to suppliers, distributors and resellers of IBM and OEM IT products and services. The company determines its allowances for credit losses on financing receivables based on two portfolio segments: lease receivables and loan receivables. The company further segments the portfolio into three classes: Americas, Europe/Middle East/Africa (EMEA) and Asia Pacific.

When calculating the allowances, the company considers its ability to mitigate a potential loss by repossessing leased equipment and by considering the current fair market value of any other collateral. The value of the equipment is the net realizable value. The allowance for credit losses for capital leases, installment payment plan receivables and customer loans includes an assessment of the entire balance of the capital lease or loan, including amounts not yet due. The methodologies that the company uses to calculate its receivables reserves, which are applied consistently to its different portfolios, are as follows:

**Individually Evaluated**—The company reviews all financing receivables considered at risk on a quarterly basis. The review primarily consists of an analysis based upon current information available about the client, such as financial statements, news reports, published credit ratings, current market-implied credit analysis, as well as the current economic environment, collateral net of repossession cost and prior collection history. For loans that are collateral dependent, impairment is measured using the fair value of the collateral when foreclosure is probable. Using this information, the company determines the expected cash flow for the receivable and calculates an estimate of the potential loss and the probability of loss. For those accounts in which the loss is probable, the company records a specific reserve.

**Collectively Evaluated**—The company records an unallocated reserve that is calculated by applying a reserve rate to its different portfolios, excluding accounts that have been individually evaluated and specifically reserved. This reserve rate is based upon credit rating, probability of default, term, characteristics (lease/loan) and loss history. Factors that could result in actual receivable losses that are materially different from the estimated reserve include significant changes in the economy, or a sudden change in the economic health of a significant client in the company's receivables portfolio.

#### Other Credit-Related Policies

**Past Due**—The company views receivables as past due when payment has not been received after 90 days, measured from the original billing date.

**Non-Accrual**—Non-accrual assets include those receivables (impaired loans or nonperforming leases) with specific reserves and other accounts for which it is likely that the company will be unable to collect all amounts due according to original terms of the lease or loan agreement. Income recognition is discontinued on these receivables. Cash collections are first applied as a reduction to principal outstanding. Any cash received in excess of principal payments outstanding is recognized as interest income. Receivables may be removed from non-accrual status, if appropriate, based upon changes in client circumstances, such as a sustained history of payments.

**Impaired Loans**—The company evaluates all financing receivables considered at-risk, including loans, for impairment on a quarterly basis. The company considers any receivable with an individually evaluated reserve as an impaired loan. Depending on the level of impairment, loans will also be placed on non-accrual status as appropriate. Client loans are primarily for software and services and are unsecured. These receivables are subjected to credit analysis to evaluate the associated risk and, when appropriate, actions are taken to mitigate risks in these agreements which include covenants to protect against credit deterioration during the life of the obligation.

**Write-Off**—Receivable losses are charged against the allowance in the period in which the receivable is deemed uncollectible. Subsequent recoveries, if any, are credited to the allowance. Write-offs of receivables and associated reserves occur to the extent that the customer is no longer in operation and/or, there is no reasonable expectation of additional collections or repossession. The company's assessments factor in the history of collections and write-offs in specific countries and across the portfolio.

#### Estimated Residual Values of Lease Assets

The recorded residual values of lease assets are estimated at the inception of the lease to be the expected fair value of the assets at the end of the lease term. The company periodically reassesses the realizable value of its lease residual values. Any anticipated increases in specific future residual values are not recognized before realization through remarketing efforts. Anticipated decreases in specific future residual values that are considered to be other-than-temporary are recognized immediately upon identification and are recorded as an adjustment to the residual value estimate. For sales-type and direct-financing leases, this reduction lowers the recorded net investment and is recognized as a loss charged to financing income in the period in which the estimate is changed, as well as an adjustment to unearned income to reduce future-period financing income.

#### Common Stock

Common stock refers to the \$.20 par value per share capital stock as designated in the company's Certificate of Incorporation. Treasury stock is accounted for using the cost method. When treasury stock is reissued, the value is computed and recorded using a weighted-average basis.

#### Earnings Per Share of Common Stock

Earnings per share (EPS) is computed using the two-class method. The two-class method determines EPS for each class of common stock and participating securities according to dividends and dividend equivalents and their respective participation rights in undistributed earnings. Basic EPS of common stock is computed by dividing net income by the weighted-average number of common shares outstanding for the period. Diluted EPS of common stock is computed on the basis of the weighted-average number of shares of common stock plus the effect of dilutive potential common shares outstanding during the period using the treasury stock method. Dilutive potential common shares include outstanding stock awards, convertible notes and stock options.

**NOTE B. ACCOUNTING CHANGES****New Standards to be Implemented**

In February 2018, the Financial Accounting Standards Board (FASB) issued guidance that allows entities to elect an option to reclassify the stranded tax effects related to the application of U.S. tax reform from accumulated other comprehensive income/(loss) to retained earnings. The guidance is effective January 1, 2019 with early adoption permitted. The company is currently evaluating whether to elect the option and the impact of the new guidance on its consolidated financial results.

In August 2017, the FASB issued guidance to simplify the application of current hedge accounting in certain areas, better portray the economic results of an entity's risk management activities in its financial statements and make targeted improvements to presentation and disclosure requirements. The guidance is effective January 1, 2019 with early adoption permitted. The company adopted the guidance as of January 1, 2018 and does not expect a material impact in the consolidated financial results.

In March 2017, the FASB issued guidance that impacts the presentation of net periodic pension and postretirement benefit costs. Under the guidance, the service cost component of net benefit cost will continue to be presented within cost, selling general and administrative expense and research, development and engineering expense in the Consolidated Statement of Earnings, unless eligible for capitalization. The other components of net benefit cost will be presented separately from service cost within other (income) and expense in the Consolidated Statement of Earnings. This presentation change will be applied retrospectively upon adoption. The guidance is effective January 1, 2018 with early adoption permitted. The company adopted the guidance as of the effective date. The guidance is primarily a change in financial statement presentation and is not expected to have a material impact in the consolidated financial results. The change will have an impact on gross profit margins.

In June 2016, the FASB issued guidance for credit impairment based on an expected loss model rather than an incurred loss model. The guidance requires the consideration of all available relevant information when estimating expected credit losses, including past events, current conditions and forecasts and their implications for expected credit losses. The guidance is effective January 1, 2020 with a one year early adoption permitted. The company has established an implementation team and is evaluating the impact of the new guidance.

The FASB issued guidance in February 2016, with amendments in 2018, which changes the accounting for leases. The guidance requires lessees to recognize right-of-use assets and lease liabilities for most leases in the Consolidated Statement of Financial Position. The guidance makes some changes to lessor accounting, including the elimination of the use of third-party residual value guarantee insurance in the capital lease test, and overall aligns with the new revenue recognition guidance. The guidance also requires qualitative and quantitative disclosures to assess the amount, timing and uncertainty of cash flows arising from leases. There are certain practical expedients that can be elected which the company is currently evaluating for application. The guidance is effective January 1, 2019 and early adoption is permitted. The company will adopt the guidance as of the effective date.

A cross-functional implementation team has been established which is evaluating the lease portfolio, system, process and policy change requirements. The company has made progress in gathering the necessary data elements for the lease population and a system provider has been selected, with system configuration and implementation underway. The company is currently evaluating the impact of the new guidance on its consolidated financial results and expects it will have a material impact on the Consolidated Statement of Financial Position. The company is currently planning on electing the package of practical expedients to not reassess prior conclusions related to contracts containing leases, leases classification, and initial direct costs and is evaluating the other practical expedients available under the guidance.

The company's operating lease commitments were \$6.6 billion at December 31, 2017. In 2017, the use of third-party residual value guarantee insurance resulted in the company recognizing \$452 million of sales-type lease revenue that would otherwise have been recognized over the lease period as operating lease revenue. The company continues to assess the potential impacts of the guidance, including normal ongoing business dynamics or potential changes in contracting terms.

In January 2016, the FASB issued guidance which addresses aspects of recognition, measurement, presentation and disclosure of financial instruments. Certain equity investments will be measured at fair value with changes recognized in net income. The amendment also simplifies the impairment test of equity investments that lack readily determinable fair value. The guidance is effective January 1, 2018 and early adoption was not permitted except for limited provisions. The company adopted the guidance on the effective date. The guidance is not expected to have a material impact in the consolidated financial results.

The FASB issued guidance on the recognition of revenue from contracts with customers in May 2014 with amendments in 2015 and 2016. Revenue recognition will depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. The guidance also requires disclosures regarding the nature, amount, timing and uncertainty of revenue and cash flows arising from contracts with customers. The guidance permits two methods of adoption: retrospectively to each prior reporting period presented, or retrospectively with the cumulative effect of initially applying the guidance recognized at the date of initial application (the cumulative catch-up transition method). The company adopted the guidance effective January 1, 2018 using the cumulative catch-up transition method.

Given the scope of work required to implement the recognition and disclosure requirements under the new standard, the company began its assessment process in 2014 and has completed its changes to policy, processes, systems and controls. This also included the assessment of data availability and presentation necessary to meet the additional disclosure requirements of the guidance in the Notes to the Consolidated Financial Statements beginning in the first quarter of 2018.

The company expects revenue recognition for its broad portfolio of hardware, software and services offerings to remain largely unchanged. However, the guidance is expected to change the timing of revenue recognition in certain areas, including recognizing revenue for certain software licenses over time versus at a point in time, in limited circumstances. These impacts are not expected to be material. The company expects to continue to recognize revenue for term license (recurring license charge) software arrangements on a monthly basis over the period that the client is entitled to use the license due to the contractual terms in these arrangements. Since the company currently expenses sales commissions as incurred, the requirement in the new standard to capitalize certain in-scope sales commissions will result in an accounting change for the company. This change is not expected to be material to the consolidated financial results, with no impact to cash flows.

At January 1, 2018, \$557 million was reclassified from notes and accounts receivable-trade and deferred income-current to prepaid expenses and other current assets to establish the opening balance for net contract assets. In-scope sales commission costs previously recorded in the Consolidated Statement of Earnings were capitalized in accordance with the transition guidance, in the amount of \$737 million. Deferred income of \$29 million was recorded for certain software licenses that will be recognized over time versus at a point in time. Additionally, net deferred taxes was reduced \$184 million in the Consolidated Statement of Financial Position, resulting in a cumulative-effect net increase to retained earnings of \$524 million. The amortization of capitalized sales commissions compared to the previous method of recognition on an as-incurred basis is not expected to have a material impact to the company's consolidated financial results.

#### **Standards Implemented**

In January 2017, the FASB issued guidance which clarifies the definition of a business. The guidance provides a more robust framework to use in determining when a set of assets and activities acquired or sold is a business. The guidance was effective January 1, 2018 and early adoption was permitted. The company adopted the guidance effective January 1, 2017, and it did not have a material impact in the consolidated financial results.

In October 2016, the FASB issued guidance which requires an entity to recognize the income tax consequences of intra-entity transfers of assets, other than inventory, at the time of transfer. Assets within the scope of the guidance include intellectual property and property, plant and equipment. The guidance was effective January 1, 2018 and early adoption was permitted. The company adopted the guidance on January 1, 2017 using the required modified retrospective method. At adoption, \$95 million and \$47 million were reclassified from investments and sundry assets and prepaid expenses and other current assets, respectively into retained earnings. Additionally, net deferred taxes of \$244 million were established in deferred taxes in the Consolidated Statement of Financial Position, resulting in a cumulative-effect net increase to retained earnings of \$102 million. In January 2017, the company had one transaction that generated a \$582 million benefit to income tax expense, income

from continuing operations and net income and a benefit to both basic and diluted earnings per share of \$0.62 per share for the year ended December 31, 2017. There was no other impact in the consolidated financial results for the year ended December 31, 2017. The ongoing impact of this guidance will be dependent on any transaction that is within its scope.

In March 2016, the FASB issued guidance which changes the accounting for share-based payment transactions, including the income tax consequences, classification of awards as either equity or liabilities and classification in the Consolidated Statement of Cash Flows. The guidance was effective and adopted by the company on January 1, 2017, and it did not have a material impact in the Consolidated Statement of Financial Position. The ongoing impact of the guidance could result in increased volatility in the provision for income taxes and earnings per share in the Consolidated Statement of Earnings, depending on the company's share price at exercise or vesting of share-based awards compared to grant date, however these impacts are not expected to be material. These impacts are recorded on a prospective basis. The company continues to estimate forfeitures in conjunction with measuring stock-based compensation cost. The guidance also requires cash payments on behalf of employees for shares directly withheld for taxes to be presented as financing outflows in the Consolidated Statement of Cash Flows. Prior to adoption, the company reported this activity as an operating cash outflow and as a result, prior periods have been reclassified as required. The FASB also issued guidance in May 2017, which relates to the accounting for modifications of share-based payment awards. The company adopted the guidance in the second quarter of 2017. The guidance had no impact in the consolidated financial results.

In September 2015, the FASB issued guidance eliminating the requirement that an acquirer in a business combination account for a measurement-period adjustment retrospectively. Instead, an acquirer will recognize a measurement-period adjustment during the period in which the amount of the adjustment is determined. In addition, the portion of the amount recorded in current-period earnings by line item that would have been recorded in previous reporting periods if the adjustment to the provisional amounts had been recognized as of the acquisition date should be presented separately on the face of the income statement or disclosed in the notes. The guidance was effective January 1, 2016 on a prospective basis. The guidance did not have a material impact in the consolidated financial results.

In May 2015, the FASB issued guidance which removed the requirement to categorize within the fair value hierarchy all investments for which fair value is measured using the net asset value per share practical expedient. The amendments also removed the requirement to make certain disclosures for all investments that are eligible to be measured at fair value using the net asset value per share practical expedient. Rather, those disclosures are limited to investments for which the entity has elected to measure the fair value using that practical expedient. The guidance was effective January 1, 2016. The guidance was a change in disclosure only and did not have an impact in the consolidated financial results.

## Notes to Consolidated Financial Statements

International Business Machines Corporation and Subsidiary Companies

In April 2015, the FASB issued guidance about whether a cloud computing arrangement includes a software license. If a cloud computing arrangement includes a software license, then the customer should account for the software license element of the arrangement consistent with the acquisition of other software licenses. If a cloud computing arrangement does not include a software license, the customer should account for the arrangement as a services contract. All software licenses recognized under this guidance will be accounted for consistent with other licenses of intangible assets. The guidance was effective January 1, 2016 and the company adopted it on a prospective basis. The guidance did not have a material impact in the consolidated financial results.

### NOTE C. ACQUISITIONS/DIVESTITURES

#### Acquisitions

Purchase price consideration for all acquisitions, as reflected in the tables in this note, was paid primarily in cash. All acquisitions are reported in the Consolidated Statement of Cash Flows net of acquired cash and cash equivalents.

#### 2017

In 2017, the company completed five acquisitions at an aggregate cost of \$134 million. All of these acquisitions were for 100 percent of the acquired businesses.

The Technology Services & Cloud Platforms segment completed acquisitions of three businesses: in the first quarter, Agile 3 Solutions, LLC (Agile 3 Solutions), a privately held business; in the third quarter, the cloud and managed hosting services business from a large U.S. telecommunications company, and Cloudigo Ltd. (Cloudigo), a privately held business. The Cognitive Solutions segment completed the acquisition of one privately held business: in the second quarter, XCC Web Content & Custom Apps Extension (XCC) from TIMETOACT Software & Consulting GmbH. Global Business Services (GBS) completed the acquisition of one privately held business: in the fourth quarter, Vivant Digital (Vivant).

Each acquisition is expected to enhance the company's portfolio of product and services capabilities. Agile 3 Solutions is a developer of software used by C-Suite and senior executives to better visualize, understand and manage risks associated with the protection of sensitive data and adds capabilities to the company's security portfolio. The acquisition of the cloud and managed hosting services business of a large U.S. telecommunications company strengthens the company's services portfolio and aligns with its cloud strategy. Cloudigo brings talent and technology that aligns closely with the company's cloud platform investments in advanced network processing. XCC's technology enhances IBM's Connections Cloud platform by providing a single, accessible engagement center for sharing content. Vivant extends the strategy and design expertise of IBM Interactive Experience (IBM iX) and helps accelerate clients' digital transformations.

The following table reflects the purchase price related to these acquisitions and the resulting purchase price allocations as of December 31, 2017.

#### 2017 Acquisitions

	(\$ in millions)	Amortization Life (in Years)	Total Acquisitions
Current assets	\$ 18		
Fixed assets/noncurrent assets	69		
Intangible assets			
Goodwill	N/A	16	
Completed technology	5	9	
Client relationships	5–7	64	
Patents/trademarks	1–5	1	
<b>Total assets acquired</b>	<b>177</b>		
Current liabilities	(9)		
Noncurrent liabilities	(34)		
<b>Total liabilities assumed</b>	<b>(43)</b>		
<b>Total purchase price</b>	<b>\$134</b>		

N/A—Not applicable

The acquisitions were accounted for as business combinations using the acquisition method, and accordingly, the identifiable assets acquired, the liabilities assumed, and any noncontrolling interest in the acquired entity were recorded at their estimated fair values at the date of acquisition. The primary items that generated the goodwill are the value of the synergies between the acquired businesses and IBM and the acquired assembled workforce, neither of which qualify as an amortizable intangible asset.

The overall weighted-average life of the identified amortizable intangible assets acquired is 6.6 years. These identified intangible assets will be amortized on a straight-line basis over their useful lives. Goodwill of \$13 million has been assigned to the Technology Services & Cloud Platforms segment and goodwill of \$3 million has been assigned to the Cognitive Solutions segment. It is expected that approximately 50 percent of the goodwill will be deductible for tax purposes.

#### 2016

In 2016, the company completed fifteen acquisitions at an aggregate cost of \$5,899 million.

**The Weather Company (TWC)**—On January 29, 2016, the company completed the acquisition of TWC's B2B, mobile and cloud-based Web-properties, weather.com, Weather Underground, The Weather Company brand and WSI, its global business-to-business brand, for cash consideration of \$2,278 million. The cable television segment was not acquired by IBM, but is licensing weather forecast data and analytics from IBM under a long-term contract. TWC was a privately held business. Goodwill of \$1,717 million was assigned to the Cognitive Solutions segment. It was expected that none of the goodwill would be deductible for tax purposes. The overall weighted-average useful life of the identified intangible assets acquired was 6.9 years.

**Truven Health Analytics, Inc. (Truven)**—On April 8, 2016, the company completed the acquisition of 100 percent of Truven, a leading provider of healthcare analytics solutions, for cash consideration of \$2,612 million, of which \$2,412 million was paid in April 2016 and \$148 million was paid in July 2017. Truven has developed proprietary analytic methods and assembled analytic

content assets, creating extensive national healthcare utilization, performance, quality and cost data. Truven was a privately held business. Goodwill of \$1,933 million was assigned to the Cognitive Solutions segment. It was expected that approximately 15 percent of the goodwill would be deductible for tax purposes. The overall weighted-average useful life of the identified intangible assets acquired was 6.9 years.

**Other Acquisitions**—The Technology Services & Cloud Platforms segment completed acquisitions of four businesses: in the first quarter: Ustream, Inc. (Ustream), a privately held business, and AT&T's application and hosting services business; in the third quarter, G4S's cash solutions business; and in the fourth quarter, Sanovi Technologies Private Limited (Sanovi), a privately held business. GBS completed acquisitions of six privately held businesses: in the first quarter, Resource/Ammirati, ecx International AG (ecx.io) and Optevia Limited (Optevia); in the second quarter, Aperto AG (Aperto) and Bluewolf Group, LLC (Bluewolf); and in the fourth quarter, Fluid, Inc.'s Expert Personal Shopper (XPS) business. The Cognitive Solutions segment completed acquisitions of three privately held businesses: in the second quarter, Resilient Systems, Inc. (Resilient) and EZ Legacy, Ltd. (EZSource); and in the fourth quarter, Promontory Financial Group, LLC (Promontory).

Ustream provides cloud-based video streaming to enterprises and broadcasters. The acquisition of AT&T's application and hosting services business strengthens the company's cloud portfolio. The acquisition of the G4S cash solutions business brings together the engineering skills of G4S with the company's analytics and remote technology capabilities to expand delivery solutions. Sanovi provides hybrid cloud recovery, cloud migration and business continuity software for enterprise data centers and

cloud infrastructure. Resource/Ammirati is a leading U.S.-based digital marketing and creative agency, addressing the rising demand from businesses seeking to reinvent themselves for the digital economy. Ecx.io enhances GBS' IBM iX with new digital marketing, commerce and platform skills to accelerate clients' digital transformations. Optevia is a Software-as-a Service systems integrator specializing in CRM solutions for public sector organizations. Aperto also joined IBM iX, supporting the company's growth in Europe, with expertise in digital strategy projects, including website and application development. Bluewolf extends the company's analytics, experience design and industry consulting leadership with one of the world's leading Salesforce consulting practices to deliver differentiated, consumer-grade experiences via the cloud. Fluid, Inc.'s Expert Personal Shopper business extends the company's portfolio of SaaS offerings and services, helping clients conduct commerce and engage with their customers. Resilient, a provider of incident response solutions, automates and orchestrates the many processes needed when dealing with cyber incidents from breaches to lost devices. EZSource helps developers quickly and easily understand and change mainframe code based on data displayed through dashboards and other visualizations. Promontory, a global market-leading risk management and regulatory compliance consulting firm, helps address clients' escalating regulations and risk management requirements.

All of these Other Acquisitions were for 100 percent of the acquired businesses.

The following table reflects the purchase price related to these acquisitions and the resulting purchase price allocations as of December 31, 2016.

#### 2016 Acquisitions

(\$ in millions)

	Amortization Life (in Years)	The Weather Company	Truven Health Analytics	Other Acquisitions
Current assets	\$ 76	\$ 171	\$ 153	
Fixed assets/noncurrent assets	123	127	110	
Intangible assets				
Goodwill	N/A	1,717	1,933	593
Completed technology	1–7	160	338	96
Client relationships	3–7	313	516	226
Patents/trademarks	1–7	349	54	42
Total assets acquired	2,738	3,141	1,220	
Current liabilities	(88)	(148)	(96)	
Noncurrent liabilities	(372)	(381)	(76)	
Total liabilities assumed	(460)	(529)	(171)	
Bargain purchase gain	—	—	(40)*	
<b>Total purchase price</b>		<b>\$2,278</b>	<b>\$2,612</b>	<b>\$1,009</b>

N/A—Not applicable

\* Bargain purchase gain relating to AT&T's application and hosting services business was recognized in selling, general and administrative expense in the Consolidated Statement of Earnings in the three months ended March 31, 2016.

For the Other Acquisitions, the overall weighted-average life of the identified amortizable intangible assets acquired was 6.3 years. These identified intangible assets will be amortized on a straight-line basis over their useful lives. Goodwill of \$119 million was assigned to the Technology Services & Cloud

Platforms segment, goodwill of \$303 million was assigned to the GBS segment and goodwill of \$171 million was assigned to the Cognitive Solutions segment. It was expected that approximately 55 percent of the goodwill would be deductible for tax purposes.

**Notes to Consolidated Financial Statements**

International Business Machines Corporation and Subsidiary Companies

**2015**

In 2015, the company completed fourteen acquisitions at an aggregate cost of \$3,555 million.

**Merge Healthcare, Inc. (Merge)**— On October 13, 2015, the company completed the acquisition of 100 percent of Merge, a publicly held business and a leading provider of medical image handling and processing, interoperability and clinical systems designed to advance healthcare quality and efficiency, for cash consideration of \$1,036 million. Merge joined the company's Watson Health business unit, bolstering clients' ability to analyze and cross-reference medical images against billions of data points already in the Watson Health Cloud. Goodwill of \$695 million was assigned to the Cognitive Solutions (\$502 million) and Technology Services & Cloud Platforms (\$193 million) segments. It was expected that none of the goodwill would be deductible for tax purposes. The overall weighted-average useful life of the identified intangible assets acquired was 7.0 years.

**Cleversafe, Inc. (Cleversafe)**— On November 6, 2015, the company completed the acquisition of 100 percent of Cleversafe, a privately held business and a leading developer and manufacturer of object-based storage software and appliances, for cash consideration of \$1,309 million. Cleversafe's integration into the company's Cloud business gives clients strategic data flexibility, simplified management and consistency with on-premise, cloud and hybrid cloud deployment options. Goodwill of \$1,000 million was assigned to the Technology Services & Cloud Platforms (\$590 million) and Systems (\$410 million) segments. It was expected that none of the goodwill would be deductible for tax purposes. The overall weighted-average useful life of the identified intangible assets acquired was 6.9 years.

**Other Acquisitions**— The Cognitive Solutions segment completed acquisitions of six privately held businesses: in the first quarter, AlchemyAI, Inc. (AlchemyAI) and Blekko, Inc. (Blekko); in the second quarter, Explorys, Inc. (Explorys) and Phytel, Inc. (Phytel); in the third quarter, Compose, Inc. (Compose); and in the fourth quarter, IRIS Analytics GmbH (IRIS Analytics). The Technology Services & Cloud Platforms segment completed acquisitions of four privately held businesses: in the second

quarter, Blue Box Group, Inc. (Blue Box); in the third quarter, StrongLoop, Inc. (StrongLoop); and in the fourth quarter, Gravitant, Inc. (Gravitant) and Clearleap, Inc. (Clearleap). GBS completed acquisitions of two privately held businesses in the fourth quarter, Advanced Application Corporation (AAC) and Meteorix, LLC. (Meteorix).

AlchemyAI provides scalable cognitive computing application program interface services and computing applications. Blekko technology provides advanced Web-crawling, categorization and intelligent filtering. Explorys provides secure cloud-based solutions for clinical integration, at-risk population management, cost of care measurement and pay-for-performance. Phytel's SaaS-based population health management offerings help providers identify patients at risk for care gaps and engage the patient to begin appropriate preventative care. Blue Box provides hosted, managed, OpenStack-based production-grade private clouds for the enterprise and service provider markets. Compose offers auto-scaling, production-ready databases to help software development teams deploy data services efficiently. StrongLoop provides application development software that enables software developers to build applications using application programming interfaces. AAC engages in system integration application development, software support and services. AAC was an affiliate of JBCC Holdings Inc. and IBM Japan Ltd. The company acquired all the shares of AAC which became a wholly owned subsidiary as of October 1, 2015. Gravitant develops cloud-based software to enable organizations to easily plan, buy and manage, or "broker," software and computing services from multiple suppliers across hybrid clouds. Meteorix offers consulting, deployment, integration and ongoing post-production services for Workday Financial Management and Human Capital Management applications. Clearleap provides cloud-based video services. IRIS Analytics provides technology and consultancy services to the payments industry to detect electronic payment fraud.

All of these Other Acquisitions were for 100 percent of the acquired businesses with the exception of the AAC acquisition.

The following table reflects the purchase price related to these acquisitions and the resulting purchase price allocations as of December 31, 2015.

**2015 Acquisitions**

(\$ in millions)

	Amortization Life (in Years)	Merge	Cleversafe	Other Acquisitions
Current assets	\$ 94	\$ 23	\$ 60	
Fixed assets/noncurrent assets	128	63	82	
Intangible assets				
Goodwill	N/A	695	1,000	895
Completed technology	5–7	133	364	163
Client relationships	5–7	145	23	95
Patents/trademarks	2–7	54	11	23
Total assets acquired	1,248	1,484	1,318	
Current liabilities	(73)	(15)	(34)	
Noncurrent liabilities	(139)	(160)	(73)	
Total liabilities assumed	(212)	(175)	(107)	
<b>Total purchase price</b>	<b>\$1,036</b>	<b>\$1,309</b>	<b>\$1,210</b>	

N/A—Not applicable

## Notes to Consolidated Financial Statements

International Business Machines Corporation and Subsidiary Companies

For the “Other Acquisitions,” the overall weighted-average life of the identified intangible assets acquired was 6.4 years. These identified intangible assets will be amortized on a straight-line basis over their useful lives. Goodwill of \$518 million was assigned to the Cognitive Solutions segment, \$303 million was assigned to the Technology Services & Cloud Platforms segment, and \$74 million was assigned to the GBS segment. It was expected that 7 percent of the goodwill would be deductible for tax purposes.

### Divestitures

**Microelectronics**—On October 20, 2014, IBM and GLOBALFOUNDRIES announced a definitive agreement in which GLOBALFOUNDRIES would acquire the company’s Microelectronics business, including existing semiconductor manufacturing assets and operations in East Fishkill, NY and Essex Junction, VT. The commercial OEM business acquired by GLOBALFOUNDRIES includes custom logic and specialty foundry, manufacturing and related operations. The transaction closed on July 1, 2015.

At September 30, 2014, the company concluded that the Microelectronics business met the criteria for discontinued operations reporting. The disposal group constituted a component under accounting guidance. The continuing cash inflows and outflows with the discontinued component are related to the manufacturing sourcing arrangement and the transition, packaging and test services. These cash flows are not direct cash flows as they are not significant and the company has no significant continuing involvement.

All assets and liabilities of the business, classified as held for sale at June 30, 2015, were transferred at closing. The company transferred \$515 million of net cash to GLOBALFOUNDRIES in the third quarter of 2015. This amount included \$750 million of cash consideration, adjusted by the amount of working capital due from GLOBALFOUNDRIES and other miscellaneous items. A second cash payment in the amount of \$500 million was transferred in December 2016 while the remaining cash consideration of \$250 million was transferred in December 2017.

Summarized financial information for discontinued operations is shown in the table below.

(\$ in millions)

For the year ended December 31:	2017	2016	2015
Total revenue	\$ —	\$ —	\$ 720
Loss from discontinued operations, before tax	(9)	(11)	(175)
Loss on disposal, before tax	1	0	(116)
Total loss from discontinued operations, before income taxes	(8)	(11)	(291)
Provision/(benefit) for income taxes	(3)	(2)	(117)
<b>Loss from discontinued operations, net of tax</b>	<b>\$ (5)</b>	<b>\$ (9)</b>	<b>\$ (174)</b>

**Industry Standard Server**—On January 23, 2014, IBM and Lenovo Group Limited (Lenovo) announced a definitive agreement in which Lenovo would acquire the company’s industry standard server portfolio (System x) for an adjusted purchase price of \$2.1 billion, consisting of approximately \$1.8 billion in cash, with the balance in Lenovo common stock. The stock represented less than 5 percent equity ownership in Lenovo. The company sold to Lenovo its System x, BladeCenter and Flex System blade servers and switches, x86-based Flex integrated systems, NeXtScale and iDataPlex servers and associated software, blade networking and maintenance operations. As of March 31, 2016, all Lenovo common stock was sold.

The initial closing was completed on October 1, 2014. A subsequent closing occurred in most other countries in which there was a large business footprint on December 31, 2014. The remaining countries closed on March 31, 2015. An assessment of the ongoing contractual terms of the transaction resulted in the recognition of pre-tax gains of \$63 million, \$57 million and \$14 million in 2015, 2016 and 2017, respectively.

Overall, the company expects to recognize a total pre-tax gain on the sale of approximately \$1.6 billion, which does not include associated costs related to transition and performance-based costs. Net of these charges, the pre-tax gain was approximately \$1.3 billion, of which the cumulative gain recorded as of December 31, 2017 is \$1.2 billion. The balance of the gain is expected to be recognized in 2019 upon conclusion of the maintenance agreement.

**Others**—In addition to those above, the company completed the following divestitures:

2017—In the first quarter of 2017, the company completed one research-related divestiture. The Cognitive Solutions segment completed four divestitures; two in the second quarter of 2017 and one each in the third and fourth quarter of 2017. The financial terms related to these transactions were not material. Overall, the company recognized a pre-tax gain of \$31 million related to these transactions in 2017.

2016—In the first quarter of 2016, the company completed four software product-related divestitures. In the fourth quarter of 2016, the company completed the divestiture of one service-related offering. The financial terms related to these transactions were not material. Overall, the company recorded a pre-tax gain of \$42 million related to these transactions in 2016.

2015—In the first quarter of 2015, the company completed two software product-related divestitures and in the second quarter, the company completed one software product-related divestiture and the divestiture of one GBS offering. In the fourth quarter of 2015, the company completed three software product-related divestitures. The financial terms related to these transactions were not material. Overall, the company recorded a pre-tax gain of \$81 million related to these transactions in 2015.

**Notes to Consolidated Financial Statements**

International Business Machines Corporation and Subsidiary Companies

**NOTE D. FINANCIAL INSTRUMENTS****Fair Value Measurements****Financial Assets and Liabilities Measured at Fair Value on a Recurring Basis**

The following tables present the company's financial assets and financial liabilities that are measured at fair value on a recurring basis at December 31, 2017 and 2016.

(\$ in millions)

<b>At December 31, 2017:</b>	<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>	<b>Total</b>
<b>Assets</b>				
<b>Cash equivalents<sup>(1)</sup></b>				
Time deposits and certificates of deposit	\$ —	\$ 8,066	\$—	\$ 8,066
Commercial paper	—	96	—	96
Money market funds	26	—	—	26
Canadian government securities	—	398	—	398
<b>Total</b>	<b>26</b>	<b>8,560</b>	<b>—</b>	<b>8,586<sup>(6)</sup></b>
<b>Debt securities—current<sup>(2)</sup></b>				
Debt securities—noncurrent <sup>(3)</sup>	4	7	—	11
<b>Available-for-sale equity investments<sup>(3)</sup></b>				
Derivative assets <sup>(4)</sup>				
Interest rate contracts	—	461	—	461
Foreign exchange contracts	—	469	—	469
Equity contracts	—	12	—	12
<b>Total</b>	<b>—</b>	<b>942</b>	<b>—</b>	<b>942<sup>(7)</sup></b>
<b>Total assets</b>	<b>\$33</b>	<b>\$10,117</b>	<b>\$—</b>	<b>\$10,151<sup>(7)</sup></b>
<b>Liabilities</b>				
<b>Derivative liabilities<sup>(5)</sup></b>				
Foreign exchange contracts	\$ —	\$ 378	\$—	\$ 378
Equity contracts	—	3	—	3
Interest rate contracts	—	34	—	34
<b>Total liabilities</b>	<b>\$ —</b>	<b>\$ 415</b>	<b>\$—</b>	<b>\$ 415<sup>(7)</sup></b>

<sup>(1)</sup> Included within cash and cash equivalents in the Consolidated Statement of Financial Position.

<sup>(2)</sup> U.S. government securities reported as marketable securities in the Consolidated Statement of Financial Position.

<sup>(3)</sup> Included within investments and sundry assets in the Consolidated Statement of Financial Position.

<sup>(4)</sup> The gross balances of derivative assets contained within prepaid expenses and other current assets, and investments and sundry assets in the Consolidated Statement of Financial Position at December 31, 2017 were \$185 million and \$757 million, respectively.

<sup>(5)</sup> The gross balances of derivative liabilities contained within other accrued expenses and liabilities, and other liabilities in the Consolidated Statement of Financial Position at December 31, 2017 were \$377 million and \$38 million, respectively.

<sup>(6)</sup> Available-for-sale securities with carrying values that approximate fair value.

<sup>(7)</sup> If derivative exposures covered by a qualifying master netting agreement had been netted in the Consolidated Statement of Financial Position, the total derivative asset and liability positions each would have been reduced by \$255 million.

(\$ in millions)	Level 1	Level 2	Level 3	Total
<b>At December 31, 2016:</b>				
<b>Assets</b>				
Cash equivalents <sup>(1)</sup>				
Time deposits and certificates of deposit	\$ —	\$3,629	\$—	\$3,629
Money market funds	1,204	—	—	1,204
<b>Total</b>	<b>1,204</b>	<b>3,629</b>	<b>—</b>	<b>4,832<sup>(6)</sup></b>
Debt securities – current <sup>(2)</sup>	—	699	—	699 <sup>(6)</sup>
Debt securities – noncurrent <sup>(3)</sup>	1	6	—	8
Available-for-sale equity investments <sup>(3)</sup>	7	—	—	7
Derivative assets <sup>(4)</sup>				
Interest rate contracts	—	555	—	555
Foreign exchange contracts	—	560	—	560
Equity contracts	—	11	—	11
<b>Total</b>	<b>—</b>	<b>1,126</b>	<b>—</b>	<b>1,126<sup>(7)</sup></b>
<b>Total assets</b>	<b>\$1,212</b>	<b>\$5,460</b>	<b>\$—</b>	<b>\$6,672<sup>(7)</sup></b>
<b>Liabilities</b>				
Derivative liabilities <sup>(5)</sup>				
Foreign exchange contracts	\$ —	\$ 188	\$—	\$ 188
Equity contracts	—	10	—	10
Interest rate contracts	—	8	—	8
<b>Total liabilities</b>	<b>\$ —</b>	<b>\$ 206</b>	<b>\$—</b>	<b>\$ 206<sup>(7)</sup></b>

<sup>(1)</sup> Included within cash and cash equivalents in the Consolidated Statement of Financial Position.

<sup>(2)</sup> U.S. government securities reported as marketable securities in the Consolidated Statement of Financial Position.

<sup>(3)</sup> Included within investments and sundry assets in the Consolidated Statement of Financial Position.

<sup>(4)</sup> The gross balances of derivative assets contained within prepaid expenses and other current assets, and investments and sundry assets in the Consolidated Statement of Financial Position at December 31, 2016 were \$532 million and \$594 million, respectively.

<sup>(5)</sup> The gross balances of derivative liabilities contained within other accrued expenses and liabilities, and other liabilities in the Consolidated Statement of Financial Position at December 31, 2016 were \$145 million and \$61 million, respectively.

<sup>(6)</sup> Available-for-sale securities with carrying values that approximate fair value.

<sup>(7)</sup> If derivative exposures covered by a qualifying master netting agreement had been netted in the Consolidated Statement of Financial Position, the total derivative asset and liability positions each would have been reduced by \$116 million.

There were no transfers between Levels 1 and 2 for the years ended December 31, 2017 and 2016.

#### Financial Assets and Liabilities Not Measured at Fair Value

##### Short-Term Receivables and Payables

Notes and other accounts receivable and other investments are financial assets with carrying values that approximate fair value. Accounts payable, other accrued expenses and short-term debt (excluding the current portion of long-term debt) are financial liabilities with carrying values that approximate fair value. If measured at fair value in the financial statements, these financial instruments would be classified as Level 3 in the fair value hierarchy, except for short-term debt, which would be classified as Level 2.

##### Loans and Long-Term Receivables

Fair values are based on discounted future cash flows using current interest rates offered for similar loans to clients with similar credit ratings for the same remaining maturities. At December 31, 2017 and 2016, the difference between the carrying amount and estimated fair value for loans and long-term receivables was immaterial. If measured at fair value in the financial statements, these financial instruments would be classified as Level 3 in the fair value hierarchy.

##### Long-Term Debt

Fair value of publicly traded long-term debt is based on quoted market prices for the identical liability when traded as an asset in an active market. For other long-term debt for which a quoted market price is not available, an expected present value technique that uses rates currently available to the company for debt with similar terms and remaining maturities is used to estimate fair value. The carrying amount of long-term debt is \$39,837 million and \$34,655 million and the estimated fair value is \$42,264 million and \$36,838 million at December 31, 2017 and 2016, respectively. If measured at fair value in the financial statements, long-term debt (including the current portion) would be classified as Level 2 in the fair value hierarchy.

**Notes to Consolidated Financial Statements**

International Business Machines Corporation and Subsidiary Companies

**Debt and Marketable Equity Securities**

The company's cash equivalents and current debt securities are considered available-for-sale and recorded at fair value, which is not materially different from carrying value, in the Consolidated Statement of Financial Position.

The following tables summarize the company's noncurrent debt and marketable equity securities which are also considered available-for-sale and recorded at fair value in the Consolidated Statement of Financial Position.

(\$ in millions)

At December 31, 2017:	Adjusted Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
Debt securities – noncurrent <sup>(1)</sup>	\$8	\$3	\$—	\$11
Available-for-sale equity investments <sup>(1)</sup>	1	3	0	4

<sup>(1)</sup> Included within investments and sundry assets in the Consolidated Statement of Financial Position.

(\$ in millions)

At December 31, 2016:	Adjusted Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
Debt securities – noncurrent <sup>(1)</sup>	\$5	\$3	\$—	\$8
Available-for-sale equity investments <sup>(1)</sup>	3	5	0	7

<sup>(1)</sup> Included within investments and sundry assets in the Consolidated Statement of Financial Position.

During the fourth quarter of 2014, the company acquired equity securities in conjunction with the sale of the System x business which were classified as available-for-sale securities. Based on an evaluation of available evidence as of December 31, 2015, the company recorded an other-than-temporary impairment loss of \$86 million resulting in an adjusted cost basis of \$185 million as of December 31, 2015. In the first quarter of 2016, the company recorded a gross realized loss of \$37 million (before taxes) related to the sale of all the outstanding shares. The loss on this sale was recorded in other (income) and expense in the Consolidated Statement of Earnings.

Sales of debt and available-for-sale equity investments during the period were as follows:

(\$ in millions)	For the year ended December 31:	2017	2016	2015
Proceeds	\$7	\$151	\$8	
Gross realized gains (before taxes)	3	3	1	
Gross realized losses (before taxes)	2	37	1	

The after-tax net unrealized gains/(losses) on available-for-sale debt and equity securities that have been included in other comprehensive income/(loss) and the after-tax net (gains)/losses reclassified from accumulated other comprehensive income/(loss) to net income were as follows:

(\$ in millions)	For the year ended December 31:	2017	2016
Net unrealized gains/(losses) arising during the period		\$0	\$(23)
Net unrealized (gains)/losses reclassified to net income*		1	21

\* There were no writedowns in 2017 and 2016, respectively.

The contractual maturities of substantially all available-for-sale debt securities are less than one year at December 31, 2017.

**Derivative Financial Instruments**

The company operates in multiple functional currencies and is a significant lender and borrower in the global markets. In the normal course of business, the company is exposed to the impact of interest rate changes and foreign currency fluctuations, and to a lesser extent equity and commodity price changes and client credit risk. The company limits these risks by following established risk management policies and procedures, including the use of derivatives, and, where cost effective, financing with

debt in the currencies in which assets are denominated. For interest rate exposures, derivatives are used to better align rate movements between the interest rates associated with the company's lease and other financial assets and the interest rates associated with its financing debt. Derivatives are also used to manage the related cost of debt. For foreign currency exposures, derivatives are used to better manage the cash flow volatility arising from foreign exchange rate fluctuations.

As a result of the use of derivative instruments, the company is exposed to the risk that counterparties to derivative contracts will fail to meet their contractual obligations. To mitigate the counterparty credit risk, the company has a policy of only entering into contracts with carefully selected major financial institutions based upon their overall credit profile. The company's established policies and procedures for mitigating credit risk on principal transactions include reviewing and establishing limits for credit exposure and continually assessing the creditworthiness of counterparties. The right of set-off that exists under certain of these arrangements enables the legal entities of the company subject to the arrangement to net amounts due to and from the counterparty reducing the maximum loss from credit risk in the event of counterparty default.

The company is also a party to collateral security arrangements with most of its major derivative counterparties. These arrangements require the company to hold or post collateral (cash or U.S. Treasury securities) when the derivative fair values exceed contractually established thresholds. Posting thresholds can be fixed or can vary based on credit default swap pricing or credit ratings received from the major credit agencies. The aggregate fair value of all derivative instruments under these collateralized arrangements that were in a liability position at December 31, 2017 and 2016 was \$126 million and \$11 million, respectively, for which no collateral was posted at either date. Full collateralization of these agreements would be required in the event that the company's credit rating falls below investment grade or if its credit default swap spread exceeds 250 basis points, as applicable, pursuant to the terms of the collateral security arrangements. The aggregate fair value of derivative instruments in asset positions as of December 31, 2017 and 2016 was \$942 million and \$1,126 million, respectively. This amount represents the maximum exposure to loss at the reporting date if the counterparties failed to perform as contracted. This exposure was reduced by \$255 million and \$116 million at December 31, 2017 and 2016, respectively, of liabilities included in master netting arrangements with those counterparties. Additionally, at December 31, 2017 and 2016, this exposure was reduced by \$114 million and \$141 million of cash collateral, respectively, and \$35 million of non-cash collateral in U.S. Treasury securities at December 31, 2016. There were no non-cash collateral balances in U.S. Treasury securities at December 31, 2017. At December 31, 2017 and 2016, the net exposure related to derivative assets recorded in the Consolidated Statement of Financial Position was \$572 million and \$834 million, respectively. At December 31, 2017 and 2016, the net position related to derivative liabilities recorded in the Consolidated Statement of Financial Position was \$160 million and \$90 million, respectively.

In the Consolidated Statement of Financial Position, the company does not offset derivative assets against liabilities in master netting arrangements nor does it offset receivables or payables recognized upon payment or receipt of cash collateral against the fair values of the related derivative instruments. No amount was recognized in other receivables at December 31, 2017 and 2016 for the right to reclaim cash collateral. The amount recognized in accounts payable for the obligation to return cash collateral was \$114 million and \$141 million at December 31, 2017 and 2016, respectively. The company restricts the use of cash collateral received to rehypothecation, and therefore reports it in prepaid expenses and other current assets in the Consolidated Statement of Financial Position. No amount was rehypothecated at December 31, 2017 and 2016.

The company may employ derivative instruments to hedge the volatility in stockholders' equity resulting from changes in currency exchange rates of significant foreign subsidiaries of the company with respect to the U.S. dollar. These instruments, designated as net investment hedges, expose the company to liquidity risk as the derivatives have an immediate cash flow impact upon maturity which is not offset by a cash flow from the translation of the underlying hedged equity. The company monitors this cash loss potential on an ongoing basis and may discontinue some of these hedging relationships by de-designating or terminating the derivative instrument in order to manage the liquidity risk. Although not designated as accounting hedges, the company may utilize derivatives to offset the changes in the fair value of the de-designated instruments from the date of de-designation until maturity.

In its hedging programs, the company uses forward contracts, futures contracts, interest-rate swaps, cross-currency swaps, and options depending upon the underlying exposure. The company is not a party to leveraged derivative instruments.

A brief description of the major hedging programs, categorized by underlying risk, follows.

#### **Interest Rate Risk**

##### **Fixed and Variable Rate Borrowings**

The company issues debt in the global capital markets to fund its operations and financing business. Access to cost-effective financing can result in interest rate mismatches with the underlying assets. To manage these mismatches and to reduce overall interest cost, the company uses interest-rate swaps to convert specific fixed-rate debt issuances into variable-rate debt (i.e., fair value hedges) and to convert specific variable-rate debt issuances into fixed-rate debt (i.e., cash flow hedges). At December 31, 2017 and 2016, the total notional amount of the company's interest rate swaps was \$9.1 billion and \$7.3 billion, respectively. The weighted-average remaining maturity of these instruments at December 31, 2017 and 2016 was approximately 4.8 years and 6.2 years, respectively.

**Forecasted Debt Issuance**

The company is exposed to interest rate volatility on future debt issuances. To manage this risk, the company may use forward starting interest-rate swaps to lock in the rate on the interest payments related to the forecasted debt issuance. These swaps are accounted for as cash flow hedges. The company did not have any derivative instruments relating to this program outstanding at December 31, 2017 and 2016.

At December 31, 2016, net gains of less than \$1 million (before taxes) were recorded in accumulated other comprehensive income/(loss) in connection with cash flow hedges of the company's borrowings. During 2017, all gains and losses associated with this program that were recorded in other comprehensive income/(loss) were reclassified to net income and there are no gains and losses remaining in accumulated other comprehensive income/(loss) at December 31, 2017.

**Foreign Exchange Risk****Long-Term Investments in Foreign Subsidiaries  
(Net Investment)**

A large portion of the company's foreign currency denominated debt portfolio is designated as a hedge of net investment in foreign subsidiaries to reduce the volatility in stockholders' equity caused by changes in foreign currency exchange rates in the functional currency of major foreign subsidiaries with respect to the U.S. dollar. The company also uses cross-currency swaps and foreign exchange forward contracts for this risk management purpose. At December 31, 2017 and 2016, the total notional amount of derivative instruments designated as net investment hedges was \$7.0 billion and \$6.7 billion, respectively. At December 31, 2017 and 2016, the weighted-average remaining maturity of these instruments was approximately 0.2 years at both periods.

**Anticipated Royalties and Cost Transactions**

The company's operations generate significant nonfunctional currency, third-party vendor payments and intercompany payments for royalties and goods and services among the company's non-U.S. subsidiaries and with the company. In anticipation of these foreign currency cash flows and in view of the volatility of the currency markets, the company selectively employs foreign exchange forward contracts to manage its currency risk. These forward contracts are accounted for as cash flow hedges. The maximum length of time over which the company has hedged its exposure to the variability in future cash flows is four years. At December 31, 2017 and 2016, the total notional amount of forward contracts designated as cash flow hedges of forecasted royalty and cost transactions was \$7.8 billion and \$8.3 billion, respectively. The weighted-average remaining maturity of these instruments at December 31, 2017 and 2016 was 0.7 years at both periods.

At December 31, 2017 and 2016 in connection with cash flow hedges of anticipated royalties and cost transactions, the company recorded net gains of \$27 million and net gains of \$462 million (before taxes), respectively, in accumulated other comprehensive income/(loss). Within these amounts, \$81 million of losses and \$397 million of gains, respectively, are expected to be reclassified to net income within the next 12 months, providing an offsetting economic impact against the underlying anticipated transactions.

**Foreign Currency Denominated Borrowings**

The company is exposed to exchange rate volatility on foreign currency denominated debt. To manage this risk, the company employs cross-currency swaps to convert fixed-rate foreign currency denominated debt to fixed-rate debt denominated in the functional currency of the borrowing entity. These swaps are accounted for as cash flow hedges. The maximum length of time over which the company has hedged its exposure to the variability in future cash flows is approximately ten years. At December 31, 2017 and 2016, the total notional amount of cross-currency swaps designated as cash flow hedges of foreign currency denominated debt was \$6.5 billion and \$1.4 billion, respectively.

At December 31, 2017 and 2016, in connection with cash flow hedges of foreign currency denominated borrowings, the company recorded net gains of \$42 million and net gains of \$29 million (before taxes), respectively, in accumulated other comprehensive income/(loss). Within these amounts, \$157 million of gains and \$27 million of gains, respectively, are expected to be reclassified to net income within the next 12 months, providing an offsetting economic impact against the underlying exposure.

**Subsidiary Cash and Foreign Currency Asset/Liability Management**

The company uses its Global Treasury Centers to manage the cash of its subsidiaries. These centers principally use currency swaps to convert cash flows in a cost-effective manner. In addition, the company uses foreign exchange forward contracts to economically hedge, on a net basis, the foreign currency exposure of a portion of the company's nonfunctional currency assets and liabilities. The terms of these forward and swap contracts are generally less than one year. The changes in the fair values of these contracts and of the underlying hedged exposures are generally offsetting and are recorded in other (income) and expense in the Consolidated Statement of Earnings. At December 31, 2017 and 2016, the total notional amount of derivative instruments in economic hedges of foreign currency exposure was \$11.5 billion and \$12.7 billion, respectively.

**Equity Risk Management**

The company is exposed to market price changes in certain broad market indices and in the company's own stock primarily related to certain obligations to employees. Changes in the overall value of these employee compensation obligations are recorded in selling, general and administrative (SG&A) expense in the Consolidated Statement of Earnings. Although not designated as accounting hedges, the company utilizes derivatives, including equity swaps and futures, to economically hedge the exposures related to its employee compensation obligations. The derivatives are linked to the total return on certain broad market indices or the total return on the company's common stock, and are recorded at fair value with gains or losses also reported in SG&A expense in the Consolidated Statement of Earnings. At December 31, 2017 and 2016, the total notional amount of derivative instruments in economic hedges of these compensation obligations was \$1.3 billion and \$1.2 billion, respectively.

**Other Risks**

The company may hold warrants to purchase shares of common stock in connection with various investments that are deemed derivatives because they contain net share or net cash settlement provisions. The company records the changes in the fair value of these warrants in other (income) and expense in the Consolidated Statement of Earnings. The company did not have any warrants qualifying as derivatives outstanding at December 31, 2017 and 2016.

The company is exposed to a potential loss if a client fails to pay amounts due under contractual terms. The company may utilize credit default swaps to economically hedge its credit exposures. The swaps are recorded at fair value with gains and losses reported in other (income) and expense in the Consolidated Statement of Earnings. The company did not have

any derivative instruments relating to this program outstanding at December 31, 2017 and 2016.

The company is exposed to market volatility on certain investment securities. The company may utilize options or forwards to economically hedge its market exposure. The derivatives are recorded at fair value with gains and losses reported in other (income) and expense in the Consolidated Statement of Earnings. At December 31, 2017 and 2016, the company did not have any derivative instruments relating to this program outstanding.

The following tables provide a quantitative summary of the derivative and non-derivative instrument-related risk management activity as of December 31, 2017 and 2016, as well as for the years ended December 31, 2017, 2016 and 2015, respectively.

**Fair Values of Derivative Instruments in the Consolidated Statement of Financial Position**

(\$ in millions)

At December 31:	Fair Value of Derivative Assets			Fair Value of Derivative Liabilities		
	Balance Sheet Classification	2017	2016	Balance Sheet Classification	2017	2016
<b>Designated as hedging instruments</b>						
Interest rate contracts	Prepaid expenses and other current assets	\$ 2	\$ —	Other accrued expenses and liabilities	\$ —	\$ —
	Investments and sundry assets	459	555	Other liabilities	34	8
Foreign exchange contracts	Prepaid expenses and other current assets	111	421	Other accrued expenses and liabilities	318	46
	Investments and sundry assets	298	17	Other liabilities	3	35
	<b>Fair value of derivative assets</b>	<b>\$870</b>	<b>\$ 993</b>	<b>Fair value of derivative liabilities</b>	<b>\$ 355</b>	<b>\$ 89</b>
<b>Not designated as hedging instruments</b>						
Foreign exchange contracts	Prepaid expenses and other current assets	\$ 61	\$ 100	Other accrued expenses and liabilities	\$ 57	\$ 89
	Investments and sundry assets	—	22	Other liabilities	—	18
Equity contracts	Prepaid expenses and other current assets	12	11	Other accrued expenses and liabilities	3	10
	<b>Fair value of derivative assets</b>	<b>\$ 72</b>	<b>\$ 133</b>	<b>Fair value of derivative liabilities</b>	<b>\$ 60</b>	<b>\$ 117</b>
<b>Total derivatives</b>		<b>\$942</b>	<b>\$1,126</b>		<b>\$ 415</b>	<b>\$ 206</b>
<b>Total debt designated as hedging instruments<sup>(1)</sup></b>						
Short-term debt	N/A	N/A		\$ —	\$ 1,125	
Long-term debt	N/A	N/A		\$6,471	\$7,844	
	N/A	N/A		\$6,471	\$8,969	
<b>Total</b>		<b>\$942</b>	<b>\$1,126</b>		<b>\$6,886</b>	<b>\$9,175</b>

N/A—Not applicable

<sup>(1)</sup> Debt designated as hedging instruments are reported at carrying value.

**Notes to Consolidated Financial Statements**

International Business Machines Corporation and Subsidiary Companies

**The Effect of Derivative Instruments in the Consolidated Statement of Earnings**

(\$ in millions)

For the year ended December 31:	Consolidated Statement of Earnings Line Item	Gain/(Loss) Recognized in Earnings					
		Recognized on Derivatives			Attributable to Risk Being Hedged <sup>(2)</sup>		
		2017	2016	2015	2017	2016	2015
Derivative instruments in fair value hedges <sup>(1)(5)</sup>							
Interest rate contracts	Cost of financing	\$ 1	\$ 28	\$108	\$ 74	\$ 58	\$ (1)
	Interest expense	1	31	94	69	63	(1)
Derivative instruments not designated as hedging instruments							
Foreign exchange contracts	Other (income) and expense	16	(189)	127	N/A	N/A	N/A
Interest rate contracts	Other (income) and expense	—	0	(1)	N/A	N/A	N/A
Equity contracts	SG&A expense	135	112	(27)	N/A	N/A	N/A
	Other (income) and expense	—	(1)	(9)	N/A	N/A	N/A
<b>Total</b>		<b>\$153</b>	<b>\$ (18)</b>	<b>\$291</b>	<b>\$144</b>	<b>\$121</b>	<b>\$ (1)</b>

(\$ in millions)

For the year ended December 31:	Gain/(Loss) Recognized in Earnings and Other Comprehensive Income												
	Effective Portion Recognized in OCI			Consolidated Statement of Earnings Line Item	Effective Portion Reclassified from AOCI			Ineffectiveness and Amounts Excluded from Effectiveness Testing <sup>(3)</sup>			2017	2016	2015
	2017	2016	2015		2017	2016	2015	2017	2016	2015			
Derivative instruments in cash flow hedges													
Interest rate contracts	\$ —	\$ —	\$ —	Interest expense	\$ (45)	\$ (24)	\$ 0	\$ —	\$ —	\$ —	2017	2016	2015
Foreign exchange contracts	(58)	243	618	Other (income) and expense	324	(68)	731	1	(3)	5			
				Cost of sales*	3	(5)	192	—	—	—			
				Cost of services*	70	(8)	0	—	—	—			
				SG&A expense	11	4	149	—	—	—			
Instruments in net investment hedges <sup>(4)</sup>													
Foreign exchange contracts	(1,607)	311	889	Cost of financing	—	—	—	11	—	—	2017	2016	2015
				Interest expense	—	—	—	33	77	13			
<b>Total</b>	<b>\$ (1,665)</b>	<b>\$555</b>	<b>\$1,507</b>		<b>\$363</b>	<b>\$ (102)</b>	<b>\$1,072</b>	<b>\$45</b>	<b>\$74</b>	<b>\$18</b>			

\* Reclassified to conform to 2017 presentation.

(1) The amount includes changes in clean fair values of the derivative instruments in fair value hedging relationships and the periodic accrual for coupon payments required under these derivative contracts.

(2) The amount includes basis adjustments to the carrying value of the hedged item recorded during the period and amortization of basis adjustments recorded on de-designated hedging relationships during the period.

(3) The amount of gain/(loss) recognized in income represents ineffectiveness on hedge relationships.

(4) Instruments in net investment hedges include derivative and non-derivative instruments.

(5) For the years ended December 31, 2017, 2016 and 2015, fair value hedges resulted in losses of \$2 million, \$4 million and \$2 million in ineffectiveness, respectively.

N/A—Not applicable

For the 12 months ending December 31, 2017, 2016 and 2015, there were no significant gains or losses excluded from the assessment of hedge effectiveness (for fair value hedges), or associated with an underlying exposure that did not or was not expected to occur (for cash flow hedges); nor are there any anticipated in the normal course of business.

#### NOTE E. INVENTORIES

(\$ in millions)

At December 31:	2017	2016
Finished goods	\$ 333	\$ 358
Work in process and raw materials	1,250	1,195
<b>Total</b>	<b>\$1,583</b>	<b>\$1,553</b>

#### NOTE F. FINANCING RECEIVABLES

The following table presents financing receivables, net of allowances for credit losses, including residual values.

(\$ in millions)

At December 31:	2017	2016
<b>Current</b>		
Net investment in sales-type and direct financing leases	\$ 2,900	\$ 2,909
Commercial financing receivables	11,596	9,706
Client loan and installment payment receivables (loans)	7,226	6,390
<b>Total</b>	<b>\$21,721</b>	<b>\$19,006</b>
<b>Noncurrent</b>		
Net investment in sales-type and direct financing leases	\$ 4,320	\$ 3,950
Client loan and installment payment receivables (loans)	5,230	5,071
<b>Total</b>	<b>\$ 9,550</b>	<b>\$ 9,021</b>

Net investment in sales-type and direct financing leases relates principally to the company's systems products and are for terms ranging generally from two to six years. Net investment in sales-type and direct financing leases includes unguaranteed residual values of \$630 million and \$585 million at December 31, 2017 and 2016, respectively, and is reflected net of unearned income of \$535 million and \$513 million, and net of the allowance for credit losses of \$103 million and \$133 million at those dates, respectively. Scheduled maturities of minimum lease payments outstanding at December 31, 2017, expressed as a percentage of the total, are approximately: 2018, 43 percent; 2019, 27 percent; 2020, 18 percent; 2021, 9 percent; and 2022 and beyond, 3 percent.

Commercial financing receivables, net of allowance for credit losses of \$21 million and \$28 million at December 31, 2017 and 2016, respectively, relate primarily to inventory and accounts receivable financing for dealers and remarketers of IBM and OEM products. Payment terms for inventory and accounts receivable financing generally range from 30 to 90 days.

Client loan and installment payment receivables (loans), net of allowance for credit losses of \$211 million and \$276 million at December 31, 2017 and 2016, respectively, are loans that are provided primarily to clients to finance the purchase of hardware, software and services. Payment terms on these financing arrangements are generally for terms up to seven years.

The allowance for credit losses at December 31, 2016 reflected a write-off in the fourth quarter of \$188 million of previously reserved customer accounts as a result of recent experience and history across the portfolio, particularly in China. Of this total, \$30 million was in Americas, \$33 million was in EMEA and \$125 million was in Asia Pacific and \$73 million and \$115 million was in lease receivables and loan receivables, respectively.

Client loan and installment payment financing contracts are priced independently at competitive market rates. The company has a history of enforcing these financing agreements.

The company utilizes certain of its financing receivables as collateral for nonrecourse borrowings. Financing receivables pledged as collateral for borrowings were \$773 million and \$689 million at December 31, 2017 and 2016, respectively. These borrowings are included in note J, "Borrowings," on pages 112 to 115.

The company did not have any financing receivables held for sale as of December 31, 2017 and 2016.

#### Financing Receivables by Portfolio Segment

The following tables present financing receivables on a gross basis, excluding the allowance for credit losses and residual value, by portfolio segment and by class, excluding commercial financing receivables and other miscellaneous financing receivables at December 31, 2017 and 2016. The company determines its allowance for credit losses based on two portfolio segments: lease receivables and loan receivables, and further segments the portfolio into three classes: Americas, EMEA and Asia Pacific. This portfolio segmentation was changed from growth markets and major markets in 2017 as the company no longer manages the business under those market delineations. There was no impact to segment reporting or the company's Consolidated Financial Statements.

**Notes to Consolidated Financial Statements**

International Business Machines Corporation and Subsidiary Companies

(\$ in millions)

<b>At December 31, 2017:</b>	<b>Americas</b>	<b>EMEA</b>	<b>Asia Pacific</b>	<b>Total</b>
<b>Financing receivables</b>				
Lease receivables	\$ 3,911	\$ 1,349	\$ 1,333	\$ 6,593
Loan receivables	6,715	3,597	2,354	12,667
<b>Ending balance</b>	<b>\$10,626</b>	<b>\$4,946</b>	<b>\$3,687</b>	<b>\$19,259</b>
Collectively evaluated for impairment	\$10,497	\$4,889	\$3,604	\$18,990
Individually evaluated for impairment	\$ 129	\$ 57	\$ 83	\$ 269
<b>Allowance for credit losses</b>				
<b>Beginning balance at January 1, 2017</b>				
Lease receivables	\$ 54	\$ 4	\$ 76	\$ 133
Loan receivables	169	18	89	276
<b>Total</b>	<b>\$ 223</b>	<b>\$ 22</b>	<b>\$ 165</b>	<b>\$ 410</b>
Write-offs	(51)	(1)	(85)	(137)
Recoveries	1	1	0	2
Provision	(8)	29	(4)	16
Other	7	11	6	24
<b>Ending balance at December 31, 2017</b>	<b>\$ 172</b>	<b>\$ 61</b>	<b>\$ 82</b>	<b>\$ 314</b>
Lease receivables	\$ 63	\$ 9	\$ 31	\$ 103
Loan receivables	\$ 108	\$ 52	\$ 51	\$ 211
Collectively evaluated for impairment	\$ 43	\$ 15	\$ 6	\$ 64
Individually evaluated for impairment	\$ 128	\$ 46	\$ 76	\$ 250

(\$ in millions)

<b>At December 31, 2016:</b>	<b>Americas</b>	<b>EMEA</b>	<b>Asia Pacific</b>	<b>Total</b>
<b>Financing receivables</b>				
Lease receivables	\$ 3,830	\$ 1,171	\$ 1,335	\$ 6,336
Loan receivables	6,185	3,309	2,243	11,737
<b>Ending balance</b>	<b>\$10,015</b>	<b>\$4,480</b>	<b>\$3,578</b>	<b>\$18,073</b>
Collectively evaluated for impairment	\$ 9,847	\$ 4,460	\$ 3,419	\$17,726
Individually evaluated for impairment	\$ 168	\$ 20	\$ 159	\$ 347
<b>Allowance for credit losses</b>				
<b>Beginning balance at January 1, 2016</b>				
Lease receivables	\$ 52	\$ 17	\$ 143	\$ 213
Loan receivables	122	55	200	377
<b>Total</b>	<b>\$ 175</b>	<b>\$ 72</b>	<b>\$ 343</b>	<b>\$ 590</b>
Write-offs	(36)	(48)	(154)	(237)
Recoveries	2	0	0	2
Provision	65	(1)	(6)	58
Other	17	(1)	(18)	(3)
<b>Ending balance at December 31, 2016</b>	<b>\$ 223</b>	<b>\$ 22</b>	<b>\$ 165</b>	<b>\$ 410</b>
Lease receivables	\$ 54	\$ 4	\$ 76	\$ 133
Loan receivables	\$ 169	\$ 18	\$ 89	\$ 276
Collectively evaluated for impairment	\$ 62	\$ 13	\$ 15	\$ 90
Individually evaluated for impairment	\$ 161	\$ 9	\$ 150	\$ 320

When determining the allowances, financing receivables are evaluated either on an individual or a collective basis. For individually evaluated receivables, the company determines the expected cash flow for the receivable and calculates an estimate of the potential loss and the probability of loss. For those accounts in which the loss is probable, the company

records a specific reserve. In addition, the company records an unallocated reserve that is calculated by applying a reserve rate to its different portfolios, excluding accounts that have been specifically reserved. This reserve rate is based upon credit rating, probability of default, term, characteristics (lease/loan) and loss history.

#### Financing Receivables on Non-Accrual Status

The following table presents the recorded investment in financing receivables which were on non-accrual status at December 31, 2017 and 2016.

(\$ in millions)	2017	2016
<b>At December 31:</b>		
Americas	\$ 22	\$ 23
EMEA	14	2
Asia Pacific	3	14
<b>Total lease receivables</b>	<b>\$ 38</b>	<b>\$ 40</b>
Americas	\$ 71	\$ 128
EMEA	59	5
Asia Pacific	9	12
<b>Total loan receivables</b>	<b>\$138</b>	<b>\$145</b>
<b>Total receivables</b>	<b>\$177</b>	<b>\$185</b>

#### Impaired Receivables

The company considers any receivable with an individually evaluated reserve as an impaired receivable. Depending on the level of impairment, receivables will also be placed on a non-accrual status. The following tables present impaired receivables at December 31, 2017 and 2016. This presentation includes both loan and lease receivables.

(\$ in millions)	Recorded Investment	Related Allowance
<b>At December 31, 2017:</b>		
Americas	\$129	\$128
EMEA	57	46
Asia Pacific	83	76
<b>Total</b>	<b>\$269</b>	<b>\$250</b>

(\$ in millions)	Recorded Investment	Related Allowance
<b>At December 31, 2016:</b>		
Americas	\$168	\$161
EMEA	20	9
Asia Pacific	159	150
<b>Total</b>	<b>\$347</b>	<b>\$320</b>

(\$ in millions)	Average Recorded Investment	Interest Income Recognized	Interest Income Recognized on Cash Basis
<b>For the year ended December 31, 2017:</b>			
Americas	\$158	\$0	\$—
EMEA	33	0	—
Asia Pacific	122	0	—
<b>Total</b>	<b>\$312</b>	<b>\$0</b>	<b>\$—</b>

(\$ in millions)

For the year ended December 31, 2016:	Average Recorded Investment	Interest Income Recognized	Interest Income Recognized on Cash Basis
Americas	\$160	\$0	\$—
EMEA	56	0	—
Asia Pacific	290	0	—
<b>Total</b>	<b>\$505</b>	<b>\$0</b>	<b>\$—</b>

#### Credit Quality Indicators

The company's credit quality indicators, which are based on rating agency data, publicly available information and information provided by customers, are reviewed periodically based on the relative level of risk. The resulting indicators are a numerical rating system that maps to Moody's Investors Service credit ratings as shown below. The company uses information provided by Moody's, where available, as one of many inputs in its determination of customer credit rating.

The tables present the net recorded investment for each class of receivables, by credit quality indicator, at December 31, 2017 and 2016. Receivables with a credit quality indicator ranging from Aaa to Baa3 are considered investment grade. All others are considered non-investment grade. The credit quality indicators do not reflect mitigation actions that the company may take to transfer credit risk to third parties.

#### Lease Receivables

(\$ in millions)

At December 31, 2017:	Americas	EMEA	Asia Pacific
<b>Credit rating</b>			
Aaa–Aa3	\$ 422	\$ 49	\$ 68
A1–A3	855	190	544
Baa1–Baa3	980	371	337
Ba1–Ba2	730	448	184
Ba3–B1	443	192	89
B2–B3	367	77	64
Caa–D	51	13	18
<b>Total</b>	<b>\$3,847</b>	<b>\$1,340</b>	<b>\$1,302</b>

#### Loan Receivables

(\$ in millions)

At December 31, 2017:	Americas	EMEA	Asia Pacific
<b>Credit rating</b>			
Aaa–Aa3	\$ 724	\$ 129	\$ 120
A1–A3	1,469	502	961
Baa1–Baa3	1,683	982	596
Ba1–Ba2	1,253	1,186	325
Ba3–B1	760	508	157
B2–B3	630	204	113
Caa–D	88	34	31
<b>Total</b>	<b>\$6,607</b>	<b>\$3,545</b>	<b>\$2,303</b>

**Notes to Consolidated Financial Statements**

International Business Machines Corporation and Subsidiary Companies

At December 31, 2017, the industries which made up Global Financing's receivables portfolio consisted of: Financial (33 percent), Government (15 percent), Manufacturing (13 percent), Services (13 percent), Retail (8 percent), Communications (7 percent), Healthcare (6 percent) and Other (6 percent).

**Lease Receivables**

(\$ in millions)

<b>At December 31, 2016:</b>	<b>Americas</b>	<b>EMEA</b>	<b>Asia Pacific</b>
<b>Credit rating</b>			
Aaa–Aa3	\$ 447	\$ 51	\$ 53
A1–A3	782	113	486
Baa1–Baa3	772	366	330
Ba1–Ba2	822	350	185
Ba3–B1	574	208	106
B2–B3	297	71	84
Caa–D	83	9	15
<b>Total</b>	<b>\$3,776</b>	<b>\$1,167</b>	<b>\$1,259</b>

**Loan Receivables**

(\$ in millions)

<b>At December 31, 2016:</b>	<b>Americas</b>	<b>EMEA</b>	<b>Asia Pacific</b>
<b>Credit rating</b>			
Aaa–Aa3	\$ 712	\$ 143	\$ 90
A1–A3	1,246	318	832
Baa1–Baa3	1,230	1,032	565
Ba1–Ba2	1,309	987	316
Ba3–B1	914	585	182
B2–B3	472	201	143
Caa–D	133	25	25
<b>Total</b>	<b>\$6,016</b>	<b>\$3,291</b>	<b>\$2,154</b>

At December 31, 2016, the industries which made up Global Financing's receivables portfolio consisted of: Financial (34 percent), Government (14 percent), Manufacturing (13 percent), Services (12 percent), Retail (8 percent), Communications (7 percent), Healthcare (6 percent) and Other (6 percent).

**Past Due Financing Receivables**

(\$ in millions)

<b>At December 31, 2017:</b>	<b>Total Past Due &gt;90 Days<sup>(1)</sup></b>	<b>Fully Reserved Financing Receivables</b>	<b>&lt;90 Days or Unbilled Financing Receivables</b>	<b>Total Financing Receivables</b>	<b>Recorded Investment &gt;90 Days and Accruing<sup>(2)</sup></b>
Americas	\$30	\$ 29	\$ 3,852	\$ 3,911	\$197
EMEA	3	5	1,340	1,349	5
Asia Pacific	5	28	1,301	1,333	23
<b>Total lease receivables</b>	<b>\$37</b>	<b>\$ 62</b>	<b>\$ 6,493</b>	<b>\$ 6,593</b>	<b>\$225</b>
Americas	\$39	\$ 96	\$ 6,581	\$ 6,715	\$254
EMEA	12	35	3,551	3,597	17
Asia Pacific	3	46	2,305	2,354	12
<b>Total loan receivables</b>	<b>\$53</b>	<b>\$176</b>	<b>\$12,437</b>	<b>\$12,667</b>	<b>\$283</b>
<b>Total</b>	<b>\$91</b>	<b>\$239</b>	<b>\$18,930</b>	<b>\$19,259</b>	<b>\$508</b>

<sup>(1)</sup> Only the portion of a financing receivable which is greater than 90 days past due, excluding amounts that are fully reserved.

<sup>(2)</sup> At a contract level, which includes total billed and unbilled amounts for aged financing receivables greater than 90 days.

(\$ in millions)

<b>At December 31, 2016:</b>	<b>Total Past Due &gt;90 Days<sup>(1)</sup></b>	<b>Fully Reserved Financing Receivables</b>	<b>&lt;90 Days or Unbilled Financing Receivables</b>	<b>Total Financing Receivables</b>	<b>Recorded Investment &gt;90 Days and Accruing<sup>(2)</sup></b>
Americas	\$17	\$ 20	\$ 3,793	\$ 3,830	\$ 66
EMEA	2	10	1,159	1,171	6
Asia Pacific	12	59	1,264	1,335	40
<b>Total lease receivables</b>	<b>\$31</b>	<b>\$ 89</b>	<b>\$ 6,216</b>	<b>\$ 6,336</b>	<b>\$111</b>
Americas	\$19	\$ 90	\$ 6,075	\$ 6,185	\$ 80
EMEA	5	5	3,299	3,309	15
Asia Pacific	6	87	2,150	2,243	46
<b>Total loan receivables</b>	<b>\$31</b>	<b>\$182</b>	<b>\$11,524</b>	<b>\$11,737</b>	<b>\$141</b>
<b>Total</b>	<b>\$62</b>	<b>\$271</b>	<b>\$17,740</b>	<b>\$18,073</b>	<b>\$253</b>

<sup>(1)</sup> Only the portion of a financing receivable which is greater than 90 days past due, excluding amounts that are fully reserved.

<sup>(2)</sup> At a contract level, which includes total billed and unbilled amounts for aged financing receivables greater than 90 days.

**Troubled Debt Restructurings**

The company did not have any significant troubled debt restructurings for the years ended December 31, 2017 and 2016.

**NOTE G. PROPERTY, PLANT AND EQUIPMENT**

(\$ in millions)	2017	2016*
<b>At December 31:</b>		
Land and land improvements	\$ 480	\$ 506
Buildings and building and leasehold improvements	10,073	9,763
Information technology equipment	16,874	15,012
Production, engineering, office and other equipment	4,060	3,869
Plant and other property—gross	31,487	29,150
Less: Accumulated depreciation	20,832	18,842
Plant and other property—net	10,655	10,308
Rental machines	844	984
Less: Accumulated depreciation	383	461
Rental machines—net	462	523
<b>Total—net</b>	<b>\$11,116</b>	\$10,830

\* Reclassified to conform to 2017 presentation.

**NOTE H. INVESTMENTS AND SUNDAY ASSETS**

(\$ in millions)	2017	2016
<b>At December 31:</b>		
Deferred transition and setup costs and other deferred arrangements*	\$1,537	\$1,497
Derivatives—noncurrent	757	594
Alliance investments		
Equity method	90	85
Non-equity method	32	19
Prepaid software	300	230
Long-term deposits	271	267
Other receivables	455	416
Employee benefit-related	316	272
Prepaid income taxes	590	477
Other assets	572	729
<b>Total</b>	<b>\$4,919</b>	\$4,585

\* Deferred transition and setup costs and other deferred arrangements are related to services client arrangements. Refer to note A, "Significant Accounting Policies," on page 87 for additional information.

**NOTE I. INTANGIBLE ASSETS INCLUDING GOODWILL**

**Intangible Assets**

The following table details the company's intangible asset balances by major asset class.

(*\$ in millions*)

<b>At December 31, 2017:</b>	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
<b>Intangible asset class</b>			
Capitalized software	\$1,600	\$ (790)	\$ 810
Client relationships	2,358	(1,080)	1,278
Completed technology	2,586	(1,376)	1,210
Patents/trademarks	668	(256)	413
Other*	47	(16)	31
<b>Total</b>	<b>\$7,260</b>	<b>(\$3,518)</b>	<b>\$3,742</b>

\* Other intangibles are primarily acquired proprietary and nonproprietary business processes, methodologies and systems.

(*\$ in millions*)

<b>At December 31, 2016:</b>	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
<b>Intangible asset class</b>			
Capitalized software	\$1,537	\$ (661)	\$ 876
Client relationships	2,831	(1,228)	1,602
Completed technology	3,322	(1,668)	1,654
Patents/trademarks	730	(205)	525
Other*	46	(15)	31
<b>Total</b>	<b>\$8,466</b>	<b>(\$3,778)</b>	<b>\$4,688</b>

\* Other intangibles are primarily acquired proprietary and nonproprietary business processes, methodologies and systems.

The net carrying amount of intangible assets decreased \$946 million during the year ended December 31, 2017, primarily due to intangible asset amortization, partially offset by additions resulting from capitalized software. There was no impairment of intangible assets recorded in 2017 and 2016. The aggregate intangible amortization expense was \$1,520 million and \$1,544 million for the years ended December 31, 2017 and 2016, respectively. In addition, in 2017 and 2016, respectively, the company retired \$1,753 million and \$817 million of fully amortized intangible assets, impacting both the gross carrying amount and accumulated amortization by this amount.

The amortization expense for each of the five succeeding years relating to intangible assets currently recorded in the Consolidated Statement of Financial Position is estimated to be the following at December 31, 2017:

(*\$ in millions*)

	Capitalized Software	Acquired Intangibles	Total
2018	\$482	\$812	\$1,294
2019	248	671	920
2020	79	560	639
2021	—	446	446
2022	—	377	377

**Notes to Consolidated Financial Statements**

International Business Machines Corporation and Subsidiary Companies

**Goodwill**

The changes in the goodwill balances by reportable segment, for the years ended December 31, 2017 and 2016, are as follows:

(\$ in millions)

Segment	Balance January 1, 2017	Goodwill Additions	Purchase Price Adjustments	Divestitures	Foreign Currency Translation and Other Adjustments*	Balance December 31, 2017
Cognitive Solutions	\$19,484	\$ 3	\$(38)	\$(20)	\$235	\$19,665
Global Business Services	4,607	—	2	—	204	4,813
Technology Services & Cloud Platforms	10,258	13	(2)	—	179	10,447
Systems	1,850	—	0	—	13	1,862
<b>Total</b>	<b>\$36,199</b>	<b>\$16</b>	<b>\$(38)</b>	<b>\$(20)</b>	<b>\$631</b>	<b>\$36,788</b>

\* Primarily driven by foreign currency translation.

(\$ in millions)

Segment	Balance January 1, 2016	Goodwill Additions	Purchase Price Adjustments	Divestitures	Foreign Currency Translation and Other Adjustments*	Balance December 31, 2016
Cognitive Solutions	\$15,621	\$3,821	\$ 5	\$(12)	\$ 48	\$19,484
Global Business Services	4,396	303	4	(1)	(95)	4,607
Technology Services & Cloud Platforms	10,156	119	(12)	(5)	(1)	10,258
Systems	1,848	—	(4)	—	5	1,850
<b>Total</b>	<b>\$32,021</b>	<b>\$4,244</b>	<b>\$ (7)</b>	<b>\$(18)</b>	<b>\$ (42)</b>	<b>\$36,199</b>

\* Primarily driven by foreign currency translation.

There were no goodwill impairment losses recorded during 2017 or 2016 and the company has no accumulated impairment losses.

Purchase price adjustments recorded in 2017 and 2016 were related to acquisitions that were completed on or prior to September 30, 2017 or September 30, 2016, respectively, and were still subject to the measurement period that ends at the earlier of 12 months from the acquisition date or when information becomes available. Net purchase price adjustments of \$38 million were recorded during 2017, with the primary drivers being deferred tax assets, other taxes payable and other current liabilities associated with the Truven Health Analytics, Inc. and The Weather Company acquisitions. Net purchase price adjustments of \$7 million were recorded during 2016, with the primary drivers being deferred tax assets, accounts receivable, deferred income, inventory and other current liabilities.

**NOTE J. BORROWINGS****Short-Term Debt**

(\$ in millions)

At December 31:	2017	2016
Commercial paper	\$1,496	\$ 899
Short-term loans	276	375
Long-term debt—current maturities	5,214	6,239
<b>Total</b>	<b>\$6,987</b>	<b>\$7,513</b>

The weighted-average interest rate for commercial paper at December 31, 2017 and 2016 was 1.5 percent and 0.7 percent, respectively. The weighted-average interest rates for short-term loans were 8.8 percent and 9.5 percent at December 31, 2017 and 2016, respectively.

**Long-Term Debt**  
**Pre-Swap Borrowing**

(\$ in millions)

At December 31:	Maturities	2017	2016
U.S. dollar debt (average interest rate at December 31, 2017):*			
4.0%	2017	\$ —	\$ 5,104
3.5%	2018	4,640	4,724
2.7%	2019	5,540	4,132
1.9%	2020	3,416	2,054
2.2%	2021	4,129	2,887
2.4%	2022	3,481	1,901
3.3%	2023	1,547	1,500
3.6%	2024	2,000	2,000
7.0%	2025	600	600
3.5%	2026	1,350	1,350
4.7%	2027	969	469
6.5%	2028	313	313
5.9%	2032	600	600
8.0%	2038	83	83
5.6%	2039	745	745
4.0%	2042	1,107	1,107
7.0%	2045	27	27
4.7%	2046	650	650
7.1%	2096	316	316
		31,515	30,563
Other currencies (average interest rate at December 31, 2017, in parentheses):*			
Euros (1.5%)	2019–2029	10,502	7,122
Pound sterling (2.7%)	2020–2022	1,420	1,296
Japanese yen (0.3%)	2022–2026	1,291	1,576
Canadian (2.2%)	2017	—	373
Other (5.4%)	2018–2020	717	215
		45,445	41,145
Less: net unamortized discount		826	839
Less: net unamortized debt issuance costs		93	82
Add: fair value adjustment**		526	669
		45,052	40,893
Less: current maturities		5,214	6,239
<b>Total</b>		<b>\$39,837</b>	<b>\$34,655</b>

\* Includes notes, debentures, bank loans, secured borrowings and capital lease obligations.

\*\*The portion of the company's fixed-rate debt obligations that is hedged is reflected in the Consolidated Statement of Financial Position as an amount equal to the sum of the debt's carrying value and a fair value adjustment representing changes in the fair value of the hedged debt obligations attributable to movements in benchmark interest rates.

There are no debt securities issued and outstanding by IBM International Group Capital LLC, which is an indirect, 100 percent owned finance subsidiary of International Business Machines Corporation, the parent. Any debt securities issued by IBM International Group Capital LLC, would be fully and unconditionally guaranteed by the parent.

**Notes to Consolidated Financial Statements**

International Business Machines Corporation and Subsidiary Companies

During the third quarter of 2017, IBM Credit LLC (IBM Credit), a wholly owned subsidiary of the company, filed a shelf registration statement with the Securities and Exchange Commission (SEC) allowing it to offer for sale public debt securities. IBM Credit issued fixed- and floating-rate debt securities in September 2017 in the aggregate amount of \$3.0 billion with maturity dates ranging from 2019 to 2022. The debt is included in the long-term debt table on page 113.

The company's indenture governing its debt securities and its various credit facilities each contain significant covenants which obligate the company to promptly pay principal and interest, limit the aggregate amount of secured indebtedness and sale and leaseback transactions to 10 percent of the company's

consolidated net tangible assets, and restrict the company's ability to merge or consolidate unless certain conditions are met. The credit facilities also include a covenant on the company's consolidated net interest expense ratio, which cannot be less than 2.20 to 1.0, as well as a cross default provision with respect to other defaulted indebtedness of at least \$500 million.

The company is in compliance with all of its significant debt covenants and provides periodic certifications to its lenders. The failure to comply with its debt covenants could constitute an event of default with respect to the debt to which such provisions apply. If certain events of default were to occur, the principal and interest on the debt to which such event of default applied would become immediately due and payable.

**Post-Swap Borrowing (Long-Term Debt, Including Current Portion)**

(\$ in millions)

For the year ended December 31:	2017		2016	
	Amount	Average Rate	Amount	Average Rate
Fixed-rate debt	\$29,007	2.73%	\$27,414	3.18%
Floating-rate debt*	16,044	2.10%	13,480	1.59%
<b>Total</b>	<b>\$45,052</b>		<b>\$40,893</b>	

\* Includes \$9,138 million in 2017 and \$7,338 million in 2016 of notional interest rate swaps that effectively convert fixed-rate long-term debt into floating-rate debt. See note D, "Financial Instruments," on pages 102 to 107.

Pre-swap annual contractual maturities of long-term debt outstanding at December 31, 2017, are as follows:

(\$ in millions)

	Total
2018	\$ 5,217
2019	7,128
2020	6,242
2021	5,196
2022	4,288
2023 and beyond	17,374
<b>Total</b>	<b>\$45,445</b>

**Interest on Debt**

(\$ in millions)

For the year ended December 31:	2017	2016	2015
Cost of financing	\$ 658	\$ 576	\$ 540
Interest expense	615	630	468
Interest capitalized	5	2	0
<b>Total interest paid and accrued</b>	<b>\$1,278</b>	<b>\$1,208</b>	<b>\$1,008</b>

Refer to the related discussion on page 144 in note T, "Segment Information," for total interest expense of the Global Financing segment. See note D, "Financial Instruments," on pages 102 to 107 for a discussion of the use of foreign currency denominated debt designated as a hedge of net investment, as well as a discussion of the use of currency and interest rate swaps in the company's debt risk management program.

**Lines of Credit**

In 2016, the company increased the size of its five-year Credit Agreement (the "Credit Agreement") to \$10.25 billion and extended the term by one year to November 10, 2021. The total expense recorded by the company related to this Credit Agreement was \$6.1 million in 2017, \$5.5 million in 2016 and \$5.3 million in 2015. The Credit Agreement permits the company and its Subsidiary Borrowers to borrow up to \$10.25 billion on a revolving basis. Borrowings of the Subsidiary Borrowers will be unconditionally backed by the company. The company may also, upon the agreement of either existing lenders, or of the additional banks not currently party to the Credit Agreement, increase the commitments under the Credit Agreement up to an additional \$1.75 billion. Subject to certain terms of the Credit Agreement, the company and Subsidiary Borrowers may borrow, prepay and reborrow amounts under the Credit Agreement at any time during the Credit Agreement term. Interest rates on borrowings under the Credit Agreement will be based on prevailing market interest rates, as further described in the Credit Agreement. The Credit Agreement contains customary representations and warranties, covenants, events of default, and indemnification provisions. The company believes that circumstances that might give rise to breach of these covenants or an event of default, as specified in the Credit Agreement, are remote.

The company also has other committed lines of credit in some of the geographies which are not significant in the aggregate. Interest rates and other terms of borrowing under these lines of credit vary from country to country, depending on local market conditions.

On July 20, 2017, the company and IBM Credit, (the Borrowers), entered into a \$2.5 billion 364-Day Credit Agreement, and a \$2.5 billion Three-Year Credit Agreement (the New Credit Agreements, and together with the Credit Agreement, the Credit Facilities). IBM also entered into the Third Amendment to its Credit Agreement. The total expense recorded by the company related to the New Credit Agreements was \$2.8 million in 2017. The New Credit Agreements permit the Borrowers to borrow up to an aggregate of \$5 billion on a revolving basis. Neither Borrower is a guarantor or co-obligor of the other Borrower under the New Credit Agreements. Subject to certain conditions stated in the New Credit Agreements, the Borrowers may borrow, prepay and re-borrow amounts under the New Credit Agreements at any time during the term of the New Credit Agreements. Funds borrowed may be used for the general corporate purposes of the Borrowers. Interest rates on borrowings under the New Credit Agreements will be based on prevailing market interest rates, as further described in the New Credit Agreements. The New Credit Agreements contain customary representations and warranties, covenants, events of default, and indemnification provisions. The Amendment to the Credit Agreement adds and restates various provisions in order to provide the company with the opportunity in 2018 to request that the lenders extend the termination date of the Credit Agreement to July 20, 2023.

As of December 31, 2017, there were no borrowings by the company, or its subsidiaries, under the Credit Facilities.

#### NOTE K. OTHER LIABILITIES

(\$ in millions)

At December 31:	2017	2016
Income tax reserves	\$4,193	\$2,621
Excess 401(k) Plus Plan	1,583	1,494
Disability benefits	504	538
Derivative liabilities	38	61
Workforce reductions	804	782
Deferred taxes	545	424
Other taxes payable	948	90
Environmental accruals	262	262
Warranty accruals	56	68
Asset retirement obligations	115	142
Acquisition related	88	111
Divestiture related*	253	270
Other	577	613
<b>Total</b>	<b>\$9,965</b>	<b>\$7,477</b>

\* Primarily related to the divestiture of the Microelectronics business.

In response to changing business needs, the company periodically takes workforce reduction actions to improve productivity, cost competitiveness and to rebalance skills. The noncurrent contractually obligated future payments associated with these activities are reflected in the workforce reductions caption in the previous table. This also includes certain special restructuring-related actions prior to 2006. The noncurrent liabilities are workforce accruals related to terminated employees who are no longer working for the company who were granted annual payments to supplement their incomes in certain countries. Depending on the individual country's legal requirements, these required payments will continue until the former employee begins receiving pension benefits or passes away. Current liabilities are included in other accrued expenses and liabilities in the Consolidated Statement of Financial Position and were immaterial at December 31, 2017.

The company employs extensive internal environmental protection programs that primarily are preventive in nature. The company also participates in environmental assessments and cleanups at a number of locations, including operating facilities, previously owned facilities and Superfund sites. The company's maximum exposure for all environmental liabilities cannot be estimated and no amounts have been recorded for non-ARO environmental liabilities that are not probable or estimable. The total amounts accrued for non-ARO environmental liabilities, including amounts classified as current in the Consolidated Statement of Financial Position, that do not reflect actual or anticipated insurance recoveries, were \$267 million and \$272 million at December 31, 2017 and 2016, respectively. Estimated environmental costs are not expected to materially affect the consolidated financial position or consolidated results of the company's operations in future periods. However, estimates of future costs are subject to change due to protracted cleanup periods and changing environmental remediation regulations.

As of December 31, 2017, the company was unable to estimate the range of settlement dates and the related probabilities for certain asbestos remediation AROs. These conditional AROs are primarily related to the encapsulated structural fireproofing that is not subject to abatement unless the buildings are demolished and non-encapsulated asbestos that the company would remediate only if it performed major renovations of certain existing buildings. Because these conditional obligations have indeterminate settlement dates, the company could not develop a reasonable estimate of their fair values. The company will continue to assess its ability to estimate fair values at each future reporting date. The related liability will be recognized once sufficient additional information becomes available. The total amounts accrued for ARO liabilities, including amounts classified as current in the Consolidated Statement of Financial Position were \$152 million and \$173 million at December 31, 2017 and 2016, respectively.

**Notes to Consolidated Financial Statements**

International Business Machines Corporation and Subsidiary Companies

**NOTE L. EQUITY ACTIVITY**

The authorized capital stock of IBM consists of 4,687,500,000 shares of common stock with a \$.20 per share par value, of which 922,179,225 shares were outstanding at December 31, 2017 and 150,000,000 shares of preferred stock with a \$.01 per share par value, none of which were outstanding at December 31, 2017.

**Stock Repurchases**

The Board of Directors authorizes the company to repurchase IBM common stock. The company repurchased 27,237,179 common shares at a cost of \$4,323 million, 23,283,400 common shares at a cost of \$3,455 million and 30,338,647 common shares at a cost of \$4,701 million in 2017, 2016 and 2015, respectively. These amounts reflect transactions executed through December 31 of each year. Actual cash disbursements for repurchased shares may differ due to varying settlement dates for these transactions. At December 31, 2017, \$3,786 million of Board common stock repurchase authorization was available. The company plans to purchase shares on the open market or in private transactions from time to time, depending on market conditions.

**Other Stock Transactions**

The company issued the following shares of common stock as part of its stock-based compensation plans and employees stock purchase plan: 4,311,998 shares in 2017, 3,893,366 shares in 2016, and 6,013,875 shares in 2015. The company issued 463,083 treasury shares in 2017, 383,077 treasury shares in 2016 and 1,155,558 treasury shares in 2015, as a result of restricted stock unit releases and exercises of stock options by employees of certain acquired businesses and by non-U.S. employees. Also, as part of the company's stock-based compensation plans, 1,226,080 common shares at a cost of \$193 million, 854,365 common shares at a cost of \$126 million, and 1,625,820 common shares at a cost of \$248 million in 2017, 2016 and 2015, respectively, were remitted by employees to the company in order to satisfy minimum statutory tax withholding requirements. These amounts are included in the treasury stock balance in the Consolidated Statement of Financial Position and the Consolidated Statement of Changes in Equity.

**Reclassifications and Taxes Related to Items of Other Comprehensive Income**

(\$ in millions)

For the year ended December 31, 2017:	Before Tax Amount	Tax (Expense)/Benefit	Net of Tax Amount
<b>Other comprehensive income/(loss)</b>			
<b>Foreign currency translation adjustments</b>	<b>\$ 152</b>	<b>\$ 617</b>	<b>\$ 769</b>
<b>Net changes related to available-for-sale securities</b>			
Unrealized gains/(losses) arising during the period	\$ 1	\$ (1)	\$ 0
Reclassification of (gains)/losses to other (income) and expense	1	0	1
<b>Total net changes related to available-for-sale securities</b>	<b>\$ 2</b>	<b>\$ (1)</b>	<b>\$ 1</b>
<b>Unrealized gains/(losses) on cash flow hedges</b>			
Unrealized gains/(losses) arising during the period	\$ (58)	\$ 0	\$ (58)
Reclassification of (gains)/losses to:			
Cost of sales	(3)	1	(3)
Cost of services	(70)	27	(43)
SG&A expense	(11)	3	(9)
Other (income) and expense	(324)	124	(199)
Interest expense	45	(17)	28
<b>Total unrealized gains/(losses) on cash flow hedges</b>	<b>\$ (421)</b>	<b>\$ 137</b>	<b>\$ (284)</b>
<b>Retirement-related benefit plans<sup>(1)</sup></b>			
Prior service costs/(credits)	\$ 0	\$ 0	\$ 0
Net (losses)/gains arising during the period	682	(201)	481
Curtailments and settlements	19	(5)	14
Amortization of prior service (credits)/costs	(88)	29	(58)
Amortization of net (gains)/losses	2,889	(1,006)	1,883
<b>Total retirement-related benefit plans</b>	<b>\$3,502</b>	<b>\$ (1,182)</b>	<b>\$2,320</b>
<b>Other comprehensive income/(loss)</b>	<b>\$3,235</b>	<b>\$ (429)</b>	<b>\$2,806</b>

<sup>(1)</sup> These AOCI components are included in the computation of net periodic pension cost. (See note S, "Retirement-Related Benefits," for additional information.)

(\$ in millions)	Before Tax Amount	Tax (Expense)/ Benefit	Net of Tax Amount
<b>For the year ended December 31, 2016:</b>			
<b>Other comprehensive income/(loss)</b>			
<b>Foreign currency translation adjustments</b>	\$ (20)	\$(120)	\$ (140)
<b>Net changes related to available-for-sale securities</b>			
Unrealized gains/(losses) arising during the period	\$ (38)	\$ 14	\$ (23)
Reclassification of (gains)/losses to other (income) and expense	34	(13)	21
<b>Total net changes related to available-for-sale securities</b>	\$ (3)	\$ 1	\$ (2)
<b>Unrealized gains/(losses) on cash flow hedges</b>			
Unrealized gains/(losses) arising during the period	\$ 243	\$ (80)	\$ 163
Reclassification of (gains)/losses to:			
Cost of sales*	5	(5)	1
Cost of services*	8	(3)	5
SG&A expense	(4)	(2)	(7)
Other (income) and expense	68	(26)	42
Interest expense	24	(9)	15
<b>Total unrealized gains/(losses) on cash flow hedges</b>	\$ 345	\$ (126)	\$ 219
<b>Retirement-related benefit plans<sup>(1)</sup></b>			
Net (losses)/gains arising during the period	\$(2,490)	\$ 924	\$(1,566)
Curtailments and settlements	(16)	1	(15)
Amortization of prior service (credits)/costs	(107)	34	(74)
Amortization of net (gains)/losses	2,764	(976)	1,788
<b>Total retirement-related benefit plans</b>	\$ 150	\$ (19)	\$ 132
<b>Other comprehensive income/(loss)</b>	<b>\$ 472</b>	<b>\$(263)</b>	<b>\$ 209</b>

\* Reclassified to conform to 2017 presentation.

<sup>(1)</sup> These AOCI components are included in the computation of net periodic pension cost. (See note S, "Retirement-Related Benefits," for additional information.)

**Notes to Consolidated Financial Statements**

International Business Machines Corporation and Subsidiary Companies

(\$ in millions)

	Before Tax Amount	Tax (Expense)/ Benefit	Net of Tax Amount
<b>For the year ended December 31, 2015:</b>			
<b>Other comprehensive income/(loss)</b>			
<b>Foreign currency translation adjustments</b>	\$(1,379)	\$ (342)	\$(1,721)
<b>Net changes related to available-for-sale securities</b>			
Unrealized gains/(losses) arising during the period	\$ (54)	\$ 21	\$ (33)
Reclassification of (gains)/losses to other (income) and expense	86	(33)	53
<b>Total net changes related to available-for-sale securities</b>	\$ 32	\$ (12)	\$ 20
<b>Unrealized gains/(losses) on cash flow hedges</b>			
Unrealized gains/(losses) arising during the period	\$ 618	\$ (218)	\$ 399
Reclassification of (gains)/losses to:			
Cost of sales*	(192)	59	(133)
Cost of services*	0	(2)	(2)
SG&A expense	(149)	43	(105)
Other (income) and expense	(731)	281	(451)
Interest expense	0	0	0
<b>Total unrealized gains/(losses) on cash flow hedges</b>	\$ (454)	\$ 162	\$ (292)
<b>Retirement-related benefit plans<sup>(1)</sup></b>			
Prior service costs/(credits)	\$ 6	\$ (2)	\$ 4
Net (losses)/gains arising during the period	(2,963)	1,039	(1,925)
Curtailments and settlements	33	(9)	24
Amortization of prior service (credits)/costs	(100)	36	(65)
Amortization of net (gains)/losses	3,304	(1,080)	2,223
<b>Total retirement-related benefit plans</b>	\$ 279	\$ (17)	\$ 262
<b>Other comprehensive income/(loss)</b>	<b>\$ (1,523)</b>	<b>\$ (208)</b>	<b>\$ (1,731)</b>

\* Reclassified to conform to 2017 presentation.

(1) These AOCI components are included in the computation of net periodic pension cost. (See note S, "Retirement-Related Benefits," for additional information.)

**Accumulated Other Comprehensive Income/(Loss) (net of tax)**

(\$ in millions)

	Net Unrealized Gains/(Losses) on Cash Flow Hedges	Foreign Currency Translation Adjustments*	Net Change Retirement- Related Benefit Plans	Net Unrealized Gains/(Losses) on Available- For-Sale Securities	Accumulated Other Comprehensive Income/(Loss)
December 31, 2014	\$ 392	\$(1,742)	\$(26,509)	\$(15)	\$(27,875)
Other comprehensive income before reclassifications	399	(1,721)	(1,897)	(33)	(3,252)
Amount reclassified from accumulated other comprehensive income	(691)	0	2,158	53	1,520
Total change for the period	(292)	(1,721)	262	20	(1,731)
December 31, 2015	100	(3,463)	(26,248)	5	(29,607)
Other comprehensive income before reclassifications	163	(140)	(1,581)	(23)	(1,581)
Amount reclassified from accumulated other comprehensive income	56	0	1,714	21	1,791
Total change for the period	219	(140)	132	(2)	209
December 31, 2016	319	(3,603)	(26,116)	2	(29,398)
Other comprehensive income before reclassifications	(58)	769	495	0	1,206
Amount reclassified from accumulated other comprehensive income	(226)	0	1,825	1	1,599
Total change for the period	(284)	769	2,320	1	2,806
December 31, 2017	\$ 35	\$(2,834)	\$(23,796)	\$ 3	\$(26,592)

\* Foreign currency translation adjustments are presented gross except for any associated hedges which are presented net of tax.

#### **NOTE M. CONTINGENCIES AND COMMITMENTS**

##### **Contingencies**

As a company with a substantial employee population and with clients in more than 175 countries, IBM is involved, either as plaintiff or defendant, in a variety of ongoing claims, demands, suits, investigations, tax matters and proceedings that arise from time to time in the ordinary course of its business. The company is a leader in the information technology industry and, as such, has been and will continue to be subject to claims challenging its IP rights and associated products and offerings, including claims of copyright and patent infringement and violations of trade secrets and other IP rights. In addition, the company enforces its own IP against infringement, through license negotiations, lawsuits or otherwise. Also, as is typical for companies of IBM's scope and scale, the company is party to actions and proceedings in various jurisdictions involving a wide range of labor and employment issues (including matters related to contested employment decisions, country-specific labor and employment laws, and the company's pension, retirement and other benefit plans), as well as actions with respect to contracts, product liability, securities, foreign operations, competition law and environmental matters. These actions may be commenced by a number of different parties, including competitors, clients, current or former employees, government and regulatory agencies, stockholders and representatives of the locations in which the company does business. Some of the actions to which the company is party may involve particularly complex technical issues, and some actions may raise novel questions under the laws of the various jurisdictions in which these matters arise.

The company records a provision with respect to a claim, suit, investigation or proceeding when it is probable that a liability has been incurred and the amount of the loss can be reasonably estimated. Any recorded liabilities, including any changes to such liabilities for the years ended December 31, 2017, 2016 and 2015 were not material to the Consolidated Financial Statements.

In accordance with the relevant accounting guidance, the company provides disclosures of matters for which the likelihood of material loss is at least reasonably possible. In addition, the company also discloses matters based on its consideration of other matters and qualitative factors, including the experience of other companies in the industry, and investor, customer and employee relations considerations.

With respect to certain of the claims, suits, investigations and proceedings discussed herein, the company believes at this time that the likelihood of any material loss is remote, given, for example, the procedural status, court rulings, and/or the strength of the company's defenses in those matters. With respect to the remaining claims, suits, investigations and proceedings discussed in this note, except as specifically discussed herein, the company is unable to provide estimates of reasonably possible losses or range of losses, including losses in excess of amounts accrued, if any, for the following reasons. Claims, suits, investigations and proceedings are inherently uncertain, and it is not possible to predict the ultimate outcome of these matters. It is the company's experience that damage amounts claimed in litigation against it are unreliable and unrelated to possible outcomes, and as such are not meaningful indicators

of the company's potential liability. Further, the company is unable to provide such an estimate due to a number of other factors with respect to these claims, suits, investigations and proceedings, including considerations of the procedural status of the matter in question, the presence of complex or novel legal theories, and/or the ongoing discovery and development of information important to the matters. The company reviews claims, suits, investigations and proceedings at least quarterly, and decisions are made with respect to recording or adjusting provisions and disclosing reasonably possible losses or range of losses (individually or in the aggregate), to reflect the impact and status of settlement discussions, discovery, procedural and substantive rulings, reviews by counsel and other information pertinent to a particular matter.

Whether any losses, damages or remedies finally determined in any claim, suit, investigation or proceeding could reasonably have a material effect on the company's business, financial condition, results of operations or cash flows will depend on a number of variables, including: the timing and amount of such losses or damages; the structure and type of any such remedies; the significance of the impact any such losses, damages or remedies may have in the Consolidated Financial Statements; and the unique facts and circumstances of the particular matter that may give rise to additional factors. While the company will continue to defend itself vigorously, it is possible that the company's business, financial condition, results of operations or cash flows could be affected in any particular period by the resolution of one or more of these matters.

The following is a summary of the more significant legal matters involving the company.

The company is a defendant in an action filed on March 6, 2003 in state court in Salt Lake City, Utah by the SCO Group (SCO v. IBM). The company removed the case to Federal Court in Utah. Plaintiff is an alleged successor in interest to some of AT&T's UNIX IP rights, and alleges copyright infringement, unfair competition, interference with contract and breach of contract with regard to the company's distribution of AIX and Dynix and contribution of code to Linux and the company has asserted counterclaims. On September 14, 2007, plaintiff filed for bankruptcy protection, and all proceedings in this case were stayed. The court in another suit, the SCO Group, Inc. v. Novell, Inc., held a trial in March 2010. The jury found that Novell is the owner of UNIX and UnixWare copyrights; the judge subsequently ruled that SCO is obligated to recognize Novell's waiver of SCO's claims against IBM and Sequent for breach of UNIX license agreements. On August 30, 2011, the Tenth Circuit Court of Appeals affirmed the district court's ruling and denied SCO's appeal of this matter. In June 2013, the Federal Court in Utah granted SCO's motion to reopen the SCO v. IBM case. In February 2016, the Federal Court ruled in favor of IBM on all of SCO's remaining claims, and SCO appealed. On October 30, 2017, the Tenth Circuit Court of Appeals affirmed the dismissal of all but one of SCO's remaining claims, which was remanded to the Federal Court in Utah.

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On May 13, 2010, IBM and the State of Indiana (acting on behalf of the Indiana Family and Social Services Administration) sued one another in a dispute over a 2006 contract regarding the modernization of social service program processing in Indiana. After six weeks of trial, on July 18, 2012, the Indiana Superior Court in Marion County rejected the State's claims in their entirety and awarded IBM \$52 million plus interest and costs. On February 13, 2014, the Indiana Court of Appeals reversed portions of the trial judge's findings, found IBM in material breach, and ordered the case remanded to the trial judge to determine the State's damages, if any. The Indiana Court of Appeals also affirmed approximately \$50 million of the trial court's award of damages to IBM. On March 22, 2016, the Indiana Supreme Court affirmed the outcome of the Indiana Court of Appeals and remanded the case to the Indiana Superior Court. On August 7, 2017, the Indiana Superior Court awarded the State \$128 million, which it then offset against IBM's previously affirmed award of \$50 million, resulting in a \$78 million award to the State, plus interest. IBM appealed to the Indiana Court of Appeals and the matter remains pending.

On March 9, 2017, the Commonwealth of Pennsylvania's Department of Labor and Industry sued IBM in Pennsylvania state court regarding a 2006 contract for the development of a custom software system to manage the Commonwealth's unemployment insurance benefits programs. The matter is pending in a Pennsylvania court.

On October 29, 2013, Bridgestone Americas, Inc. (Bridgestone) sued IBM regarding a 2009 contract for the implementation of an SAP-based, enterprise-wide order management system. IBM counterclaimed against Bridgestone and its parent, Bridgestone Corp. The case is pending in the Middle District of Tennessee.

On April 16, 2014, Iusacell SA de C.V. (Iusacell) sued IBM, claiming that IBM made fraudulent misrepresentations that induced Iusacell to enter into an agreement with IBM Mexico. Iusacell claimed damages for lost profits. Iusacell's complaint related to a contractual dispute in Mexico, which was the subject of a pending arbitration proceeding in Mexico initiated by IBM Mexico against Iusacell for breach of the underlying agreement. On August 31, 2017, the parties entered into an agreement releasing all claims against each other, resolving both the lawsuit and the arbitration proceeding.

IBM UK initiated legal proceedings in May 2010 before the High Court in London against the IBM UK Pensions Trust (the UK Trust) and two representative beneficiaries of the UK Trust membership. IBM UK sought a declaration that it acted lawfully both in notifying the Trustee of the UK Trust that it was closing its UK defined benefit plans to future accruals for most participants and in implementing the company's new retirement policy. In April 2014, the High Court acknowledged that the changes made to its UK defined benefit plans were within IBM's discretion, but ruled that IBM breached its implied duty of good faith both in implementing these changes and in the manner in which it consulted with employees. Proceedings to determine remedies were held in July 2014, and in February 2015 the High Court held that for IBM to make changes to accruals under the plan would require a new consultation of the participants, but other changes

(including to early retirement policy) would not require such consultation. IBM UK appealed both the breach and remedies judgments. In August 2017, the Appeal Court reversed the High Court, holding that IBM UK was not in breach of its implied duties of good faith and that the changes made to the plans were lawful. The time to appeal has expired and the Appeal Court judgment is final. In addition, IBM UK is a defendant in approximately 290 individual actions brought since early 2010 by participants of the defined benefits plans who left IBM UK. These actions, which allege constructive dismissal and age discrimination, are pending before the Employment Tribunal in Southampton UK.

In early 2012, IBM notified the SEC of an investigation by the Polish Central Anti-Corruption Bureau involving allegations of illegal activity by a former IBM Poland employee in connection with sales to the Polish government. IBM cooperated with the SEC and Polish authorities in this matter. In April 2013, IBM learned that the U.S. Department of Justice (DOJ) was also investigating allegations related to the Poland matter, as well as allegations relating to transactions in Argentina, Bangladesh and Ukraine. The DOJ was seeking information regarding the company's global Foreign Corrupt Practices Act of 1977 (FCPA) compliance program and its public sector business. The company cooperated with the DOJ in this matter. In June 2017, the DOJ and the SEC each informed IBM that based on the information to date, they closed their respective investigations into these matters without pursuing any enforcement action against the company.

In May 2015, a putative class action was commenced in the United States District Court for the Southern District of New York related to the company's October 2014 announcement that it was divesting its global commercial semiconductor technology business, alleging violations of the Employee Retirement Income Security Act ("ERISA"). Management's Retirement Plans Committee and three current or former IBM executives are named as defendants. On September 29, 2017, the Court granted the defendants' motion to dismiss the first amended complaint. Plaintiffs have filed a notice of appeal to the Second Circuit Court of Appeals and the matter remains pending.

In August 2015, IBM learned that the SEC is conducting an investigation relating to revenue recognition with respect to the accounting treatment of certain transactions in the U.S., UK and Ireland. The company is cooperating with the SEC in this matter.

The company is party to, or otherwise involved in, proceedings brought by U.S. federal or state environmental agencies under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), known as "Superfund," or laws similar to CERCLA. Such statutes require potentially responsible parties to participate in remediation activities regardless of fault or ownership of sites. The company is also conducting environmental investigations, assessments or remediations at or in the vicinity of several current or former operating sites globally pursuant to permits, administrative orders or agreements with country, state or local environmental agencies, and is involved in lawsuits and claims concerning certain current or former operating sites.

The company is also subject to ongoing tax examinations and governmental assessments in various jurisdictions. Along with many other U.S. companies doing business in Brazil, the company is involved in various challenges with Brazilian tax authorities regarding non-income tax assessments and non-income tax litigation matters. The total potential amount related to all these matters for all applicable years is approximately \$1.0 billion. The company believes it will prevail on these matters and that this amount is not a meaningful indicator of liability.

#### **Commitments**

The company's extended lines of credit to third-party entities include unused amounts of \$8,111 million and \$6,542 million at December 31, 2017 and 2016, respectively. A portion of these amounts was available to the company's business partners to support their working capital needs. In addition, the company has committed to provide future financing to its clients in connection with client purchase agreements for approximately \$3,569 million and \$2,463 million at December 31, 2017 and 2016, respectively.

The company has applied the guidance requiring a guarantor to disclose certain types of guarantees, even if the likelihood of requiring the guarantor's performance is remote. The following is a description of arrangements in which the company is the guarantor.

The company is a party to a variety of agreements pursuant to which it may be obligated to indemnify the other party with respect to certain matters. Typically, these obligations arise in the context of contracts entered into by the company, under which the company customarily agrees to hold the other party harmless against losses arising from a breach of representations and covenants related to such matters as title to assets sold, certain IP rights, specified environmental matters, third-party performance of nonfinancial contractual obligations and certain income taxes. In each of these circumstances, payment by the company is conditioned on the other party making a claim pursuant to the procedures specified in the particular contract, the procedures of which typically allow the company to challenge the other party's claims. While typically indemnification provisions do not include a contractual maximum on the company's payment, the company's obligations under these agreements may be limited in terms of time and/or nature of claim, and in some instances, the company may have recourse against third parties for certain payments made by the company.

It is not possible to predict the maximum potential amount of future payments under these or similar agreements due to the conditional nature of the company's obligations and the unique facts and circumstances involved in each particular agreement. Historically, payments made by the company under these agreements have not had a material effect on the company's business, financial condition or results of operations.

In addition, the company guarantees certain loans and financial commitments. The maximum potential future payment under these financial guarantees was \$19 million and \$34 million at December 31, 2017 and 2016, respectively. The fair value of the guarantees recognized in the Consolidated Statement of Financial Position was immaterial.

#### **NOTE N. TAXES**

(\$ in millions)

For the year ended December 31:	2017	2016	2015
Income from continuing operations before income taxes			
U.S. operations	\$ 560	\$ 3,650	\$ 5,915
Non-U.S. operations	10,840	8,680	10,030
<b>Total income from continuing operations before income taxes</b>	<b>\$11,400</b>	<b>\$12,330</b>	<b>\$15,945</b>

The income from continuing operations provision for income taxes by geographic operations is as follows:

(\$ in millions)

For the year ended December 31:	2017	2016	2015
U.S. operations	\$2,923	\$ 38	\$ 849
Non-U.S. operations	2,719	411	1,732
<b>Total continuing operations provision for income taxes</b>	<b>\$5,642</b>	<b>\$449</b>	<b>\$2,581</b>

The components of the income from continuing operations provision for income taxes by taxing jurisdiction are as follows:

(\$ in millions)

For the year ended December 31:	2017	2016	2015
U.S. federal			
Current	\$2,388	\$ 186	\$ (321)
Deferred	77	(746)	553
	<b>\$2,465</b>	<b>\$ (560)</b>	<b>\$ 232</b>
U.S. state and local			
Current	\$ 55	\$ 244	\$ 128
Deferred	28	(44)	116
	<b>\$ 83</b>	<b>\$ 200</b>	<b>\$ 244</b>
Non-U.S.			
Current	\$3,891	\$ 988	\$2,101
Deferred	(797)	(179)	4
	<b>\$3,094</b>	<b>\$ 809</b>	<b>\$2,105</b>
<b>Total continuing operations provision for income taxes</b>	<b>\$5,642</b>	<b>\$ 449</b>	<b>\$2,581</b>
Discontinued operations provision for income taxes	(3)	(2)	(117)
Provision for social security, real estate, personal property and other taxes	3,434	3,417	3,497
<b>Total taxes included in net income</b>	<b>\$9,073</b>	<b>\$3,864</b>	<b>\$5,961</b>

**Notes to Consolidated Financial Statements**

International Business Machines Corporation and Subsidiary Companies

A reconciliation of the statutory U.S. federal tax rate to the company's effective tax rate from continuing operations is as follows:

<b>For the year ended December 31:</b>	<b>2017</b>	<b>2016</b>	<b>2015</b>
Statutory rate	35%	35%	35%
U.S. Tax Cuts and Jobs Act	48	—	—
Foreign tax differential	(26)	(21)	(17)
Intra-entity transfers	(5)	—	—
Domestic incentives	(2)	(1)	(2)
State and local	1	1	1
Japan resolution	—	(10)	—
Other	(2)	0	(1)
<b>Effective rate</b>	<b>49%</b>	<b>4%</b>	<b>16%</b>

Percentages rounded for disclosure purposes.

The significant components reflected within the tax rate reconciliation labeled "Foreign tax differential" include the effects of foreign subsidiaries' earnings taxed at rates other than the U.S. statutory rate, foreign export incentives, the U.S. tax impacts of non-U.S. earnings repatriation and any net impacts of intercompany transactions. These items also reflect audit settlements, excluding the 2016 Japan resolution, or changes in the amount of unrecognized tax benefits associated with each of these items.

On December 22, 2017, the U.S. Tax Cuts and Jobs Act was enacted. U.S. tax reform introduced many changes, including lowering the U.S. corporate tax rate to 21 percent, changes in incentives, provisions to prevent U.S. base erosion and significant changes in the taxation of international income, including provisions which allow for the repatriation of foreign earnings without U.S. tax. The enactment of U.S. tax reform resulted in a provisional charge of \$5,475 million to tax expense in the fourth-quarter and year-ended December 31, 2017. This charge was the result of the one-time U.S. transition tax and any foreign tax costs on undistributed foreign earnings, as well as the remeasurement of deferred tax balances to the new U.S. Federal tax rate.

The net charge related to U.S. tax reform is based on the company's estimates as of December 31, 2017. All components of the provisional charge of \$5,475 million are based on the company's estimates as of December 31, 2017. Specifically, the transition tax, any foreign tax costs as well as the remeasurement of deferred tax balances are provisional and have been calculated based on existing tax law and the best information available as of the date of estimate. The final impact of U.S. tax reform may differ, possibly materially, due to factors such as changes in interpretations and assumptions that the company has made in its assessment, conclusion of the effects of the "Global

Intangible Low-Taxed Income" provisions, further refinement of the company's calculations, additional guidance that may be issued by the U.S. government, among other items. As these various factors are finalized, any change will be recorded as an adjustment to the provision for, or benefit from, income taxes in the period the amounts are determined, not to exceed 12 months from the date of U.S. tax reform enactment.

In late January 2018, the U.S. Treasury and Internal Revenue Service issued guidelines, which are expected to result in an additional charge in the first quarter of 2018, estimated at approximately \$110 million.

The 2017 continuing operations effective tax rate increased 45.8 points from 2016 driven by: the tax charge related to the impact of U.S. tax reform described above (48.0 points), the favorable resolution of the longstanding tax matter in Japan in 2016 (9.5 points) and an increase in the year-to-year tax charges related to intercompany payments (1.5 points). These impacts were partially offset by an increased benefit year to year in the utilization of foreign tax credits (5.4 points), a tax benefit related to an intra-entity asset transfer in the first quarter of 2017 (5.1 points), a benefit due to the tax write down of an intercompany investment in the fourth quarter of 2017 (1.7 points), and a benefit due to the geographic mix of pre-tax earnings (1.0 points).

The effect of tax law changes on deferred tax assets and liabilities was a benefit of \$270 million driven by U.S. tax reform and was included in the one-time charge.

**Deferred Tax Assets**

(\$ in millions)

<b>At December 31:</b>	<b>2017</b>	<b>2016</b>
Retirement benefits	\$3,477	\$ 4,671
Share-based and other compensation	646	1,132
Domestic tax loss/credit carryforwards	718	1,676
Deferred income	605	741
Foreign tax loss/credit carryforwards	1,024	816
Bad debt, inventory and warranty reserves	395	473
Depreciation	293	270
Accruals	387	624
Intangible assets	585	—
Other	1,396	1,503
Gross deferred tax assets	9,526	11,906
Less: valuation allowance	1,004	916
<b>Net deferred tax assets</b>	<b>\$8,522</b>	<b>\$10,990</b>

**Deferred Tax Liabilities**

(\$ in millions)

At December 31:	2017	2016
Depreciation	\$ 641	\$ 856
Retirement benefits	483	406
Goodwill and intangible assets	1,226	1,800
Leases	584	651
Software development costs	360	672
Deferred transition costs	254	351
Other	658	1,455
<b>Gross deferred tax liabilities</b>	<b>\$4,206</b>	<b>\$6,191</b>

For financial reporting purposes, the company has foreign and domestic loss carryforwards, the tax effect of which is \$507 million, as well as foreign and domestic credit carryforwards of \$1,235 million. Substantially all of these carryforwards are available for at least two years and the majority are available for 10 years or more.

The valuation allowances as of December 31, 2017, 2016 and 2015 were \$1,004 million, \$916 million and \$740 million, respectively. The amounts principally apply to certain foreign, state and local loss carryforwards and credits. In the opinion of management, it is more likely than not that these assets will not be realized. However, to the extent that tax benefits related to these carryforwards are realized in the future, the reduction in the valuation allowance will reduce income tax expense.

The amount of unrecognized tax benefits at December 31, 2017 increased by \$3,291 million in 2017 to \$7,031 million. A reconciliation of the beginning and ending amount of unrecognized tax benefits is as follows:

(\$ in millions)

	2017	2016	2015
Balance at January 1	\$3,740	\$ 4,574	\$ 5,104
Additions based on tax positions related to the current year	3,029	560	464
Additions for tax positions of prior years	803	334	569
Reductions for tax positions of prior years (including impacts due to a lapse in statute)	(367)	(1,443)	(1,348)
Settlements	(174)	(285)	(215)
<b>Balance at December 31</b>	<b>\$7,031</b>	<b>\$ 3,740</b>	<b>\$ 4,574</b>

The additions to unrecognized tax benefits related to the current and prior years are primarily attributable to U.S. tax issues, as well as non-U.S. issues, certain tax incentives and credits and state issues. The settlements and reductions to unrecognized tax benefits for tax positions of prior years are primarily attributable to non-U.S. audits and impacts due to lapses in statutes of limitation.

The liability at December 31, 2017 of \$7,031 million can be reduced by \$967 million of offsetting tax benefits associated with timing adjustments, U.S. tax credits, potential transfer pricing adjustments, and state income taxes. The net amount of \$6,064 million, if recognized, would favorably affect the company's effective tax rate. The net amounts at December 31, 2016 and 2015 were \$2,965 million and \$3,724 million, respectively.

Interest and penalties related to income tax liabilities are included in income tax expense. During the year ended December 31, 2017, the company recognized \$174 million in interest expense and penalties; in 2016, the company recognized \$62 million in interest expense and penalties; and, in 2015, the company recognized \$141 million in interest expense and penalties. The company has \$799 million for the payment of interest and penalties accrued at December 31, 2017, and had \$625 million accrued at December 31, 2016.

Within the next 12 months, the company believes it is reasonably possible that the total amount of unrecognized tax benefits associated with certain positions may be reduced. The potential decrease in the amount of unrecognized tax benefits is associated with the anticipated resolution of the company's U.S. income tax audit for 2013 and 2014, as well as various non-U.S. audits. The company estimates that the unrecognized tax benefits at December 31, 2017 could be reduced by \$1,062 million.

The company is subject to taxation in the U.S. and various state and foreign jurisdictions. With respect to major U.S. state and foreign taxing jurisdictions, the company is generally no longer subject to tax examinations for years prior to 2013. With limited exception, the company is no longer subject to income tax examination of its U.S. federal tax return for years prior to 2013. The open years contain matters that could be subject to differing interpretations of applicable tax laws and regulations related to the amount and/or timing of income, deductions and tax credits. Although the outcome of tax audits is always uncertain, the company believes that adequate amounts of tax and interest have been provided for any significant adjustments that are expected to result for these years.

In the fourth quarter of 2013, the company received a draft tax assessment notice for approximately \$866 million (approximately \$839 million at 2017 year-end currency rates) from the Indian Tax Authorities for 2009. In July 2016, the Karnataka High Court in Bangalore set aside this assessment by way of court order and the company reached a mutual agreement with the Income Tax Department for a new assessment. On January 2, 2018, the Income Tax Department issued the new 2009 draft tax assessment for approximately \$330 million. The revised draft tax assessment is in line with prior and future tax assessments and the company is confident that it will ultimately prevail on the matters raised in the assessment. At December 31, 2017, the company has recorded \$585 million as prepaid income taxes in India. A significant portion of this balance represents cash tax deposits paid over time to protect the company's right to appeal various income tax assessments made by the Indian Tax Authorities. The company believes it will prevail on these matters.

**Notes to Consolidated Financial Statements**

International Business Machines Corporation and Subsidiary Companies

In the first quarter of 2016, the U.S. Internal Revenue Service commenced its audit of the company's U.S. tax returns for 2013 and 2014. The company anticipates that this audit will be substantially completed in the first quarter of 2018.

Included in consolidated retained earnings at December 31, 2017 are undistributed after-tax earnings from non-U.S. subsidiaries, as well as a provisional amount of U.S. income taxes and foreign distribution taxes associated with the repatriation of these earnings.

**NOTE O. RESEARCH, DEVELOPMENT AND ENGINEERING**

RD&E expense was \$5,787 million in 2017, \$5,751 million in 2016 and \$5,247 million in 2015. In addition, RD&E expense included in discontinued operations was \$1 million in 2016 and \$197 million in 2015.

The company incurred total expense of \$5,367 million, \$5,421 million and \$5,178 million in 2017, 2016 and 2015, respectively, for scientific research and the application of scientific advances to the development of new and improved products and their uses, as well as services and their application. Within these amounts, software-related expense was \$3,275 million, \$3,470 million and \$3,064 million in 2017, 2016 and 2015, respectively.

Expense for product-related engineering was \$420 million, \$332 million and \$267 million in 2017, 2016 and 2015, respectively.

**NOTE P. EARNINGS PER SHARE OF COMMON STOCK**

The following table presents the computation of basic and diluted earnings per share of common stock.

(\$ in millions except per share amounts)	2017	2016	2015
<b>For the year ended December 31:</b>			
Weighted-average number of shares on which earnings per share calculations are based			
<b>Basic</b>	<b>932,828,295</b>	955,422,530	978,744,523
Add – incremental shares under stock-based compensation plans	3,094,373	2,416,940	3,037,001
Add – incremental shares associated with contingently issuable shares	1,462,957	874,626	918,744
<b>Assuming dilution</b>	<b>937,385,625</b>	958,714,097	982,700,267
Income from continuing operations	\$ 5,758	\$11,881	\$13,364
Loss from discontinued operations, net of tax	(5)	(9)	(174)
<b>Net income on which basic earnings per share is calculated</b>	<b>\$ 5,753</b>	\$11,872	\$13,190
Income from continuing operations	\$ 5,758	\$11,881	\$13,364
Net income applicable to contingently issuable shares	(2)	0	(1)
<b>Income from continuing operations on which diluted earnings per share is calculated</b>	<b>\$ 5,756</b>	\$11,881	\$13,363
<b>Loss from discontinued operations, net of tax, on which basic and diluted earnings per share is calculated</b>	<b>(5)</b>	(9)	(174)
<b>Net income on which diluted earnings per share is calculated</b>	<b>\$ 5,752</b>	\$11,872	\$13,189
Earnings/(loss) per share of common stock			
<b>Assuming dilution</b>			
Continuing operations	\$ 6.14	\$ 12.39	\$ 13.60
Discontinued operations	0.00	(0.01)	(0.18)
<b>Total</b>	<b>\$ 6.14</b>	\$ 12.38	\$ 13.42
<b>Basic</b>			
Continuing operations	\$ 6.17	\$ 12.44	\$ 13.66
Discontinued operations	0.00	(0.01)	(0.18)
<b>Total</b>	<b>\$ 6.17</b>	\$ 12.43	\$ 13.48

Weighted-average stock options to purchase 209,294 common shares in 2017, 405,552 common shares in 2016 and 41,380 common shares in 2015 were outstanding, but were not included in the computation of diluted earnings per share because the

exercise price of the options was greater than the average market price of the common shares for the full year, and therefore, the effect would have been antidilutive.

**NOTE Q. RENTAL EXPENSE AND LEASE COMMITMENTS**

Rental expense, including amounts charged to inventories and fixed assets, and excluding amounts previously reserved, was \$1,821 million in 2017, \$1,508 million in 2016 and \$1,474 million in 2015. Within these amounts, rental expense reflected in discontinued operations was \$29 million in 2015. Rental expense in agreements with rent holidays and scheduled rent increases is recorded on a straight-line basis over the lease term. Contingent

rentals are included in the determination of rental expense as accrueable. The table below depicts gross minimum rental commitments under noncancelable leases, amounts related to vacant space associated with workforce transformation, sublease income commitments and capital lease commitments. These amounts reflect activities primarily related to office space, data centers, equipment and vehicles.

(\$ in millions)

	2018	2019	2020	2021	2022	Beyond 2022
<b>Operating lease commitments</b>						
Gross minimum rental commitments (including vacant space below)	\$ 1,614	\$ 1,453	\$ 1,143	\$ 829	\$ 633	\$ 896
Vacant space	\$ 32	\$ 21	\$ 15	\$ 11	\$ 7	\$ 2
Sublease income commitments	\$ 13	\$ 7	\$ 4	\$ 2	\$ 2	\$ —
<b>Capital lease commitments</b>	<b>\$ 3</b>	<b>\$ 2</b>	<b>\$ 2</b>	<b>\$ 2</b>	<b>\$ 1</b>	<b>\$ —</b>

**NOTE R. STOCK-BASED COMPENSATION**

The following table presents total stock-based compensation cost included in income from continuing operations.

(\$ in millions)

For the year ended December 31:	2017	2016	2015
Cost	\$ 91	\$ 88	\$ 100
Selling, general and administrative	384	401	322
Research, development and engineering	59	55	51
Other (income) and expense*	—	—	(6)
Pre-tax stock-based compensation cost	534	544	468
Income tax benefits	(131)	(179)	(156)
<b>Net stock-based compensation cost</b>	<b>\$ 403</b>	<b>\$ 364</b>	<b>\$ 312</b>

\* Reflects the one-time effects related to divestitures.

The implementation of the new FASB guidance for share-based payment transactions resulted in an immaterial impact to income tax benefits for the year ended December 31, 2017.

Total unrecognized compensation cost related to non-vested awards at December 31, 2017 and 2016 was \$851 million and \$934 million, respectively. The amount at December 31, 2017 is expected to be recognized over a weighted-average period of approximately 2.6 years.

There was no significant capitalized stock-based compensation cost at December 31, 2017, 2016, and 2015.

**Incentive Awards**

Stock-based incentive awards are provided to employees under the terms of the company's long-term performance plans (the "Plans"). The Plans are administered by the Executive Compensation and Management Resources Committee of the Board of Directors (the "Committee"). Awards available under the Plans principally include restricted stock units, performance share units, stock options or any combination thereof.

The amount of shares originally authorized to be issued under the company's existing Plans was 273 million at December 31, 2017. In addition, certain incentive awards granted under previous plans, if and when those awards were canceled, could be reissued under the company's existing Plans. As such, 66.2 million additional shares were considered authorized to be issued under the company's existing Plans as of December 31, 2017. There were 104.1 million unused shares available to be granted under the Plans as of December 31, 2017.

Under the company's long-standing practices and policies, all awards are approved prior to or on the date of grant. The awards approval process specifies the individual receiving the grant, the number of options or the value of the award, the exercise price or formula for determining the exercise price and the date of grant. All awards for senior management are approved by the Committee. All awards for employees other than senior management are approved by senior management pursuant to a series of delegations that were approved by the Committee, and the grants made pursuant to these delegations are reviewed periodically with the Committee. Awards that are given as part of annual total compensation for senior management and other employees are made on specific cycle dates scheduled in advance. With respect to awards given in connection with promotions or new hires, the company's policy requires approval of such awards prior to the grant date, which is typically the date of the promotion or the date of hire.

**Stock Awards**

Stock awards are made in the form of Restricted Stock Units (RSUs), including Retention Restricted Stock Units (RRSUs), or Performance Share Units (PSUs).

**Notes to Consolidated Financial Statements**

International Business Machines Corporation and Subsidiary Companies

The tables below summarize RSU and PSU activity under the Plans during the years ended December 31, 2017, 2016 and 2015.

**RSUs**

	2017		2016		2015	
	Weighted-Average Grant Price	Number of Units	Weighted-Average Grant Price	Number of Units	Weighted-Average Grant Price	Number of Units
Balance at January 1	\$147	8,899,092	\$159	7,527,341	\$171	7,734,277
RSUs granted	137	3,540,949	140	3,985,870	143	4,230,186
RSUs released	153	(3,032,531)	174	(1,860,660)	164	(3,567,495)
RSUs canceled/forfeited	147	(852,247)	158	(753,459)	167	(869,627)
<b>Balance at December 31</b>	<b>\$141</b>	<b>8,555,263</b>	<b>\$147</b>	<b>8,899,092</b>	<b>\$159</b>	<b>7,527,341</b>

**PSUs**

	2017		2016		2015	
	Weighted-Average Grant Price	Number of Units	Weighted-Average Grant Price	Number of Units	Weighted-Average Grant Price	Number of Units
Balance at January 1	\$155	2,874,758	\$173	2,928,932	\$185	3,140,707
PSUs granted at target	137	824,875	140	990,336	153	1,137,242
Performance adjustments*	175	(623,245)	194	(387,457)	185	(168,055)
PSUs released	175	(293,236)	194	(419,759)	185	(840,552)
PSUs canceled/forfeited	144	(133,839)	174	(237,294)	184	(340,410)
<b>Balance at December 31**</b>	<b>\$144</b>	<b>2,649,313</b>	<b>\$155</b>	<b>2,874,758</b>	<b>\$173</b>	<b>2,928,932</b>

\* Represents the change in shares issued to employees after vesting of PSUs because final performance metrics were above or below specified targets.

\*\*Represents the number of shares expected to be issued based on achievement of grant date performance targets. The actual number of shares issued will depend on final performance against specified targets over the vesting period.

RSUs are stock awards granted to employees that entitle the holder to shares of common stock as the award vests, typically over a one- to five-year period. For RSUs, dividend equivalents are not paid. The fair value of such RSUs is determined and fixed on the grant date based on the company's stock price adjusted for the exclusion of dividend equivalents.

The remaining weighted-average contractual term of RSUs at December 31, 2017, 2016 and 2015 is the same as the period over which the remaining cost of the awards will be recognized, which is approximately three years. The fair value of RSUs granted during the years ended December 31, 2017, 2016 and 2015 was \$484 million, \$557 million and \$606 million, respectively. The total fair value of RSUs vested and released during the years ended December 31, 2017, 2016 and 2015 was \$463 million, \$323 million and \$583 million, respectively. As of December 31, 2017, 2016 and 2015, there was \$763 million, \$814 million and \$800 million, respectively, of unrecognized compensation cost related to non-vested RSUs. The company received no cash from employees as a result of employee vesting and release of RSUs for the years ended December 31, 2017, 2016 and 2015.

PSUs are stock awards where the number of shares ultimately received by the employee depends on the company's performance against specified targets and typically vest over a three-year period. For PSUs, dividend equivalents are not paid. The fair value of each PSU is determined on the grant date, based on the company's stock price, adjusted for the exclusion of dividend equivalents, and assumes that performance targets will be achieved. Over the performance period, the number of shares of stock that will be issued is adjusted upward or downward based upon the probability of achievement of performance targets. The ultimate number of shares issued and the related compensation cost recognized as expense will be based on a comparison of the final performance metrics to the specified targets. The fair value of PSUs granted at target during the years ended December 31, 2017, 2016 and 2015 was \$113 million, \$138 million and \$174 million, respectively. Total fair value of PSUs vested and released during the years ended December 31, 2017, 2016 and 2015 was \$51 million, \$81 million and \$156 million, respectively.

In connection with vesting and release of RSUs and PSUs, the tax benefits realized by the company for the years ended December 31, 2017, 2016 and 2015 were \$180 million, \$118 million and \$228 million, respectively.

#### Stock Options

For the years ended December 31, 2017 and 2015, the company did not grant stock options. For the year ended December 31, 2016, the company made one grant of 1.5 million premium-priced stock options. The option award was granted with a three-year cliff vesting period and a 10-year contractual term. The award's cost of \$12 million is recognized ratably over the three-year vesting period.

The company estimates the fair value of stock options at the date of grant using the Black-Scholes valuation model. Key inputs and assumptions used to estimate the fair value of stock options include the grant price of the award, the expected option term, volatility of the company's stock, the risk-free rate and the company's dividend yield. Estimates of fair value are not intended to predict actual future events or the value ultimately realized by employees who receive equity awards, and subsequent events are not indicative of the reasonableness of the original estimates of fair value made by the company.

The following table summarizes option activity under the Plans during the years ended December 31, 2017, 2016 and 2015.

	2017		2016		2015	
	Weighted-Average Exercise Price	Number of Shares Under Option	Weighted-Average Exercise Price	Number of Shares Under Option	Weighted-Average Exercise Price	Number of Shares Under Option
Balance at January 1	\$137	1,613,923	\$ 94	479,774	\$ 97	1,750,949
Options granted	—	—	140	1,500,000	—	—
Options exercised	103	(106,132)	91	(361,088)	98	(1,214,109)
Options canceled/expired	103	(7,791)	86	(4,763)	100	(57,066)
<b>Balance at December 31</b>	<b>\$140</b>	<b>1,500,000</b>	<b>\$137</b>	<b>1,613,923</b>	<b>\$ 94</b>	<b>479,774</b>
<b>Exercisable at December 31</b>	<b>\$ —</b>	<b>—</b>	<b>\$103</b>	<b>113,923</b>	<b>\$ 94</b>	<b>479,774</b>

The shares under option at December 31, 2017 were in the following exercise price ranges:

Exercise Price Range	Options Outstanding			
	Weighted-Average Exercise Price	Number of Shares Under Option	Aggregate Intrinsic Value	Weighted-Average Remaining Contractual Life (in Years)
\$129-\$154	\$140	1,500,000	\$39,236,250	8.1

#### Exercises of Employee Stock Options

The total intrinsic value of options exercised during the years ended December 31, 2017, 2016 and 2015 was \$7 million, \$20 million and \$74 million, respectively. The total cash received from employees as a result of employee stock option exercises for the years ended December 31, 2017, 2016 and 2015 was approximately \$11 million, \$33 million and \$119 million, respectively. In connection with these exercises, the tax benefits realized by the company for the years ended December 31, 2017, 2016 and 2015 were \$2 million, \$7 million and \$26 million, respectively.

The company settles employee stock option exercises primarily with newly issued common shares and, occasionally, with treasury shares. Total treasury shares held at December 31, 2017 and 2016 were approximately 1,307 million and 1,279 million shares, respectively.

**Acquisitions**

In connection with various acquisition transactions, there was an additional 0.3 million options outstanding at December 31, 2017, as a result of the company's conversion of stock-based awards previously granted by the acquired entities. The weighted-average exercise price of these awards was \$42 per share.

**IBM Employees Stock Purchase Plan**

The company maintains a non-compensatory Employees Stock Purchase Plan (ESPP). The ESPP enables eligible participants to purchase full or fractional shares of IBM common stock at a 5 percent discount off the average market price on the day of purchase through payroll deductions of up to 10 percent of eligible compensation. Eligible compensation includes any compensation received by the employee during the year. The ESPP provides for offering periods during which shares may be purchased and continues as long as shares remain available under the ESPP, unless terminated earlier at the discretion of the Board of Directors. Individual ESPP participants are restricted from purchasing more than \$25,000 of common stock in one calendar year or 1,000 shares in an offering period.

Employees purchased 1.0 million, 1.2 million and 1.3 million shares under the ESPP during the years ended December 31, 2017, 2016 and 2015, respectively. Cash dividends declared and paid by the company on its common stock also include cash dividends on the company stock purchased through the ESPP. Dividends are paid on full and fractional shares and can be reinvested. The company stock purchased through the ESPP is considered outstanding and is included in the weighted-average outstanding shares for purposes of computing basic and diluted earnings per share.

In July 2014, the "2014 ESPP Reserve" became effective and 25 million additional shares of authorized common stock were reserved and approved for issuance. The 2014 ESPP provides for semi-annual offerings commencing July 1, 2014, and continuing as long as shares remain available under the ESPP, unless terminated earlier at the discretion of the Board of Directors.

Approximately 20.8 million, 21.8 million and 23.1 million shares were available for purchase under the ESPP at December 31, 2017, 2016 and 2015, respectively.

**NOTE S. RETIREMENT-RELATED BENEFITS****Description of Plans**

IBM sponsors defined benefit pension plans and defined contribution plans that cover eligible regular employees, a supplemental retention plan that covers certain U.S. executives and nonpension postretirement benefit plans primarily consisting of retiree medical and dental benefits for eligible retirees and dependents.

**U.S. Plans****Defined Benefit Pension Plans**

## IBM Personal Pension Plan

IBM provides U.S. regular, full-time and part-time employees hired prior to January 1, 2005 with noncontributory defined benefit pension benefits via the IBM Personal Pension Plan (PPP). The PPP has two plans, a tax qualified plan (Qualified PPP) and a non-tax qualified plan (Excess PPP). The Qualified PPP is funded by company contributions to an irrevocable trust fund, which is held for the sole benefit of participants and beneficiaries. The Excess PPP, which is unfunded, provides benefits in excess of IRS limitations for qualified plans.

Benefits provided to the PPP participants are calculated using benefit formulas that vary based on the participant. The first method uses a five-year, final pay formula that determines benefits based on salary, years of service, mortality and other participant-specific factors. The second method is a cash balance formula that calculates benefits using a percentage of employees' annual salary, as well as an interest crediting rate.

Benefit accruals under the IBM Personal Pension Plan ceased December 31, 2007 for all participants.

## U.S. Supplemental Executive Retention Plan

The company also sponsors a nonqualified U.S. Supplemental Executive Retention Plan (Retention Plan). The Retention Plan, which is unfunded, provides benefits to eligible U.S. executives based on average earnings, years of service and age at termination of employment.

Benefit accruals under the Retention Plan ceased December 31, 2007 for all participants.

**Defined Contribution Plans**

## IBM 401(k) Plus Plan

U.S. regular, full-time and part-time employees are eligible to participate in the IBM 401(k) Plus Plan, which is a qualified defined contribution plan under section 401(k) of the Internal Revenue Code. Under the IBM 401(k) Plus Plan, eligible employees receive a dollar-for-dollar match of their contributions generally up to 6 percent of eligible compensation for those hired prior to January 1, 2005, and, generally up to 5 percent of eligible compensation for those hired on or after January 1, 2005. In addition, eligible employees generally receive automatic contributions from the company equal to 1, 2 or 4 percent of eligible compensation based on their eligibility to participate in the PPP as of December 31, 2007. Employees generally receive automatic contributions and matching contributions after the completion of one year of service.

All contributions, including the company match, are made in cash and invested in accordance with participants' investment elections. There are no minimum amounts that must be invested in company stock, and there are no restrictions on transferring amounts out of company stock to another investment choice, other than excessive trading rules applicable to such investments. Matching and automatic contributions are made once annually at the end of the year. In order to receive such contributions each year, a participant must be employed on December 15 of the plan year. However, matching and auto contributions may be made for certain types of separations that occur prior to December 15, including for example, if the participant has completed certain service and/or age requirements at separation. The company's matching contributions vest immediately and participants are always fully vested in their own contributions.

#### IBM Excess 401(k) Plus Plan

The IBM Excess 401(k) Plus Plan (Excess 401(k)) is an unfunded, nonqualified defined contribution plan. Employees whose eligible compensation is expected to exceed the IRS compensation limit for qualified plans are eligible to participate in the Excess 401(k). The purpose of the Excess 401(k) is to provide benefits that would be provided under the qualified IBM 401(k) Plus Plan if the compensation limits did not apply.

Amounts deferred into the Excess 401(k) are record-keeping (notional) accounts and are not held in trust for the participants. Participants in the Excess 401(k) may invest their notional accounts in investments which mirror the primary investment options available under the 401(k) Plus Plan. Participants in the Excess 401(k) are also eligible to receive company match and automatic contributions (at the same rate as under the 401(k) Plus Plan) on eligible compensation deferred into the Excess 401(k) and on compensation earned in excess of the Internal Revenue Code pay limit once they have completed one year of service. Amounts deferred into the Excess 401(k), including company contributions are recorded as liabilities in the Consolidated Statement of Financial Position. Matching and automatic contributions are made once annually at the end of the year. In order to receive such contributions each year, a participant must be employed on December 15 of the plan year. However, matching and auto contributions may be made for certain types of separations that occur prior to December 15, including for example, if the participant has completed certain service and/or age requirements at separation.

#### Nonpension Postretirement Benefit Plan

##### U.S. Nonpension Postretirement Plan

The company sponsors a defined benefit nonpension postretirement benefit plan that provides medical and dental benefits to eligible U.S. retirees and eligible dependents, as well as life insurance for eligible U.S. retirees. Benefits provided vary based on plan design formulas and eligibility requirements. Under all the plan arrangements, there is a maximum cost to the company for these benefits.

Since January 1, 2004, new hires, as of that date or later, are not eligible for company-subsidized nonpension postretirement benefits.

#### Non-U.S. Plans

Certain subsidiaries and branches outside the United States sponsor defined benefit and/or defined contribution plans that cover eligible regular employees. The company deposits funds under various fiduciary-type arrangements, purchases annuities under group contracts or provides reserves for these plans. Benefits under the defined benefit plans are typically based either on years of service and the employee's compensation (generally during a fixed number of years immediately before retirement) or on annual credits. The range of assumptions that are used for the non-U.S. defined benefit plans reflect the different economic environments within the various countries.

In addition, certain of the company's non-U.S. subsidiaries sponsor nonpension postretirement benefit plans that provide medical and dental benefits to eligible non-U.S. retirees and eligible dependents, as well as life insurance for certain eligible non-U.S. retirees. However, most non-U.S. retirees are covered by local government sponsored and administered programs.

**Notes to Consolidated Financial Statements**

International Business Machines Corporation and Subsidiary Companies

**Plan Financial Information****Summary of Financial Information**

The following table presents a summary of the total retirement-related benefits net periodic (income)/cost recorded in the Consolidated Statement of Earnings.

(\$ in millions)

	U.S. Plans			Non-U.S. Plans			Total		
	2017	2016	2015	2017	2016	2015	2017	2016	2015
<b>For the year ended December 31:</b>									
Defined benefit pension plans	\$ 237	\$ (334)	\$ (284)	\$1,315	\$1,039	\$1,421	\$1,552	\$ 705	\$1,137
Retention Plan	16	17	23	—	—	—	16	17	23
Total defined benefit pension plans (income)/cost	\$ 253	\$ (317)	\$ (261)	\$1,315	\$1,039	\$1,421	\$1,568	\$ 722	\$1,160
IBM 401(k) Plus Plan and non-U.S. plans	\$ 616	\$626	\$ 676	\$ 404	\$ 420	\$ 442	\$1,020	\$1,046	\$1,117
Excess 401(k)	26	24	21	—	—	—	26	24	21
Total defined contribution plans cost	\$ 643	\$ 650	\$ 697	\$ 404	\$ 420	\$ 442	\$1,046	\$1,070	\$1,138
Nonpension postretirement benefit plans cost	\$ 180	\$ 195	\$ 218	\$ 62	\$ 16	\$ 55	\$ 242	\$ 211	\$ 273
<b>Total retirement-related benefits net periodic cost</b>	<b>\$1,076</b>	<b>\$ 527</b>	<b>\$ 654</b>	<b>\$1,781</b>	<b>\$1,475</b>	<b>\$1,918</b>	<b>\$2,857</b>	<b>\$2,003</b>	<b>\$2,572</b>

The following table presents a summary of the total PBO for defined benefit pension plans, APBO for nonpension postretirement benefit plans, fair value of plan assets and the associated funded status recorded in the Consolidated Statement of Financial Position.

(\$ in millions)

	Benefit Obligations		Fair Value of Plan Assets		Funded Status*	
	2017	2016	2017	2016	2017	2016
<b>At December 31:</b>						
<b>U.S. Plans</b>						
Overfunded plans						
Qualified PPP	\$50,602	\$50,403	\$52,694	\$51,405	\$ 2,092	\$ 1,002
Underfunded plans						
Excess PPP	\$ 1,532	\$ 1,509	\$ —	\$ —	\$ (1,532)	\$ (1,509)
Retention Plan	310	307	—	—	(310)	(307)
Nonpension postretirement benefit plan	4,184	4,470	18	26	(4,165)	(4,444)
<b>Total underfunded U.S. plans</b>	<b>\$ 6,026</b>	<b>\$ 6,286</b>	<b>\$ 18</b>	<b>\$ 26</b>	<b>\$ (6,007)</b>	<b>\$ (6,260)</b>
<b>Non-U.S. Plans</b>						
Overfunded plans						
Qualified defined benefit pension plans	\$19,537	\$17,614	\$22,088	\$19,647	\$ 2,551	\$ 2,032
Nonpension postretirement benefit plans	0	0	0	0	0	0
<b>Total overfunded non-U.S. plans</b>	<b>\$19,537</b>	<b>\$17,614</b>	<b>\$22,088</b>	<b>\$19,647</b>	<b>\$ 2,551</b>	<b>\$ 2,032</b>
Underfunded plans						
Qualified defined benefit pension plans	\$23,046	\$21,447	\$18,711	\$16,374	\$ (4,336)	\$ (5,074)
Nonqualified defined benefit pension plans	6,527	5,919	—	—	(6,527)	(5,919)
Nonpension postretirement benefit plans	732	692	70	71	(663)	(622)
<b>Total underfunded non-U.S. plans</b>	<b>\$30,306</b>	<b>\$28,059</b>	<b>\$18,780</b>	<b>\$16,445</b>	<b>\$ (11,526)</b>	<b>\$ (11,614)</b>
<b>Total overfunded plans</b>	<b>\$70,139</b>	<b>\$68,017</b>	<b>\$74,782</b>	<b>\$71,051</b>	<b>\$ 4,643</b>	<b>\$ 3,034</b>
<b>Total underfunded plans</b>	<b>\$36,332</b>	<b>\$34,344</b>	<b>\$18,799</b>	<b>\$16,470</b>	<b>\$ (17,533)</b>	<b>\$ (17,874)</b>

\* Funded status is recognized in the Consolidated Statement of Financial Position as follows: Asset amounts as prepaid pension assets; (Liability) amounts as compensation and benefits (current liability) and retirement and nonpension postretirement benefit obligations (noncurrent liability).

At December 31, 2017, the company's qualified defined benefit pension plans worldwide were 100 percent funded compared to the benefit obligations, with the U.S. Qualified PPP 104 percent funded. Overall, including nonqualified plans, the company's defined benefit pension plans worldwide were 92 percent funded.

PPP and the Retention Plan. The defined benefit pension plans and the nonpension postretirement benefit plans under non-U.S. Plans consists of all plans sponsored by the company's subsidiaries. The nonpension postretirement benefit plan under U.S. Plan consists of only the U.S. Nonpension Postretirement Benefit Plan.

#### **Defined Benefit Pension and Nonpension Postretirement Benefit Plan Financial Information**

The following tables through page 134 represent financial information for the company's retirement-related benefit plans, excluding defined contribution plans. The defined benefit pension plans under U.S. Plans consists of the Qualified PPP, the Excess

The tables below present the components of net periodic (income)/cost of the retirement-related benefit plans recognized in the Consolidated Statement of Earnings, excluding defined contribution plans.

(\$ in millions)

	Defined Benefit Pension Plans					
	U.S. Plans			Non-U.S. Plans		
For the year ended December 31:	2017	2016	2015	2017	2016	2015
Service cost	\$ —	\$ —	\$ —	\$ 410	\$ 420	\$ 454
Interest cost	1,913	2,048	2,028	837	1,035	1,075
Expected return on plan assets	(3,014)	(3,689)	(3,953)	(1,325)	(1,867)	(1,919)
Amortization of transition assets	—	—	—	0	0	0
Amortization of prior service costs/(credits)	16	10	10	(97)	(106)	(98)
Recognized actuarial losses	1,337	1,314	1,654	1,507	1,408	1,581
Curtailments and settlements	—	—	—	19	22	35
Multi-employer plans/other costs*	—	—	—	(36)	126	293
<b>Total net periodic (income)/cost</b>	<b>\$ 253</b>	<b>\$ (317)</b>	<b>\$ (261)</b>	<b>\$ 1,315</b>	<b>\$ 1,039</b>	<b>\$ 1,421</b>

(\$ in millions)

	Nonpension Postretirement Benefit Plans					
	U.S. Plan			Non-U.S. Plans		
For the year ended December 31:	2017	2016	2015	2017	2016	2015
Service cost	\$ 14	\$ 17	\$ 24	\$ 6	\$ 5	\$ 7
Interest cost	154	165	163	57	51	50
Expected return on plan assets	0	0	0	(7)	(6)	(7)
Amortization of transition assets	—	—	—	0	0	0
Amortization of prior service costs/(credits)	(7)	(7)	(7)	0	(5)	(5)
Recognized actuarial losses	20	20	39	7	9	10
Curtailments and settlements	—	—	—	0	(38)	0
<b>Total net periodic cost</b>	<b>\$180</b>	<b>\$195</b>	<b>\$218</b>	<b>\$62</b>	<b>\$16</b>	<b>\$55</b>

\* Multi-employer plans costs were \$40 million, \$43 million and \$40 million for 2017, 2016, and 2015, respectively. The non-U.S. plans amounts include a gain of \$91 million in 2017 related to the IBM UK litigation and retirement-related obligations of \$56 million and \$233 million related to the IBM Spain pension litigation for 2016, and 2015, respectively.

**Notes to Consolidated Financial Statements**

International Business Machines Corporation and Subsidiary Companies

The following table presents the changes in benefit obligations and plan assets of the company's retirement-related benefit plans, excluding defined contribution plans.

(\$ in millions)

	Defined Benefit Pension Plans				Nonpension Postretirement Benefit Plans			
	U.S. Plans		Non-U.S. Plans		U.S. Plan		Non-U.S. Plans	
	2017	2016	2017	2016	2017	2016	2017	2016
<b>Change in benefit obligation</b>								
Benefit obligation at January 1	\$52,218	\$53,120	\$44,981	\$44,717	\$ 4,470	\$ 4,652	\$ 692	\$ 618
Service cost	—	—	410	420	14	17	6	5
Interest cost	1,913	2,048	837	1,035	154	165	57	51
Plan participants' contributions	—	—	28	30	54	50	—	—
Acquisitions/divestitures, net	—	—	24	(63)	0	0	0	0
Actuarial losses/(gains)	1,895	602	520	3,217	(98)	16	(3)	16
Benefits paid from trust	(3,460)	(3,430)	(1,865)	(1,792)	(385)	(400)	(6)	(5)
Direct benefit payments	(123)	(123)	(384)	(381)	(24)	(30)	(30)	(27)
Foreign exchange impact	—	—	4,657	(2,222)	—	—	18	35
Amendments/curtailments/ settlements/other	—	—	(96)	20	—	—	(1)	0
<b>Benefit obligation at December 31</b>	<b>\$52,444</b>	<b>\$52,218</b>	<b>\$49,111</b>	<b>\$44,981</b>	<b>\$ 4,184</b>	<b>\$ 4,470</b>	<b>\$ 732</b>	<b>\$ 692</b>
<b>Change in plan assets</b>								
Fair value of plan assets at January 1	\$51,405	\$51,716	\$36,020	\$35,748	\$ 26	\$ 71	\$ 71	\$ 59
Actual return on plan assets	4,749	3,118	2,583	3,828	0	0	6	8
Employer contributions	—	—	368	464	394	305	0	0
Acquisitions/divestitures, net	—	—	(28)	(73)	0	0	0	0
Plan participants' contributions	—	—	28	30	54	50	—	—
Benefits paid from trust	(3,460)	(3,430)	(1,865)	(1,792)	(385)	(400)	(6)	(5)
Foreign exchange impact	—	—	3,694	(2,175)	—	—	(1)	9
Amendments/curtailments/ settlements/other	—	—	(2)*	(10)*	(70)	—	(1)	0
<b>Fair value of plan assets at December 31</b>	<b>\$52,694</b>	<b>\$51,405</b>	<b>\$40,798</b>	<b>\$36,020</b>	<b>\$ 18</b>	<b>\$ 26</b>	<b>\$ 70</b>	<b>\$ 71</b>
<b>Funded status at December 31</b>	<b>\$ 250</b>	<b>\$ (814)</b>	<b>\$ (8,312)</b>	<b>\$ (8,960)</b>	<b>\$(4,165)</b>	<b>\$(4,444)</b>	<b>\$(663)</b>	<b>\$(622)</b>
Accumulated benefit obligation**	<b>\$52,444</b>	<b>\$52,218</b>	<b>\$47,974</b>	<b>\$44,514</b>	N/A	N/A	N/A	N/A

\* Includes the reinstatement of certain plan assets in Brazil due to government rulings in 2011 and 2013 allowing certain previously restricted plan assets to be returned to IBM. Return of assets to IBM over a three-year period began June 2011 and September 2013 respectively, with approximately \$23 million returned in 2016. There were no assets returned during 2017. The remaining surplus in Brazil at December 31, 2017 is excluded from total plan assets due to continued restrictions imposed by the government on the use of those plan assets.

\*\*Represents the benefit obligation assuming no future participant compensation increases.

N/A – Not applicable

**Notes to Consolidated Financial Statements**

International Business Machines Corporation and Subsidiary Companies

The following table presents the net funded status recognized in the Consolidated Statement of Financial Position.

(\$ in millions)										
At December 31:	Defined Benefit Pension Plans				Nonpension Postretirement Benefit Plans					
	U.S. Plans		Non-U.S. Plans		U.S. Plan		Non-U.S. Plans			
	2017	2016	2017	2016	2017	2016	2017	2016		
Prepaid pension assets	\$ 2,092	\$ 1,002	\$ 2,551	\$ 2,032	\$ 0	\$ 0	\$ 0	\$ 0		
Current liabilities—compensation and benefits	(120)	(118)	(323)	(303)	(353)	(368)	(17)	(15)		
Noncurrent liabilities—retirement and nonpension postretirement benefit obligations	(1,722)	(1,698)	(10,541)	(10,689)	(3,812)	(4,076)	(646)	(607)		
<b>Funded status—net</b>	<b>\$ 250</b>	<b>\$ (814)</b>	<b>\$ (8,312)</b>	<b>\$ (8,960)</b>	<b>\$ (4,165)</b>	<b>\$ (4,444)</b>	<b>\$ (663)</b>	<b>\$ (622)</b>		

The following table presents the pre-tax net loss and prior service costs/(credits) and transition (assets)/liabilities recognized in OCI and the changes in the pre-tax net loss, prior service costs/(credits) and transition (assets)/liabilities recognized in AOCI for the retirement-related benefit plans.

(\$ in millions)										
At December 31:	Defined Benefit Pension Plans				Nonpension Postretirement Benefit Plans					
	U.S. Plans		Non-U.S. Plans		U.S. Plan		Non-U.S. Plans			
	2017	2016	2017	2016	2017	2016	2017	2016		
Net loss at January 1	\$19,222	\$19,363	\$20,544	\$20,724	\$605	\$609	\$154	\$128		
Current period loss/(gain)	159	1,173	(740)	1,251	(99)	16	(2)	14		
Curtailments and settlements	—	—	(22)	(22)	—	—	0	20		
Amortization of net loss included in net periodic (income)/cost	(1,337)	(1,314)	(1,507)	(1,408)	(20)	(20)	(7)	(9)		
<b>Net loss at December 31</b>	<b>\$18,045</b>	<b>\$19,222</b>	<b>\$18,275</b>	<b>\$20,544</b>	<b>\$486</b>	<b>\$605</b>	<b>\$145</b>	<b>\$154</b>		
Prior service costs/(credits) at January 1	\$ 90	\$ 101	\$ (188)	\$ (294)	\$ 37	\$ 30	\$ 1	\$ (21)		
Curtailments, settlements and other	—	—	1	0	—	—	2	18		
Amortization of prior service (costs)/credits included in net periodic (income)/cost	(16)	(10)	97	106	7	7	0	5		
<b>Prior service costs/(credits) at December 31</b>	<b>\$ 74</b>	<b>\$ 90</b>	<b>\$ (90)</b>	<b>\$ (188)</b>	<b>\$ 45</b>	<b>\$ 37</b>	<b>\$ 3</b>	<b>\$ 1</b>		
Transition (assets)/liabilities at January 1	\$ —	\$ —	\$ 0	\$ 0	\$ —	\$ —	\$ 0	\$ 0		
Amortization of transition assets/(liabilities) included in net periodic (income)/cost	—	—	0	0	—	—	0	0		
<b>Transition (assets)/liabilities at December 31</b>	<b>\$ —</b>	<b>\$ —</b>	<b>\$ 0</b>	<b>\$ 0</b>	<b>\$ —</b>	<b>\$ —</b>	<b>\$ 0</b>	<b>\$ 0</b>		
<b>Total loss recognized in accumulated other comprehensive income/(loss)*</b>	<b>\$18,119</b>	<b>\$19,313</b>	<b>\$18,184</b>	<b>\$20,356</b>	<b>\$531</b>	<b>\$642</b>	<b>\$147</b>	<b>\$154</b>		

\* See note L, "Equity Activity," for the total change in AOCI, and the Consolidated Statement of Comprehensive Income for the components of net periodic (income)/cost, including the related tax effects, recognized in OCI for the retirement-related benefit plans.

**Notes to Consolidated Financial Statements**

International Business Machines Corporation and Subsidiary Companies

The following table presents the pre-tax estimated net loss, estimated prior service costs/(credits) and estimated transition (assets)/liabilities of the retirement-related benefit plans that will be amortized from AOCI into net periodic (income)/cost in 2018.

(\$ in millions)

	Defined Benefit Pension Plans		Nonpension Postretirement Benefit Plans	
	U.S. Plans	Non-U.S. Plans	U.S. Plan	Non-U.S. Plans
Net loss	\$1,538	\$1,464	\$9	\$6
Prior service costs/(credits)	16	(81)	(7)	0
Transition (assets)/liabilities	—	0	—	0

On March 24, 2014, the Supreme Court of Spain issued a ruling against IBM Spain in litigation involving its defined benefit and defined contribution plans. During the fourth quarter of 2016, an arbitration ruling related to the defined contribution plan resulted in an additional charge of \$56 million. For the years ended December 31, 2016 and 2015, the company recorded pre-tax retirement-related obligations of \$56 million and \$233 million, respectively, in selling, general and administrative expense in the Consolidated Statement of Earnings. There were no pre-tax retirement-related obligations for the year ended December 31, 2017. These obligations are reflected in “Non-U.S. Plans—Multi-employer plans/other costs” in the table on page 131.

On October 12, 2012, the High Court in London issued a ruling against IBM United Kingdom Limited and IBM United Kingdom Holdings Limited, both wholly-owned subsidiaries of the company, in litigation involving one of IBM UK’s defined benefit plans. As a result of the ruling, the company recorded a pre-tax retirement-related obligation of \$162 million in the fourth quarter of 2012 in selling, general and administrative expense in the

Consolidated Statement of Earnings. As a result of the final Court of Appeal ruling received in August 2017, the company adjusted its obligation under the plan. This adjustment resulted in a gain of \$91 million for the year ended December 31, 2017, which was recorded in selling, general and administrative expense in the Consolidated Statement of Earnings. This gain is reflected in “Non-U.S. Plans—Multi-employer plans/other” in the table on page 131. See note M, “Contingencies and Commitments” for additional information.

**Assumptions Used to Determine Plan Financial Information**

Underlying both the measurement of benefit obligations and net periodic (income)/cost are actuarial valuations. These valuations use participant-specific information such as salary, age and years of service, as well as certain assumptions, the most significant of which include estimates of discount rates, expected return on plan assets, rate of compensation increases, interest crediting rates and mortality rates. The company evaluates these assumptions, at a minimum, annually, and makes changes as necessary.

The table below presents the assumptions used to measure the net periodic (income)/cost and the year-end benefit obligations for retirement-related benefit plans.

	Defined Benefit Pension Plans					
	U.S. Plans			Non-U.S. Plans		
	2017	2016	2015	2017	2016	2015
<b>Weighted-average assumptions used to measure net periodic (income)/cost for the year ended December 31</b>						
Discount rate	3.80%	4.00%	3.70%	1.80%	2.40%	2.34%
Expected long-term returns on plan assets	5.75%	7.00%	7.50%	3.77%	5.53%	5.67%
Rate of compensation increase	N/A	N/A	N/A	2.45%	2.40%	2.49%
<b>Weighted-average assumptions used to measure benefit obligations at December 31</b>						
Discount rate	3.40%	3.80%	4.00%	1.76%	1.80%	2.40%
Rate of compensation increase	N/A	N/A	N/A	2.41%	2.45%	2.40%

N/A—Not applicable

	Nonpension Postretirement Benefit Plans					
	U.S. Plan			Non-U.S. Plans		
	2017	2016	2015	2017	2016	2015
<b>Weighted-average assumptions used to measure net periodic cost for the year ended December 31</b>						
Discount rate	3.60%	3.70%	3.40%	8.26%	7.06%	7.51%
Expected long-term returns on plan assets	N/A	N/A	N/A	10.47%	9.95%	10.17%
<b>Weighted-average assumptions used to measure benefit obligations at December 31</b>						
Discount rate	3.30%	3.60%	3.70%	7.28%	8.26%	7.06%

N/A—Not applicable

#### Discount Rate

The discount rate assumptions used for retirement-related benefit plans accounting reflect the yields available on high-quality, fixed-income debt instruments at the measurement date. For the U.S. and certain non-U.S. countries, a portfolio of high-quality corporate bonds is used to construct a yield curve. The cash flows from the company's expected benefit obligation payments are then matched to the yield curve to derive the discount rates. In other non-U.S. countries, where the markets for high-quality long-term bonds are not generally as well developed, a portfolio of long-term government bonds is used as a base, to which a credit spread is added to simulate corporate bond yields at these maturities in the jurisdiction of each plan, as the benchmark for developing the respective discount rates.

For the U.S. defined benefit pension plans, the changes in the discount rate assumptions impacted the net periodic (income)/cost and the PBO. The changes in the discount rate assumptions resulted in a decrease in 2017 net periodic income of \$64 million, an increase in 2016 net periodic income of \$103 million and a decrease in 2015 net periodic income of \$286 million. The changes in the discount rate assumptions resulted in an increase in the PBO of \$1,962 million and an increase of \$998 million for the years ended December 31, 2017 and 2016, respectively.

For the U.S. nonpension postretirement benefit plans, the changes in the discount rate assumptions had no material impact on net periodic cost for the years ended December 31, 2017, 2016 and 2015 and resulted in an increase in the APBO of \$88 million and an increase of \$33 million at December 31, 2017 and 2016, respectively.

For all of the company's retirement-related benefit plans, the change in the discount rate assumptions resulted in an increase in the benefit obligation of approximately \$2.5 billion at December 31, 2017 and an increase of approximately \$4.8 billion at December 31, 2016.

#### Expected Long-Term Returns on Plan Assets

Expected returns on plan assets, a component of net periodic (income)/cost, represent the expected long-term returns on plan assets based on the calculated market-related value of plan assets. Expected long-term returns on plan assets take into account long-term expectations for future returns and the investment policies and strategies as described on page 136. These rates of return are developed by the company and are tested for reasonableness against historical returns. The use of expected long-term returns on plan assets may result in recognized pension income that is greater or less than the actual returns of those plan assets in any given year. Over time, however, the expected long-term returns are designed to approximate the actual long-term returns, and therefore result in a pattern of income and cost recognition that more closely matches the pattern of the services provided by the employees. Differences between actual and expected returns are recognized as a component of net loss or gain in AOCI, which is amortized as a component of net periodic (income)/cost over the service lives or life expectancy of the plan participants, depending on the plan, provided such amounts exceed certain thresholds provided by accounting standards. The market-related value of plan assets recognizes changes in the fair value of plan assets systematically over a five-year period in the expected return on plan assets line in net periodic (income)/cost.

For the U.S. defined benefit pension plan, the expected long-term rate of return on plan assets for the years ended December 31, 2017, 2016 and 2015 was 5.75 percent, 7.0 percent and 7.5 percent, respectively. The change in the rate in 2017 resulted in a decrease in 2017 net periodic income of \$656 million. For the year ended December 31, 2016, the change in the rate resulted in a decrease in net periodic income of \$268 million. For the year ended December 31, 2015, the change in the rate resulted in a decrease in net periodic income of \$264 million. For 2018, the projected long-term rate of return on plan assets is 5.25 percent. The 50 basis point year-to-year decline is primarily driven by a change in investment strategy.

For the U.S. nonpension postretirement benefit plans, the company maintains a highly liquid trust fund balance to ensure timely payments are made. As a result, for the years ended December 31, 2017, 2016 and 2015, the expected long-term return on plan assets and the actual return on those assets were not material.

#### Rate of Compensation Increases and Mortality Rate

The rate of compensation increases is determined by the company, based upon its long-term plans for such increases. The rate of compensation increase is not applicable to the U.S. defined benefit pension plans as benefit accruals ceased December 31, 2007 for all participants. Mortality rate assumptions are based on life expectancy and death rates for different types of participants. Mortality rates are periodically updated based on actual experience. In the U.S., the Society of Actuaries released new mortality tables in 2014 and updated them in 2015, 2016 and 2017. The company utilized these tables in its plan remeasurements at December 31, 2017 and 2016. For the U.S. retirement-related plans, the change in mortality assumptions resulted in a decrease to the plan benefit obligations of \$0.3 billion and \$0.6 billion at December 31, 2017 and 2016, respectively.

#### Interest Crediting Rate

Benefits for certain participants in the PPP are calculated using a cash balance formula. An assumption underlying this formula is an interest crediting rate, which impacts both net periodic (income)/cost and the PBO. This assumption provides a basis for projecting the expected interest rate that participants will earn on the benefits that they are expected to receive in the following year and is based on the average from August to October of the one-year U.S. Treasury Constant Maturity yield plus one percent.

For the PPP, the change in the interest crediting rate to 1.6 percent for the year ended December 31, 2017 from 1.3 percent for the year ended December 31, 2016 resulted in a decrease in 2017 net periodic income of \$14 million. The change in the interest crediting rate to 1.3 percent for the year ended December 31, 2016 from 1.1 percent for the year ended December 31, 2015 resulted in a decrease in 2016 net periodic income of \$7 million. The interest crediting rate of 1.1 percent for the year ended December 31, 2015 was unchanged from December 31, 2014 and, therefore, had no impact on 2015 net periodic income.

#### Healthcare Cost Trend Rate

For nonpension postretirement benefit plan accounting, the company reviews external data and its own historical trends for healthcare costs to determine the healthcare cost trend rates. However, the healthcare cost trend rate has an insignificant effect on plan costs and obligations as a result of the terms of the plan which limit the company's obligation to the participants. The company assumes that the healthcare cost trend rate for 2018 will be 6.5 percent. In addition, the company assumes that the same trend rate will decrease to 5 percent over the next six years. A one percentage point increase or decrease in the assumed healthcare cost trend rate would not have had a material effect on 2017, 2016 and 2015 net periodic cost or the benefit obligations as of December 31, 2017 and 2016.

#### Plan Assets

Retirement-related benefit plan assets are recognized and measured at fair value. Because of the inherent uncertainty of valuations, these fair value measurements may not necessarily reflect the amounts the company could realize in current market transactions.

#### Investment Policies and Strategies

The investment objectives of the Qualified PPP portfolio are designed to generate returns that will enable the plan to meet its future obligations. The precise amount for which these obligations will be settled depends on future events, including the retirement dates and life expectancy of the plans' participants. The obligations are estimated using actuarial assumptions, based on the current economic environment and other pertinent factors described previously on pages 135 and 136. The Qualified PPP portfolio's investment strategy balances the requirement to generate returns, using potentially higher yielding assets such as equity securities, with the need to control risk in the portfolio with less volatile assets, such as fixed-income securities. Risks include, among others, inflation, volatility in equity values and changes in interest rates that could cause the plan to become underfunded, thereby increasing its dependence on contributions from the company. To mitigate any potential concentration risk, careful consideration is given to balancing the portfolio among industry sectors, companies and geographies, taking into account interest rate sensitivity, dependence on economic growth, currency and other factors that affect investment returns. During 2016 and 2017, the company changed its investment strategy, modifying the target allocation primarily by reducing equity securities and increasing debt securities. These changes were designed to reduce the potential negative impact that equity markets might have on the funded status of the plan. The Qualified PPP portfolio's target allocation is 12 percent equity securities, 79 percent fixed-income securities, 4 percent real estate and 5 percent other investments.

The assets are managed by professional investment firms and investment professionals who are employees of the company. They are bound by investment mandates determined by the company's management and are measured against specific benchmarks. Among these managers, consideration is given, but not limited to, balancing security concentration, issuer concentration, investment style and reliance on particular active and passive investment strategies.

Market liquidity risks are tightly controlled, with \$4,683 million of the Qualified PPP portfolio as of December 31, 2017 invested in private market assets consisting of private equities and private real estate investments, which are less liquid than publicly traded securities. In addition, the Qualified PPP portfolio had \$1,845 million in commitments for future investments in private markets to be made over a number of years. These commitments are expected to be funded from plan assets.

Derivatives are used as an effective means to achieve investment objectives and/or as a component of the plan's risk management strategy. The primary reasons for the use of derivatives are fixed income management, including duration, interest rate management and credit exposure, cash equitization and to manage currency and commodity strategies.

**Notes to Consolidated Financial Statements**

International Business Machines Corporation and Subsidiary Companies

Outside the U.S., the investment objectives are similar to those described previously, subject to local regulations. The weighted-average target allocation for the non-U.S. plans is 23 percent equity securities, 62 percent fixed-income securities, 3 percent real estate and 12 percent other investments, which is consistent with the allocation decisions made by the company's management. In some countries, a higher percentage allocation to fixed income is required to manage solvency and funding risks. In others, the responsibility for managing the investments typically lies with a board that may include up to 50 percent of members elected by employees and retirees. This can result

in slight differences compared with the strategies previously described. Generally, these non-U.S. plans do not invest in illiquid assets and their use of derivatives is consistent with the U.S. plan and mainly for currency hedging, interest rate risk management, credit exposure and alternative investment strategies.

The company's nonpension postretirement benefit plans are underfunded or unfunded. For some plans, the company maintains a nominal, highly liquid trust fund balance to ensure timely benefit payments.

**Defined Benefit Pension Plan Assets**

The following table presents the company's defined benefit pension plans' asset classes and their associated fair value at December 31, 2017. The U.S. Plan consists of the Qualified PPP and the non-U.S. Plans consist of all plans sponsored by the company's subsidiaries.

(\$ in millions)

	U.S. Plan				Non-U.S. Plans			
	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
<b>Equity</b>								
Equity securities <sup>(1)</sup>	\$2,215	\$ 0	\$ —	\$ 2,215	\$3,508	\$ 0	\$ —	\$ 3,508
Equity mutual funds <sup>(2)</sup>	108	—	—	108	24	—	—	24
<b>Fixed-income</b>								
Government and related <sup>(3)</sup>	—	19,762	—	19,762	—	10,103	8	10,111
Corporate bonds <sup>(4)</sup>	—	17,864	372	18,236	—	2,000	—	2,000
Mortgage and asset-backed securities	—	619	4	623	—	5	—	5
Fixed-income mutual funds <sup>(5)</sup>	338	—	—	338	86	—	—	86
Insurance contracts	—	—	—	—	—	1,366	—	1,366
Cash and short-term investments <sup>(6)</sup>	100	1,903	—	2,004	221	606	—	827
Real estate	—	—	—	—	—	—	356	356
Derivatives <sup>(7)</sup>	21	(4)	—	17	20	744	—	764
Other mutual funds <sup>(8)</sup>	—	—	—	—	60	—	—	60
<b>Subtotal</b>	<b>2,782</b>	<b>40,144</b>	<b>376</b>	<b>43,302</b>	<b>3,918</b>	<b>14,824</b>	<b>365</b>	<b>19,107</b>
<b>Investments measured at net asset value using the NAV practical expedient<sup>(9)</sup></b>								
—	—	—	—	9,537	—	—	—	21,744
<b>Other<sup>(10)</sup></b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>(145)</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>(52)</b>
<b>Fair value of plan assets</b>	<b>\$2,782</b>	<b>\$40,144</b>	<b>\$376</b>	<b>\$52,694</b>	<b>\$3,918</b>	<b>\$14,824</b>	<b>\$365</b>	<b>\$40,798</b>

<sup>(1)</sup> Represents U.S. and international securities. The U.S. Plan includes IBM common stock of \$14 million, representing 0.03 percent of the U.S. Plan assets. Non-U.S. Plans include IBM common stock of \$7 million, representing 0.02 percent of the non-U.S. Plans assets.

<sup>(2)</sup> Invests in predominantly equity securities.

<sup>(3)</sup> Includes debt issued by national, state and local governments and agencies.

<sup>(4)</sup> The U.S. Plan includes IBM corporate bonds of \$1 million, representing 0.002 percent of the U.S. Plan assets. Non-U.S. plans include IBM corporate bonds of \$1 million representing 0.002 percent of the non-U.S. Plan assets.

<sup>(5)</sup> Invests predominantly in fixed-income securities.

<sup>(6)</sup> Includes cash, cash equivalents and short-term marketable securities.

<sup>(7)</sup> Includes interest rate derivatives, forwards, exchange traded and other over-the-counter derivatives.

<sup>(8)</sup> Invests in both equity and fixed-income securities.

<sup>(9)</sup> Investments measured at fair value using the net asset value (NAV) per share (or its equivalent) as a practical expedient, including commingled funds, hedge funds, private equity and real estate partnerships.

<sup>(10)</sup>Represents net unsettled transactions, relating primarily to purchases and sales of plan assets.

**Notes to Consolidated Financial Statements**

International Business Machines Corporation and Subsidiary Companies

The U.S. nonpension postretirement benefit plan assets of \$18 million were invested primarily in cash equivalents, categorized as Level 1 in the fair value hierarchy. The non-U.S. nonpension postretirement benefit plan assets of \$70 million, primarily in Brazil, and, to a lesser extent, in Mexico and South Africa, were invested primarily in government and related fixed-income securities and corporate bonds, categorized as Level 2 in the fair value hierarchy.

The following table presents the company's defined benefit pension plans' asset classes and their associated fair value at December 31, 2016. The U.S. Plan consists of the Qualified PPP and the non-U.S. Plans consist of all plans sponsored by the company's subsidiaries.

(\$ in millions)

	U.S. Plan				Non-U.S. Plans			
	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
<b>Equity</b>								
Equity securities <sup>(1)</sup>	\$5,778	\$ 1	\$ —	\$ 5,779	\$4,080	\$ 0	\$ —	\$ 4,080
Equity mutual funds <sup>(2)</sup>	93	—	—	93	35	—	—	35
<b>Fixed income</b>								
Government and related <sup>(3)</sup>	—	14,897	—	14,897	—	7,577	16	7,593
Corporate bonds <sup>(4)</sup>	—	18,063	101	18,164	—	2,045	1	2,045
Mortgage and asset-backed securities	—	652	5	656	—	4	—	4
Fixed-income mutual funds <sup>(5)</sup>	359	—	—	359	22	—	—	22
Insurance contracts	—	—	—	—	—	1,137	—	1,137
Cash and short-term investments <sup>(6)</sup>	55	1,927	—	1,982	294	707	—	1,001
Real estate	—	—	—	—	—	—	294	294
Derivatives <sup>(7)</sup>	18	20	—	38	43	752	—	796
Other mutual funds <sup>(8)</sup>	—	—	—	—	114	—	—	114
<b>Subtotal</b>	<b>6,303</b>	<b>35,560</b>	<b>106</b>	<b>41,969</b>	<b>4,589</b>	<b>12,223</b>	<b>310</b>	<b>17,122</b>
<b>Investments measured at net asset value using the NAV practical expedient<sup>(9)</sup></b>								
—	—	—	—	9,641	—	—	—	18,946
Other <sup>(10)</sup>	—	—	—	(205)	—	—	—	(48)
<b>Fair value of plan assets</b>	<b>\$6,303</b>	<b>\$35,560</b>	<b>\$106</b>	<b>\$51,405</b>	<b>\$4,589</b>	<b>\$12,223</b>	<b>\$310</b>	<b>\$36,020</b>

<sup>(1)</sup> Represents U.S. and international securities. The U.S. Plan includes IBM common stock of \$28 million, representing 0.1 percent of the U.S. Plan assets. Non-U.S. Plans include IBM common stock of \$15 million, representing 0.04 percent of the non-U.S. Plans assets.

<sup>(2)</sup> Invests in predominantly equity securities.

<sup>(3)</sup> Includes debt issued by national, state and local governments and agencies.

<sup>(4)</sup> The U.S. Plan includes IBM corporate bonds of \$4 million, representing 0.01 percent of the U.S. Plan assets. Non-U.S. plans include IBM corporate bonds of \$1 million representing 0.003 percent of the non-U.S. Plan assets.

<sup>(5)</sup> Invests in predominantly fixed-income securities.

<sup>(6)</sup> Includes cash and cash equivalents and short-term marketable securities.

<sup>(7)</sup> Includes interest rate derivatives, forwards, exchange traded and other over-the-counter derivatives.

<sup>(8)</sup> Invests in both equity and fixed-income securities.

<sup>(9)</sup> Investments measured at fair value using the net asset value (NAV) per share (or its equivalent) as a practical expedient, including commingled funds, hedge funds, private equity and real estate partnerships.

<sup>(10)</sup>Represents net unsettled transactions, relating primarily to purchases and sales of plan assets.

The U.S. nonpension postretirement benefit plan assets of \$26 million were invested in cash, categorized as Level 1 in the fair value hierarchy. The non-U.S. nonpension postretirement benefit plan assets of \$71 million, primarily in Brazil, and, to a lesser

extent, in Mexico and South Africa, were invested primarily in government and related fixed-income securities and corporate bonds, categorized as Level 2 in the fair value hierarchy.

**Notes to Consolidated Financial Statements**

International Business Machines Corporation and Subsidiary Companies

The following tables present the reconciliation of the beginning and ending balances of Level 3 assets for the years ended December 31, 2017 and 2016 for the U.S. Plan.

(\$ in millions)

	Corporate Bonds	Mortgage and Asset-Backed Securities	Total
<b>Balance at January 1, 2017</b>	\$101	\$ 5	\$106
Return on assets held at end of year	12	0	11
Return on assets sold during the year	1	0	1
Purchases, sales and settlements, net	259	(1)	258
<b>Balance at December 31, 2017</b>	<b>\$372</b>	<b>\$ 4</b>	<b>\$376</b>

(\$ in millions)

	Corporate Bonds	Mortgage and Asset-Backed Securities	Total
<b>Balance at January 1, 2016</b>	\$ 2	\$10	\$ 12
Return on assets held at end of year	(3)	0	(2)
Return on assets sold during the year	0	1	1
Purchases, sales and settlements, net	103	(5)	99
Transfers, net	(2)	(2)	(3)
<b>Balance at December 31, 2016</b>	<b>\$101</b>	<b>\$ 5</b>	<b>\$106</b>

The following tables present the reconciliation of the beginning and ending balances of Level 3 assets for the years ended December 31, 2017 and 2016 for the non-U.S. Plans.

(\$ in millions)

	Government and Related	Corporate Bonds	Private Real Estate	Total
<b>Balance at January 1, 2017</b>	<b>\$16</b>	<b>\$1</b>	<b>\$294</b>	<b>\$310</b>
Return on assets held at end of year	2	0	24	26
Return on assets sold during the year	(3)	0	(1)	(4)
Purchases, sales and settlements, net	(2)	0	9	7
Transfers, net	(6)	0	—	(6)
Foreign exchange impact	2	0	30	31
<b>Balance at December 31, 2017</b>	<b>\$ 8</b>	<b>\$—</b>	<b>\$356</b>	<b>\$365</b>

(\$ in millions)

	Government and Related	Corporate Bonds	Private Real Estate	Total
<b>Balance at January 1, 2016</b>	\$16	\$ 4	\$411	\$431
Return on assets held at end of year	1	0	(22)	(21)
Return on assets sold during the year	0	0	35	35
Purchases, sales and settlements, net	0	(3)	(68)	(72)
Transfers, net	0	—	—	0
Foreign exchange impact	0	0	(62)	(63)
<b>Balance at December 31, 2016</b>	<b>\$16</b>	<b>\$ 1</b>	<b>\$294</b>	<b>\$310</b>

**Valuation Techniques**

The following is a description of the valuation techniques used to measure plan assets at fair value. There were no changes in valuation techniques during 2017 and 2016.

Equity securities are valued at the closing price reported on the stock exchange on which the individual securities are traded. IBM common stock is valued at the closing price reported on the New York Stock Exchange. Mutual funds are typically valued based on quoted market prices. These assets are generally classified as Level 1.

The fair value of fixed-income securities is typically estimated using pricing models, quoted prices of securities with similar characteristics or discounted cash flows and are generally classified as Level 2. If available, they are valued using the closing price reported on the major market on which the individual securities are traded.

Cash includes money market accounts that are valued at their cost plus interest on a daily basis, which approximates fair value. Short-term investments represent securities with original maturities of one year or less. These assets are classified as Level 1 or Level 2.

Real estate valuations require significant judgment due to the absence of quoted market prices, the inherent lack of liquidity and the long-term nature of such assets. These assets are initially valued at cost and are reviewed periodically utilizing available and relevant market data, including appraisals, to determine if the carrying value of these assets should be adjusted. These assets are classified as Level 3.

Exchange-traded derivatives are valued at the closing price reported on the exchange on which the individual securities are traded, while forward contracts are valued using a mid-close price. Over-the-counter derivatives are typically valued using pricing models. The models require a variety of inputs, including, for example, yield curves, credit curves, measures of volatility and foreign exchange rates. These assets are classified as Level 1 or Level 2 depending on availability of quoted market prices.

Certain investments are measured at fair value using the net asset value (NAV) per share (or its equivalent) as a practical expedient. These investments, which include commingled funds,

hedge funds, private equity and real estate partnerships, are typically valued using the NAV provided by the administrator of the fund and reviewed by the company. The NAV is based on the value of the underlying assets owned by the fund, minus liabilities and divided by the number of shares or units outstanding. In accordance with FASB guidance, these investments have not been classified in the fair value hierarchy. Refer to note B, "Accounting Changes."

**Contributions****Defined Benefit Pension Plans**

It is the company's general practice to fund amounts for pensions sufficient to meet the minimum requirements set forth in applicable employee benefits laws and local tax laws. From time to time, the company contributes additional amounts as it deems appropriate.

The company contributed \$192 million in cash and \$176 million in U.S. Treasury securities to non-U.S. defined benefit pension plans as well as \$40 million in cash to multi-employer plans for the year ended December 31, 2017. The contribution of U.S. Treasury securities is considered a non-cash transaction in the Consolidated Statement of Cash Flows. For the year ended December 31, 2016, the company contributed \$169 million in cash and \$295 million in U.S. Treasury securities to non-U.S. defined benefit pension plans as well as \$43 million in cash to multi-employer plans. The cash contributions to multi-employer plans represent the annual cost included in net periodic (income)/cost recognized in the Consolidated Statement of Earnings. The company's participation in multi-employer plans has no material impact on the company's financial statements.

In 2018, the company is not legally required to make any contributions to the U.S. defined benefit pension plans. However, depending on market conditions, or other factors, the company may elect to make discretionary contributions to the Qualified PPP during the year.

In 2018, the company estimates contributions to its non-U.S. defined benefit and multi-employer plans to be approximately \$400 million, the largest of which will be contributed to defined benefit pension plans in the UK, Japan and Spain. This amount generally represents legally mandated minimum contributions.

Financial market performance in 2018 could increase the legally mandated minimum contribution in certain countries which require monthly or daily remeasurement of the funded status. The company could also elect to contribute more than the legally mandated amount based on market conditions or other factors.

#### Defined Contribution Plans

The company contributed \$1,020 million and \$1,046 million in cash to the defined contribution plans during the years ended December 31, 2017 and 2016, respectively. In 2018, the company estimates cash contributions to the defined contribution plans to be approximately \$1.0 billion.

#### Nonpension Postretirement Benefit Plans

The company contributed \$394 million and \$305 million to the nonpension postretirement benefit plans during the years ended December 31, 2017 and 2016, respectively. The \$394 million

contribution in 2017 consisted of U.S. Treasury securities. In 2017, excess cash in the plan of \$70 million was subsequently transferred to the Active Employee Medical Trust. The \$305 million contribution in 2016 consisted of \$80 million in cash and \$225 million in U.S. Treasury securities. The contribution of U.S. Treasury securities is considered a non-cash transaction in the Consolidated Statement of Cash Flows.

#### Expected Benefit Payments

##### Defined Benefit Pension Plan Expected Payments

The following table presents the total expected benefit payments to defined benefit pension plan participants. These payments have been estimated based on the same assumptions used to measure the plans' PBO at December 31, 2017 and include benefits attributable to estimated future compensation increases, where applicable.

(\$ in millions)

	Qualified U.S. Plan Payments	Nonqualified U.S. Plans Payments	Qualified Non-U.S. Plans Payments	Nonqualified Non-U.S. Plans Payments	Total Expected Benefit Payments
2018	\$ 3,528	\$123	\$1,879	\$ 338	\$ 5,868
2019	3,510	122	1,898	340	5,870
2020	3,581	124	1,913	380	5,997
2021	3,579	125	1,939	418	6,061
2022	3,486	123	1,981	439	6,029
2023–2027	16,673	588	9,936	2,388	29,585

The 2018 expected benefit payments to defined benefit pension plan participants not covered by the respective plan assets (underfunded plans) represent a component of compensation and benefits, within current liabilities, in the Consolidated Statement of Financial Position.

##### Nonpension Postretirement Benefit Plan Expected Payments

The following table reflects the total expected benefit payments to nonpension postretirement benefit plan participants. These payments have been estimated based on the same assumptions used to measure the plans' APBO at December 31, 2017.

(\$ in millions)

	U.S. Plan Payments	Qualified Non-U.S. Plans Payments	Nonqualified Non-U.S. Plans Payments	Total Expected Benefit Payments
2018	\$ 373	\$ 6	\$ 35	\$ 414
2019	382	6	38	426
2020	390	7	40	437
2021	387	7	43	437
2022	372	7	46	425
2023–2027	1,623	37	285	1,945

The 2018 expected benefit payments to nonpension postretirement benefit plan participants not covered by the respective plan assets represent a component of compensation and benefits, within current liabilities, in the Consolidated Statement of Financial Position.

#### Other Plan Information

The following table presents information for defined benefit pension plans with accumulated benefit obligations (ABO) in excess of plan assets. For a more detailed presentation of the funded status of the company's defined benefit pension plans, see the table on page 132.

(\$ in millions)

	2017		2016	
	Benefit Obligation	Plan Assets	Benefit Obligation	Plan Assets
<b>At December 31:</b>				
Plans with PBO in excess of plan assets	\$31,416	\$18,711	\$29,182	\$16,374
Plans with ABO in excess of plan assets	27,751	15,607	28,770	16,272
Plans with assets in excess of PBO	70,139	74,782	68,017	71,051

**NOTE T. SEGMENT INFORMATION**

The company's major operations consist of five business segments: Cognitive Solutions, Global Business Services, Technology Services & Cloud Platforms, Systems and Global Financing. The segments represent components of the company for which separate financial information is available that is utilized on a regular basis by the chief operating decision maker (the chief executive officer) in determining how to allocate resources and evaluate performance. The segments are determined based on several factors, including client base, homogeneity of products, technology, delivery channels and similar economic characteristics.

Segment revenue and pre-tax income include transactions between the segments that are intended to reflect an arm's-length, market-based transfer price. Systems that are used by Technology Services & Cloud Platforms in outsourcing engagements are primarily sourced internally from the Systems segment and software is sourced from various segments. Software used by Technology Services & Cloud Platforms on external engagements is sourced internally through Cognitive Solutions and the Systems segments. For providing IT services that are used internally, Technology Services & Cloud Platforms and Global Business Services recover cost, as well as a reasonable fee, that is intended to reflect the arm's-length value of providing the services. They enter into arm's-length loans at prices equivalent to market rates with Global Financing to facilitate the acquisition of equipment and software used in services engagements. All internal transaction prices are reviewed annually, and reset if appropriate.

The company utilizes globally integrated support organizations to realize economies of scale and efficient use of resources. As a result, a considerable amount of expense is shared by all of the segments. This shared expense includes sales coverage, certain marketing functions and support functions such as Accounting, Treasury, Procurement, Legal, Human Resources and Billing and Collections. Where practical, shared expenses are allocated based on measurable drivers of expense, e.g., headcount. When a clear and measurable driver cannot be identified, shared expenses are allocated on a financial basis that is consistent with the company's management system, e.g., advertising expense is allocated based on the gross profits of the segments. A portion of the shared expenses, which are recorded in net income, are not allocated to the segments. These expenses are associated with the elimination of internal transactions and other miscellaneous items.

The following tables reflect the results of continuing operations of the company's segments consistent with the management and measurement system utilized within the company. Performance measurement is based on pre-tax income from continuing operations. These results are used, in part, by the chief operating decision maker, both in evaluating the performance of, and in allocating resources to, each of the segments.

**Management System Segment View**

(\$ in millions)

For the year ended December 31:	Cognitive Solutions	Global Business Services	Technology Services & Cloud Platforms	Systems	Global Financing	Total Segments
<b>2017</b>						
External revenue	\$18,453	\$16,348	\$34,277	\$ 8,194	\$1,696	\$78,968
Internal revenue	2,647	363	657	750	1,471	5,889
<b>Total revenue</b>	<b>\$21,100</b>	<b>\$16,711</b>	<b>\$34,934</b>	<b>\$ 8,945</b>	<b>\$3,168</b>	<b>\$84,857</b>
<b>Pre-tax income from continuing operations</b>	<b>\$ 6,817</b>	<b>\$ 1,401</b>	<b>\$ 4,344</b>	<b>\$ 1,135</b>	<b>\$1,279</b>	<b>\$14,977</b>
Revenue year-to-year change	1.4%	(2.3)%	(3.1)%	5.7%	(9.3)%	(1.3)%
Pre-tax income year-to-year change	7.3%	(19.1)%	(7.7)%	21.6%	(22.7)%	(2.6)%
Pre-tax income margin	32.3%	8.4%	12.4%	12.7%	40.4%	17.6%
<b>2016</b>						
External revenue	\$18,187	\$16,700	\$35,337	\$ 7,714	\$1,692	\$79,630
Internal revenue	2,630	409	715	750	1,802	6,307
<b>Total revenue</b>	<b>\$20,817</b>	<b>\$17,109</b>	<b>\$36,052</b>	<b>\$ 8,464</b>	<b>\$3,494</b>	<b>\$85,936</b>
<b>Pre-tax income from continuing operations</b>	<b>\$ 6,352</b>	<b>\$ 1,732</b>	<b>\$ 4,707</b>	<b>\$ 933</b>	<b>\$1,656</b>	<b>\$15,380</b>
Revenue year-to-year change	3.8%	(3.1)%	0.6%	(18.0)%	(22.0)%	(2.7)%
Pre-tax income year-to-year change	(12.3)%	(33.4)%	(17.0)%	(45.8)%	(29.9)%	(21.5)%
Pre-tax income margin	30.5%	10.1%	13.1%	11.0%	47.4%	17.9%
<b>2015</b>						
External revenue	\$17,841	\$17,166	\$35,142	\$ 9,547	\$1,840	\$81,535
Internal revenue	2,215	499	698	778	2,637	6,826
<b>Total revenue</b>	<b>\$20,055</b>	<b>\$17,664</b>	<b>\$35,840</b>	<b>\$10,325</b>	<b>\$4,477</b>	<b>\$88,361</b>
<b>Pre-tax income from continuing operations</b>	<b>\$ 7,245</b>	<b>\$ 2,602</b>	<b>\$ 5,669</b>	<b>\$ 1,722</b>	<b>\$2,364</b>	<b>\$19,602</b>
Revenue year-to-year change	(8.4)%	(11.9)%	(9.8)%	(22.4)%	(1.0)%	(11.2)%
Pre-tax income year-to-year change	(11.8)%	(22.3)%	(20.0)%	24.4%	8.0%	(11.8)%
Pre-tax income margin	36.1%	14.7%	15.8%	16.7%	52.8%	22.2%

**Notes to Consolidated Financial Statements**

International Business Machines Corporation and Subsidiary Companies

**Reconciliations of IBM as Reported**

	(\$ in millions)		
For the year ended December 31:	2017	2016	2015
<b>Revenue</b>			
Total reportable segments	\$84,857	\$85,936	\$88,361
Other revenue	171	289	206
Elimination of internal transactions	(5,889)	(6,307)	(6,826)
<b>Total IBM consolidated revenue</b>	<b>\$79,139</b>	<b>\$79,919</b>	<b>\$81,741</b>

	(\$ in millions)		
For the year ended December 31:	2017	2016	2015
<b>Pre-tax income from continuing operations</b>			
Total reportable segments	\$14,977	\$15,380	\$19,602
Amortization of acquired intangible assets	(945)	(998)	(677)
Acquisition-related charges	(52)	(5)	(26)
Non-operating retirement-related (costs)/income	(1,468)	(598)	(1,050)
Elimination of internal transactions	(726)	(1,160)	(1,675)
Unallocated corporate amounts	(385)	(290)	(230)
<b>Total pre-tax income from continuing operations</b>	<b>\$11,400</b>	<b>\$12,330</b>	<b>\$15,945</b>

**Immaterial Items****Investment in Equity Alliances and Equity Alliances Gains/(Losses)**

The investments in equity alliances and the resulting gains and (losses) from these investments that are attributable to the segments did not have a material effect on the financial position or the financial results of the segments.

**Segment Assets and Other Items**

Cognitive Solutions assets are mainly goodwill, acquired intangible assets and accounts receivable. Global Business Services assets are primarily goodwill and accounts receivable. Technology Services & Cloud Platforms assets are primarily goodwill, plant, property and equipment including the assets associated with the outsourcing business, deferred services arrangement transition costs and accounts receivable. Systems assets are primarily goodwill, manufacturing inventory, and plant, property and equipment. Global Financing assets are primarily financing receivables, cash and marketable securities, and fixed assets under operating leases.

To ensure the efficient use of the company's space and equipment, several segments may share plant, property and equipment assets. Where assets are shared, landlord ownership of the assets is assigned to one segment and is not allocated to each user segment. This is consistent with the company's management system and is reflected accordingly in the table on page 145. In those cases, there will not be a precise correlation between segment pre-tax income and segment assets.

Similarly, the depreciation amounts reported by each segment are based on the assigned landlord ownership and may not be consistent with the amounts that are included in the segments' pre-tax income. The amounts that are included in pre-tax income reflect occupancy charges from the landlord segment and are not specifically identified by the management reporting system. Capital expenditures that are reported by each segment also are consistent with the landlord ownership basis of asset assignment.

Global Financing amounts for interest income and interest expense reflect the interest income and interest expense associated with the Global Financing business, including the intercompany financing activities discussed on pages 33 and 34, as well as the income from investment in cash and marketable securities. The explanation of the difference between cost of financing and interest expense for segment presentation versus presentation in the Consolidated Statement of Earnings is included on page 48 of the Management Discussion.

**Management System Segment View**

(\$ in millions)

For the year ended December 31:	Cognitive Solutions	Global Business Services	Technology Services & Cloud Platforms	Systems	Global Financing	Total Segments
<b>2017</b>						
Assets	\$24,829	\$8,713	\$24,619	\$3,898	\$41,096	\$103,155
Depreciation/amortization of intangibles*	1,121	101	2,359	341	267	4,190
Capital expenditures/investments in intangibles	373	50	2,290	189	364	3,265
Interest income	—	—	—	—	1,527	1,527
Interest expense	—	—	—	—	381	381
<b>2016</b>						
Assets	\$25,517	\$8,628	\$24,085	\$3,812	\$36,492	\$ 98,534
Depreciation/amortization of intangibles*	1,228	104	2,224	375	317	4,248
Capital expenditures/investments in intangibles	495	55	2,382	453	380	3,764
Interest income	—	—	—	—	1,547	1,547
Interest expense	—	—	—	—	371	371
<b>2015</b>						
Assets	\$20,017	\$8,327	\$23,530	\$3,967	\$36,157	\$ 91,999
Depreciation/amortization of intangibles*	921	81	1,944	321	343	3,610
Capital expenditures/investments in intangibles	448	86	2,619	321	356	3,830
Interest income	—	—	—	—	1,720	1,720
Interest expense	—	—	—	—	469	469

\* Segment pre-tax income from continuing operations does not include the amortization of intangible assets.

**Notes to Consolidated Financial Statements**

International Business Machines Corporation and Subsidiary Companies

**Reconciliations of IBM as Reported**

	(\$ in millions)		
At December 31:	2017	2016	2015
<b>Assets</b>			
Total reportable segments	\$ 103,155	\$ 98,534	\$ 91,999
Elimination of internal transactions	(6,272)	(5,670)	(4,709)
Unallocated amounts			
Cash and marketable securities	9,900	6,752	6,634
Notes and accounts receivable	2,554	2,660	2,333
Deferred tax assets	4,746	5,078	4,693
Plant, other property and equipment	2,659	2,656	2,650
Pension assets	4,643	3,034	1,734
Other	3,972	4,425	5,161
<b>Total IBM consolidated assets</b>	<b>\$125,356</b>	<b>\$117,470</b>	<b>\$110,495</b>

**Major Clients**

No single client represented 10 percent or more of the company's total revenue in 2017, 2016 or 2015.

**Geographic Information**

The following provides information for those countries that are 10 percent or more of the specific category.

**Revenue\***

	(\$ in millions)		
For the year ended December 31:	2017	2016	2015
United States	\$29,759	\$30,194	\$30,514
Japan	8,239	8,339	7,544
Other countries	41,141	41,386	43,683
<b>Total IBM consolidated revenue</b>	<b>\$79,139</b>	<b>\$79,919</b>	<b>\$81,741</b>

\* Revenues are attributed to countries based on the location of the client.

**Plant and Other Property—Net**

	(\$ in millions)		
At December 31:	2017	2016	2015
United States	\$ 4,670	\$ 4,701	\$ 4,644
Other countries	5,985	5,607	5,532
<b>Total</b>	<b>\$10,655</b>	<b>\$10,308</b>	<b>\$10,176</b>

**Revenue by Classes of Similar Products or Services**

The following table presents external revenue for similar classes of products or services within the company's reportable segments. Client solutions often include IBM software and systems and other suppliers' products if the client solution requires it. For each of the segments that include services; Software-as-a-Service, consulting, education, training and other product-related services are included as services. For each of these segments, software includes product license charges and ongoing subscriptions.

	(\$ in millions)		
For the year ended December 31:	2017	2016	2015
<b>Cognitive Solutions</b>			
Software	\$13,598	\$13,969	\$14,557
Services	4,752	4,111	3,175
Systems	103	107	108
<b>Global Business Services</b>			
Services	\$16,004	\$16,399	\$16,851
Software	179	179	164
Systems	165	121	151
<b>Technology Services &amp; Cloud Platforms</b>			
Services	\$23,629	\$24,311	\$23,947
Maintenance	5,783	5,862	6,085
Software	3,610	3,818	3,907
Systems	1,254	1,346	1,203
Systems			
Servers	\$ 3,993	\$ 3,567	\$ 5,032
Storage	2,243	2,083	2,325
Software	1,520	1,586	1,749
Services	439	478	442
<b>Global Financing</b>			
Financing	\$ 1,167	\$ 1,231	\$ 1,386
Used equipment sales	530	461	454

**NOTE U. SUBSEQUENT EVENTS**

On January 30, 2018, the company announced that the Board of Directors approved a quarterly dividend of \$1.50 per common share. The dividend is payable March 10, 2018 to shareholders of record on February 9, 2018.

On February 6, 2018, IBM Credit LLC issued \$2.0 billion in bonds as follows: \$450 million of 3-year floating-rate bonds priced at LIBOR plus 16 basis points, \$800 million of 3-year fixed-rate bonds with a 2.65 percent coupon and \$750 million of 5-year fixed-rate bonds with a 3.0 percent coupon.

**Five-Year Comparison of Selected Financial Data**  
 International Business Machines Corporation and Subsidiary Companies

(\$ in millions except per share amounts)

For the year ended December 31:	2017	2016	2015	2014	2013
Revenue	\$ 79,139	\$ 79,919	\$ 81,741	\$ 92,793	\$ 98,367
Income from continuing operations	\$ 5,758	\$ 11,881	\$ 13,364	\$ 15,751	\$ 16,881
Loss from discontinued operations, net of tax	\$ (5)	\$ (9)	\$ (174)	\$ (3,729)	\$ (398)
Net income	\$ 5,753	\$ 11,872	\$ 13,190	\$ 12,022	\$ 16,483
Operating (non-GAAP) earnings*	\$ 12,935	\$ 13,031	\$ 14,659	\$ 16,702	\$ 18,356
Earnings/(loss) per share of common stock:					
Assuming dilution:					
Continuing operations	\$ 6.14	\$ 12.39	\$ 13.60	\$ 15.59	\$ 15.30
Discontinued operations	\$ 0.00	\$ (0.01)	\$ (0.18)	\$ (3.69)	\$ (0.36)
Total	\$ 6.14	\$ 12.38	\$ 13.42	\$ 11.90	\$ 14.94
Basic:					
Continuing operations	\$ 6.17	\$ 12.44	\$ 13.66	\$ 15.68	\$ 15.42
Discontinued operations	\$ 0.00	\$ (0.01)	\$ (0.18)	\$ (3.71)	\$ (0.36)
Total	\$ 6.17	\$ 12.43	\$ 13.48	\$ 11.97	\$ 15.06
Diluted operating (non-GAAP)*	\$ 13.80	\$ 13.59	\$ 14.92	\$ 16.53	\$ 16.64
Cash dividends paid on common stock	\$ 5,506	\$ 5,256	\$ 4,897	\$ 4,265	\$ 4,058
Per share of common stock	\$ 5.90	\$ 5.50	\$ 5.00	\$ 4.25	\$ 3.70
Investment in property, plant and equipment	\$ 3,229	\$ 3,567	\$ 3,579	\$ 3,740	\$ 3,623
Return on IBM stockholders' equity	31.1%	74.0%	101.1%	72.5%	83.8%
At December 31:	2017	2016	2015	2014	2013
Total assets	\$125,356	\$117,470	\$110,495	\$117,271	\$125,641
Net investment in property, plant and equipment	\$ 11,116	\$ 10,830	\$ 10,727	\$ 10,771	\$ 13,821
Working capital	\$ 12,373	\$ 7,613	\$ 8,235	\$ 7,797	\$ 9,610
Total debt	\$ 46,824	\$ 42,169	\$ 39,890	\$ 40,722	\$ 39,637
Total equity	\$ 17,725	\$ 18,392	\$ 14,424	\$ 12,014	\$ 22,929

\* Refer to the "GAAP Reconciliation," on page 59 of the company's 2015 Annual Report for the reconciliation of non-GAAP financial information for 2014 and 2013. Also see "GAAP Reconciliation," on pages 49 and 55 for the reconciliation of non-GAAP financial information for 2017, 2016 and 2015.

**Selected Quarterly Data**

International Business Machines Corporation and Subsidiary Companies

(\$ in millions except per share amounts and stock prices)

<b>2017</b>	<b>First Quarter</b>	<b>Second Quarter</b>	<b>Third Quarter</b>	<b>Fourth Quarter</b>	<b>Full Year</b>
Revenue	\$18,155	\$19,289	\$19,153	\$22,543	\$79,139
Gross profit	\$ 7,772	\$ 8,794	\$ 8,800	\$10,862	\$36,227
Income/(loss) from continuing operations	\$ 1,753	\$ 2,332	\$ 2,726	\$ (1,053)	\$ 5,758
Income/(loss) from discontinued operations, net of tax	\$ (3)	\$ (1)	\$ 0	\$ (1)	\$ (5)
Net income/(loss)	\$ 1,750	\$ 2,331	\$ 2,726	\$ (1,054)	\$ 5,753
Operating (non-GAAP) earnings*	\$ 2,255	\$ 2,792	\$ 3,079	\$ 4,809	\$12,935
Earnings/(loss) per share of common stock**					
Assuming dilution	\$ 1.85	\$ 2.48	\$ 2.92	\$ (1.14)	\$ 6.14
Basic	\$ 1.86	\$ 2.49	\$ 2.93	\$ (1.14)	\$ 6.17
Diluted operating (non-GAAP)*	\$ 2.38	\$ 2.97	\$ 3.30	\$ 5.18	\$ 13.80
Dividends per share of common stock	\$ 1.40	\$ 1.50	\$ 1.50	\$ 1.50	\$ 5.90
Stock prices++					
High	\$181.95	\$174.52	\$155.58	\$162.07	
Low	\$165.52	\$150.37	\$139.70	\$146.48	

(\$ in millions except per share amounts and stock prices)

<b>2016</b>	<b>First Quarter</b>	<b>Second Quarter</b>	<b>Third Quarter</b>	<b>Fourth Quarter</b>	<b>Full Year</b>
Revenue	\$18,684	\$20,238	\$19,226	\$21,770	\$79,919
Gross profit	\$ 8,686	\$ 9,702	\$ 9,013	\$10,893	\$38,294
Income from continuing operations	\$ 2,016	\$ 2,505	\$ 2,854	\$ 4,505	\$11,881
Income/(loss) from discontinued operations, net of tax	\$ (3)	\$ 0	\$ (1)	\$ (4)	\$ (9)
Net income	\$ 2,014	\$ 2,504	\$ 2,853	\$ 4,501	\$11,872
Operating (non-GAAP) earnings*	\$ 2,270	\$ 2,835	\$ 3,149	\$ 4,776	\$13,031
Earnings/(loss) per share of common stock**					
Assuming dilution:					
Continuing operations	\$ 2.09	\$ 2.61	\$ 2.98	\$ 4.73	\$ 12.39
Discontinued operations	\$ 0.00	\$ 0.00	\$ 0.00	\$ (0.01)	\$ (0.01)
Total	\$ 2.09	\$ 2.61	\$ 2.98	\$ 4.72	\$ 12.38
Basic:					
Continuing operations	\$ 2.09	\$ 2.62	\$ 2.99	\$ 4.75	\$ 12.44
Discontinued operations	\$ 0.00	\$ 0.00	\$ 0.00	\$ (0.01)	\$ (0.01)
Total	\$ 2.09	\$ 2.62	\$ 2.99	\$ 4.74	\$ 12.43
Diluted operating (non-GAAP)*	\$ 2.35	\$ 2.95	\$ 3.29	\$ 5.01	\$ 13.59
Dividends per share of common stock	\$ 1.30	\$ 1.40	\$ 1.40	\$ 1.40	\$ 5.50
Stock prices++					
High	\$151.45	\$155.35	\$163.53	\$168.51	
Low	\$117.85	\$143.50	\$151.68	\$149.63	

\* Refer to page 68 of the company's first-quarter 2017 Form 10-Q filed on April 25, 2017, page 82 of the company's second-quarter 2017 Form 10-Q filed on July 25, 2017, page 85 of the company's third-quarter 2017 Form 10-Q filed on October 31, 2017, and page 55 under the heading "GAAP Reconciliation" for the reconciliation of non-GAAP financial information for the fourth quarter of 2017 and 2016. Also see "GAAP Reconciliation," on page 49 for the reconciliation of non-GAAP financial information for full-year 2017 and 2016.

\*\* Earnings Per Share (EPS) in each quarter is computed using the weighted-average number of shares outstanding during that quarter while EPS for the full year is computed using the weighted-average number of shares outstanding during the year. Thus, the sum of the four quarters' EPS does not equal the full-year EPS.

++The stock prices reflect the high and low prices for IBM's common stock on the New York Stock Exchange composite tape for the periods presented.

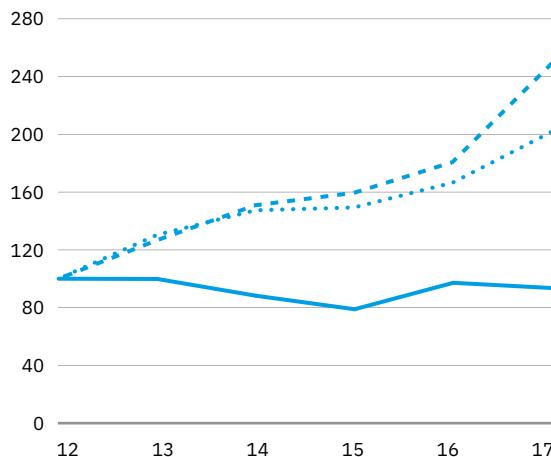
**COMPARISON OF FIVE- AND TEN-YEAR CUMULATIVE TOTAL RETURN FOR IBM,  
S&P 500 STOCK INDEX AND S&P INFORMATION TECHNOLOGY INDEX**

The following graphs compare the five- and ten-year cumulative total returns for IBM common stock with the comparable cumulative of certain Standard & Poor's (S&P) indices. Due to the fact that IBM is a company included in the S&P 500 Stock Index, the SEC's rules require the use of that index for the required five-year graph. Under those rules, the second index used for comparison may be a published industry or line-of-business

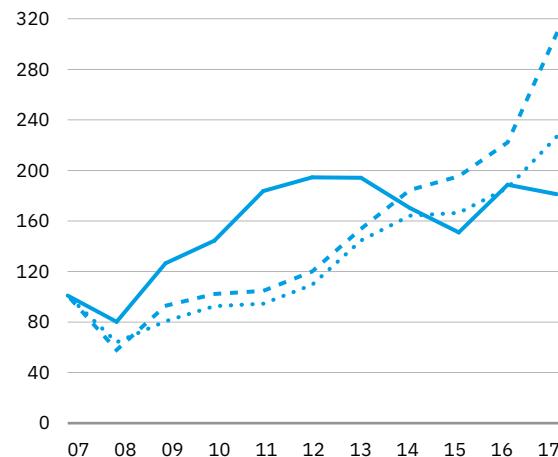
index. The S&P Information Technology Index is such an index. IBM is also included in this index.

Each graph assumes \$100 invested on December 31 (of the initial year shown in the graph) in IBM common stock and \$100 invested on the same date in each of the S&P indices. The comparisons assume that all dividends are reinvested.

**Five-Year**



**Ten-Year**



**Five-Year**

(U.S. Dollar)	2012	2013	2014	2015	2016	2017
IBM Common Stock	\$100.00	\$ 99.82	\$ 87.44	\$ 77.47	\$ 96.98	\$ 93.12
S&P 500 Index	100.00	132.39	150.51	152.59	170.84	208.14
S&P Information Technology Index	100.00	128.43	154.26	163.40	186.03	258.28

**Ten-Year**

(U.S. Dollar)	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
IBM Common Stock	\$100.00	\$79.24	\$125.67	\$143.62	\$183.01	\$193.87	\$193.51	\$169.53	\$150.18	\$188.01	\$180.52
S&P 500 Index	100.00	63.00	79.67	91.67	93.61	108.59	143.76	163.44	165.70	185.52	226.03
S&P Information Technology Index	100.00	56.86	91.96	101.32	103.77	119.15	153.02	183.81	194.70	221.66	307.74

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International Business Machines Corporation and Subsidiary Companies

**IBM Stockholder Services**

Stockholders with questions about their accounts should contact:

Computershare Trust Company, N.A., P.O. Box 505005, Louisville, Kentucky 40233-5005 (888) IBM-6700

Investors residing outside the United States, Canada and Puerto Rico should call (781) 575-2727.

Stockholders can also reach Computershare Trust Company, N.A. via e-mail at: [ibm@computershare.com](mailto:ibm@computershare.com)

Hearing-impaired stockholders with access to a telecommunications device (TDD) can communicate directly with Computershare Trust Company, N.A., by calling (800) 490-1493. Stockholders residing outside the United States, Canada and Puerto Rico should call (781) 575-2694.

**IBM on the Internet**

Topics featured in this Annual Report can be found online at [www.ibm.com](http://www.ibm.com). Financial results, news on IBM products, services and other activities can also be found at that website.

IBM files reports with the Securities and Exchange Commission (SEC), including the annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and any other filings required by the SEC.

IBM's website ([www.ibm.com/investor](http://www.ibm.com/investor)) contains a significant amount of information about IBM, including the company's annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and all amendments to those reports as soon as reasonably practicable after such material is electronically filed with or furnished to the SEC. These materials are available free of charge on or through our website.

The public may read and copy any materials the company files with the SEC at the SEC's Public Reference Room at 100 F Street, NE, Washington, DC 20549. The public may obtain information on the operation of the Public Reference Room by calling the SEC at (800) SEC-0330. The SEC maintains a website ([www.sec.gov](http://www.sec.gov)) that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC.

**Computershare Investment Plan (CIP)  
(formerly IBM Investor Services Program)**

The Computershare Investment Plan brochure outlines a number of services provided for IBM stockholders and potential IBM investors, including the reinvestment of dividends, direct purchase and the deposit of IBM stock certificates for safekeeping. Call (888) IBM-6700 for a copy of the brochure. Investors residing outside the United States, Canada and Puerto Rico should call (781) 575-2727.

Investors with other requests may write to: IBM Stockholder Relations, New Orchard Road, M/D 325, Armonk, New York 10504.

**IBM Stock**

IBM common stock is listed on the New York Stock Exchange, the Chicago Stock Exchange, and outside the United States.

**Stockholder Communications**

Stockholders can get quarterly financial results, a summary of the Annual Meeting remarks, and voting results from the meeting by calling (914) 499-7777, by sending an e-mail to [infoibm@us.ibm.com](mailto:infoibm@us.ibm.com), or by writing to IBM Stockholder Relations, New Orchard Road, M/D 325, Armonk, New York 10504.

**Annual Meeting**

The IBM Annual Meeting of Stockholders will be held on Tuesday, April 24, 2018, at 10 a.m. at the Hyatt Regency Milwaukee, Milwaukee, Wisconsin.

**Literature for IBM Stockholders**

The literature mentioned below on IBM is available without charge from:

Computershare Trust Company, N.A., P.O. Box 505005, Louisville, Kentucky 40233-5005 (888) IBM-6700.

Investors residing outside the United States, Canada and Puerto Rico should call (781) 575-2727.

The company's annual report on Form 10-K and the quarterly reports on Form 10-Q provide additional information on IBM's business. The 10-K report is released by the end of February; 10-Q reports are released by early May, August and November.

The IBM Corporate Responsibility Report highlights IBM's values and its integrated approach to corporate responsibility, including its innovative strategies to transform communities through global citizenship. Highlights from the Corporate Responsibility Report are available online at [www.ibm.com/responsibility](http://www.ibm.com/responsibility). The full Corporate Responsibility Report is available in printed form by downloading the report at [www.ibm.com/responsibility/report](http://www.ibm.com/responsibility/report).

**General Information**

Stockholders of record can receive account information and answers to frequently asked questions regarding stockholder accounts online at [www.ibm.com/investor](http://www.ibm.com/investor). Stockholders of record can also consent to receive future IBM Annual Reports and Proxy Statements online through this site.

For answers to general questions about IBM from within the continental United States, call (800) IBM-4YOU. From outside the United States, Canada and Puerto Rico, call (914) 499-1900.



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