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

FORM 10-K

(Mark One)

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the fiscal year ended September 24, 2022

or

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from _____ to _____.

Commission File Number: **001-36743**

Apple Inc.

(Exact name of Registrant as specified in its charter)

California (State or other jurisdiction of incorporation or organization)	**94-2404110** (I.R.S. Employer Identification No.)
One Apple Park Way **Cupertino, California** (Address of principal executive offices)	**95014** (Zip Code)

(408) 996-1010
(Registrant's telephone number, including area code)

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

Title of each class	Trading symbol(s)	Name of each exchange on which registered
Common Stock, $0.00001 par value per share	**AAPL**	**The Nasdaq Stock Market LLC**
1.000% Notes due 2022	**—**	**The Nasdaq Stock Market LLC**
1.375% Notes due 2024	**—**	**The Nasdaq Stock Market LLC**
0.000% Notes due 2025	**—**	**The Nasdaq Stock Market LLC**
0.875% Notes due 2025	**—**	**The Nasdaq Stock Market LLC**
1.625% Notes due 2026	**—**	**The Nasdaq Stock Market LLC**
2.000% Notes due 2027	**—**	**The Nasdaq Stock Market LLC**
1.375% Notes due 2029	**—**	**The Nasdaq Stock Market LLC**
3.050% Notes due 2029	**—**	**The Nasdaq Stock Market LLC**
0.500% Notes due 2031	**—**	**The Nasdaq Stock Market LLC**
3.600% Notes due 2042	**—**	**The Nasdaq Stock Market LLC**

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

Indicate by check mark if the Registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.

Yes ☒ No ☐

Indicate by check mark if the Registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act.

Yes ☐ No ☒

Indicate by check mark whether the Registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the Registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

Yes ☒ No ☐

Indicate by check mark whether the Registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the Registrant was required to submit such files).

Yes ☒ No ☐

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

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

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

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

Indicate by check mark whether the Registrant is a shell company (as defined in Rule 12b-2 of the Act).

Yes ☐ No ☒

The aggregate market value of the voting and non-voting stock held by non-affiliates of the Registrant, as of March 25, 2022, the last business day of the Registrant’s most recently completed second fiscal quarter, was approximately $2,830,067,000,000. Solely for purposes of this disclosure, shares of common stock held by executive officers and directors of the Registrant as of such date have been excluded because such persons may be deemed to be affiliates. This determination of executive officers and directors as affiliates is not necessarily a conclusive determination for any other purposes.

15,908,118,000 shares of common stock were issued and outstanding as of October 14, 2022.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the Registrant’s definitive proxy statement relating to its 2023 annual meeting of shareholders are incorporated by reference into Part III of this Annual Report on Form 10-K where indicated. The Registrant’s definitive proxy statement will be filed with the U.S. Securities and Exchange Commission within 120 days after the end of the fiscal year to which this report relates.

Apple Inc.

Form 10-K

For the Fiscal Year Ended September 24, 2022

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This Annual Report on Form 10-K ("Form 10-K") contains forward-looking statements, within the meaning of the Private Securities Litigation Reform Act of 1995, that involve risks and uncertainties. Many of the forward-looking statements are located in Part I, Item 1 of this Form 10-K under the heading "Business" and Part II, Item 7 of this Form 10-K under the heading "Management's Discussion and Analysis of Financial Condition and Results of Operations." Forward-looking statements provide current expectations of future events based on certain assumptions and include any statement that does not directly relate to any historical or current fact. For example, statements in this Form 10-K regarding the potential future impact of the COVID-19 pandemic on the Company's business and results of operations are forward-looking statements. Forward-looking statements can also be identified by words such as "future," "anticipates," "believes," "estimates," "expects," "intends," "plans," "predicts," "will," "would," "could," "can," "may," and similar terms. Forward-looking statements are not guarantees of future performance and the Company's actual results may differ significantly from the results discussed in the forward-looking statements. Factors that might cause such differences include, but are not limited to, those discussed in Part I, Item 1A of this Form 10-K under the heading "Risk Factors." The Company assumes no obligation to revise or update any forward-looking statements for any reason, except as required by law.

Unless otherwise stated, all information presented herein is based on the Company's fiscal calendar, and references to particular years, quarters, months or periods refer to the Company's fiscal years ended in September and the associated quarters, months and periods of those fiscal years. Each of the terms the "Company" and "Apple" as used herein refers collectively to Apple Inc. and its wholly owned subsidiaries, unless otherwise stated.

PART I

Item 1. Business

Company Background

The Company designs, manufactures and markets smartphones, personal computers, tablets, wearables and accessories, and sells a variety of related services. The Company's fiscal year is the 52- or 53-week period that ends on the last Saturday of September.

Products

iPhone

iPhone® is the Company's line of smartphones based on its iOS operating system. The iPhone line includes iPhone 14 Pro, iPhone 14, iPhone 13, iPhone SE®, iPhone 12 and iPhone 11.

Mac

Mac® is the Company's line of personal computers based on its macOS® operating system. The Mac line includes laptops MacBook Air® and MacBook Pro®, as well as desktops iMac®, Mac mini®, Mac Studio™ and Mac Pro®.

iPad

iPad® is the Company's line of multipurpose tablets based on its iPadOS® operating system. The iPad line includes iPad Pro®, iPad Air®, iPad and iPad mini®.

Wearables, Home and Accessories

Wearables, Home and Accessories includes:

- AirPods®, the Company's wireless headphones, including AirPods, AirPods Pro® and AirPods Max™;
- Apple TV®, the Company's media streaming and gaming device based on its tvOS® operating system, including Apple TV 4K and Apple TV HD;
- Apple Watch®, the Company's line of smartwatches based on its watchOS® operating system, including Apple Watch Ultra™, Apple Watch Series 8 and Apple Watch SE®; and
- Beats® products, HomePod mini® and accessories.

Services

Advertising

The Company's advertising services include various third-party licensing arrangements and the Company's own advertising platforms.

AppleCare

The Company offers a portfolio of fee-based service and support products under the AppleCare® brand. The offerings provide priority access to Apple technical support, access to the global Apple authorized service network for repair and replacement services, and in many cases additional coverage for instances of accidental damage and/or theft and loss, depending on the country and type of product.

Cloud Services

The Company's cloud services store and keep customers' content up-to-date and available across multiple Apple devices and Windows personal computers.

Digital Content

The Company operates various platforms, including the App Store®, that allow customers to discover and download applications and digital content, such as books, music, video, games and podcasts.

The Company also offers digital content through subscription-based services, including Apple Arcade®, a game subscription service; Apple Fitness+℠, a personalized fitness service; Apple Music®, which offers users a curated listening experience with on-demand radio stations; Apple News+®, a subscription news and magazine service; and Apple TV+®, which offers exclusive original content and live sports.

Payment Services

The Company offers payment services, including Apple Card®, a co-branded credit card, and Apple Pay®, a cashless payment service.

Markets and Distribution

The Company's customers are primarily in the consumer, small and mid-sized business, education, enterprise and government markets. The Company sells its products and resells third-party products in most of its major markets directly to consumers, small and mid-sized businesses, and education, enterprise and government customers through its retail and online stores and its direct sales force. The Company also employs a variety of indirect distribution channels, such as third-party cellular network carriers, wholesalers, retailers and resellers. During 2022, the Company's net sales through its direct and indirect distribution channels accounted for 38% and 62%, respectively, of total net sales.

Competition

The markets for the Company's products and services are highly competitive, and are characterized by aggressive price competition and resulting downward pressure on gross margins, frequent introduction of new products and services, short product life cycles, evolving industry standards, continual improvement in product price and performance characteristics, rapid adoption of technological advancements by competitors, and price sensitivity on the part of consumers and businesses. Many of the Company's competitors seek to compete primarily through aggressive pricing and very low cost structures, and by imitating the Company's products and infringing on its intellectual property.

The Company's ability to compete successfully depends heavily on ensuring the continuing and timely introduction of innovative new products, services and technologies to the marketplace. The Company designs and develops nearly the entire solution for its products, including the hardware, operating system, numerous software applications and related services. Principal competitive factors important to the Company include price, product and service features (including security features), relative price and performance, product and service quality and reliability, design innovation, a strong third-party software and accessories ecosystem, marketing and distribution capability, service and support, and corporate reputation.

The Company is focused on expanding its market opportunities related to smartphones, personal computers, tablets, wearables and accessories, and services. The Company faces substantial competition in these markets from companies that have significant technical, marketing, distribution and other resources, as well as established hardware, software, and service offerings with large customer bases. In addition, some of the Company's competitors have broader product lines, lower-priced products and a larger installed base of active devices. Competition has been particularly intense as competitors have aggressively cut prices and lowered product margins. Certain competitors have the resources, experience or cost structures to provide products at little or no profit or even at a loss. The Company's services compete with business models that provide content to users for free and use illegitimate means to obtain third-party digital content and applications. The Company faces significant competition as competitors imitate the Company's product features and applications within their products, or collaborate to offer integrated solutions that are more competitive than those they currently offer.

Supply of Components

Although most components essential to the Company's business are generally available from multiple sources, certain components are currently obtained from single or limited sources. The Company also competes for various components with other participants in the markets for smartphones, personal computers, tablets, wearables and accessories. Therefore, many components used by the Company, including those that are available from multiple sources, are at times subject to industry-wide shortage and significant commodity pricing fluctuations.

The Company uses some custom components that are not commonly used by its competitors, and new products introduced by the Company often utilize custom components available from only one source. When a component or product uses new technologies, initial capacity constraints may exist until the suppliers' yields have matured or their manufacturing capacities have increased. The continued availability of these components at acceptable prices, or at all, may be affected if suppliers decide to concentrate on the production of common components instead of components customized to meet the Company's requirements.

The Company has entered into agreements for the supply of many components; however, there can be no guarantee that the Company will be able to extend or renew these agreements on similar terms, or at all.

Substantially all of the Company's hardware products are manufactured by outsourcing partners that are located primarily in Asia, with some Mac computers manufactured in the U.S. and Ireland.

Research and Development

Because the industries in which the Company competes are characterized by rapid technological advances, the Company's ability to compete successfully depends heavily upon its ability to ensure a continual and timely flow of competitive products, services and technologies to the marketplace. The Company continues to develop new technologies to enhance existing products and services, and to expand the range of its offerings through research and development ("R&D"), licensing of intellectual property and acquisition of third-party businesses and technology.

Intellectual Property

The Company currently holds a broad collection of intellectual property rights relating to certain aspects of its hardware devices, accessories, software and services. This includes patents, designs, copyrights, trademarks and other forms of intellectual property rights in the U.S. and various foreign countries. Although the Company believes the ownership of such intellectual property rights is an important factor in differentiating its business and that its success does depend in part on such ownership, the Company relies primarily on the innovative skills, technical competence and marketing abilities of its personnel.

The Company regularly files patent, design, copyright and trademark applications to protect innovations arising from its research, development, design and marketing, and is currently pursuing thousands of applications around the world. Over time, the Company has accumulated a large portfolio of issued and registered intellectual property rights around the world. No single intellectual property right is solely responsible for protecting the Company's products and services. The Company believes the duration of its intellectual property rights is adequate relative to the expected lives of its products and services.

In addition to Company-owned intellectual property, many of the Company's products and services are designed to include intellectual property owned by third parties. It may be necessary in the future to seek or renew licenses relating to various aspects of the Company's products, processes and services. While the Company has generally been able to obtain such licenses on commercially reasonable terms in the past, there is no guarantee that such licenses could be obtained in the future on reasonable terms or at all.

Business Seasonality and Product Introductions

The Company has historically experienced higher net sales in its first quarter compared to other quarters in its fiscal year due in part to seasonal holiday demand. Additionally, new product and service introductions can significantly impact net sales, cost of sales and operating expenses. The timing of product introductions can also impact the Company's net sales to its indirect distribution channels as these channels are filled with new inventory following a product launch, and channel inventory of an older product often declines as the launch of a newer product approaches. Net sales can also be affected when consumers and distributors anticipate a product introduction.

Human Capital

The Company believes it has a talented, motivated and dedicated team, and works to create an inclusive, safe and supportive environment for all of its team members. As of September 24, 2022, the Company had approximately 164,000 full-time equivalent employees.

Workplace Practices and Policies

The Company is an equal opportunity employer committed to inclusion and diversity and to providing a workplace free of harassment or discrimination.

Compensation and Benefits

The Company believes that compensation should be competitive and equitable, and should enable employees to share in the Company's success. The Company recognizes its people are most likely to thrive when they have the resources to meet their needs and the time and support to succeed in their professional and personal lives. In support of this, the Company offers a wide variety of benefits for employees around the world and invests in tools and resources that are designed to support employees' individual growth and development.

Inclusion and Diversity

The Company remains committed to its vision to build and sustain a more inclusive workforce that is representative of the communities it serves. The Company continues to work to increase diverse representation at every level, foster an inclusive culture, and support equitable pay and access to opportunity for all employees.

Engagement

The Company believes that open and honest communication among team members, managers and leaders helps create an open, collaborative work environment where everyone can contribute, grow and succeed. Team members are encouraged to come to their managers with questions, feedback or concerns, and the Company conducts surveys that gauge employee sentiment in areas like career development, manager performance and inclusivity.

Health and Safety

The Company is committed to protecting its team members everywhere it operates. The Company identifies potential workplace risks in order to develop measures to mitigate possible hazards. The Company supports employees with general safety, security and crisis management training, and by putting specific programs in place for those working in potentially high-hazard environments. Additionally, the Company works to protect the safety and security of its team members, visitors and customers through its global security team. The Company has also taken additional health and safety measures during the COVID-19 pandemic.

Available Information

The Company's Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, and amendments to reports filed pursuant to Sections 13(a) and 15(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), are filed with the U.S. Securities and Exchange Commission (the "SEC"). Such reports and other information filed by the Company with the SEC are available free of charge at investor.apple.com/investor-relations/sec-filings/default.aspx when such reports are available on the SEC's website. The Company periodically provides certain information for investors on its corporate website, www.apple.com, and its investor relations website, investor.apple.com. This includes press releases and other information about financial performance, information on environmental, social and governance matters, and details related to the Company's annual meeting of shareholders. The information contained on the websites referenced in this Form 10-K is not incorporated by reference into this filing. Further, the Company's references to website URLs are intended to be inactive textual references only.

Item 1A. Risk Factors

The Company's business, reputation, results of operations, financial condition and stock price can be affected by a number of factors, whether currently known or unknown, including those described below. When any one or more of these risks materialize from time to time, the Company's business, reputation, results of operations, financial condition and stock price can be materially and adversely affected.

Because of the following factors, as well as other factors affecting the Company's results of operations and financial condition, past financial performance should not be considered to be a reliable indicator of future performance, and investors should not use historical trends to anticipate results or trends in future periods. This discussion of risk factors contains forward-looking statements.

This section should be read in conjunction with Part II, Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations" and the consolidated financial statements and accompanying notes in Part II, Item 8, "Financial Statements and Supplementary Data" of this Form 10-K.

Macroeconomic and Industry Risks

The Company's operations and performance depend significantly on global and regional economic conditions and adverse economic conditions can materially adversely affect the Company's business, results of operations and financial condition.

The Company has international operations with sales outside the U.S. representing a majority of the Company's total net sales. In addition, the Company's global supply chain is large and complex and a majority of the Company's supplier facilities, including manufacturing and assembly sites, are located outside the U.S. As a result, the Company's operations and performance depend significantly on global and regional economic conditions.

Adverse macroeconomic conditions, including inflation, slower growth or recession, new or increased tariffs and other barriers to trade, changes to fiscal and monetary policy, tighter credit, higher interest rates, high unemployment and currency fluctuations can adversely impact consumer confidence and spending and materially adversely affect demand for the Company's products and services. In addition, consumer confidence and spending can be materially adversely affected in response to financial market volatility, negative financial news, conditions in the real estate and mortgage markets, declines in income or asset values, energy shortages and cost increases, labor and healthcare costs and other economic factors.

In addition to an adverse impact on demand for the Company's products, uncertainty about, or a decline in, global or regional economic conditions can have a significant impact on the Company's suppliers, contract manufacturers, logistics providers, distributors, cellular network carriers and other channel partners. Potential effects include financial instability; inability to obtain credit to finance operations and purchases of the Company's products; and insolvency.

A downturn in the economic environment can also lead to increased credit and collectibility risk on the Company's trade receivables; the failure of derivative counterparties and other financial institutions; limitations on the Company's ability to issue new debt; reduced liquidity; and declines in the fair value of the Company's financial instruments. These and other economic factors can materially adversely affect the Company's business, results of operations, financial condition and stock price.

The Company's business, results of operations, financial condition and stock price have been adversely affected and could in the future be materially adversely affected by the COVID-19 pandemic.

COVID-19 has had, and continues to have, a significant impact around the world, prompting governments and businesses to take unprecedented measures in response. Such measures have included restrictions on travel and business operations, temporary closures of businesses, and quarantine and shelter-in-place orders. The COVID-19 pandemic has at times significantly curtailed global economic activity and caused significant volatility and disruption in global financial markets.

The COVID-19 pandemic and the measures taken by many countries in response have adversely affected and could in the future materially adversely impact the Company's business, results of operations, financial condition and stock price. During the course of the pandemic, certain of the Company's component suppliers and manufacturing and logistical service providers have experienced disruptions, resulting in supply shortages that affected sales worldwide, and similar disruptions could occur in the future. Public safety measures can also adversely impact consumer demand for the Company's products and services in affected areas.

The Company continues to monitor the situation and take appropriate actions in accordance with the recommendations and requirements of relevant authorities. The extent to which the COVID-19 pandemic may impact the Company's operational and financial performance remains uncertain and will depend on many factors outside the Company's control, including the timing, extent, trajectory and duration of the pandemic, the emergence of new variants, the development, availability, distribution and effectiveness of vaccines and treatments, the imposition of protective public safety measures, and the impact of the pandemic on the global economy and demand for consumer products and services. Additional future impacts on the Company may include material adverse effects on demand for the Company's products and services, the Company's supply chain and sales and distribution channels, the Company's ability to execute its strategic plans, and the Company's profitability and cost structure.

To the extent the COVID-19 pandemic adversely affects the Company's business, results of operations, financial condition and stock price, it may also have the effect of heightening many of the other risks described in this Part I, Item 1A of this Form 10-K.

The Company's business can be impacted by political events, trade and other international disputes, war, terrorism, natural disasters, public health issues, industrial accidents and other business interruptions.

Political events, trade and other international disputes, war, terrorism, natural disasters, public health issues, industrial accidents and other business interruptions can harm or disrupt international commerce and the global economy, and could have a material adverse effect on the Company and its customers, suppliers, contract manufacturers, logistics providers, distributors, cellular network carriers and other channel partners.

The Company has a large, global business with sales outside the U.S. representing a majority of the Company's total net sales, and the Company believes that it generally benefits from growth in international trade. Substantially all of the Company's manufacturing is performed in whole or in part by outsourcing partners located primarily in Asia, including China mainland, India, Japan, South Korea, Taiwan and Vietnam. Trade policies and disputes and other international conflicts can result in tariffs, sanctions and other measures that restrict international trade, and can materially adversely affect the Company's business, particularly if these measures occur in regions where the Company derives a significant portion of its revenues and/or has significant supply chain operations. For example, tensions between the U.S. and China have led to a series of tariffs being imposed by the U.S. on imports from China mainland, as well as other business restrictions. Tariffs increase the cost of the Company's products and the components and raw materials that go into making them. These increased costs can adversely impact the gross margin that the Company earns on its products. Tariffs can also make the Company's products more expensive for customers, which could make the Company's products less competitive and reduce consumer demand. Countries may also adopt other measures, such as controls on imports or exports of goods, technology or data, that could adversely impact the Company's operations and supply chain and limit the Company's ability to offer its products and services as designed. These measures can require the Company to take various actions, including changing suppliers, restructuring business relationships, and ceasing to offer third-party applications on its platforms. Changing the Company's operations in accordance with new or changed trade restrictions can be expensive, time-consuming and disruptive to the Company's operations. Such restrictions can be announced with little or no advance notice and the Company may not be able to effectively mitigate all adverse impacts from such measures. If disputes and conflicts further escalate in the future, actions by governments in response could be significantly more severe and restrictive and could materially adversely affect the Company's business. Political uncertainty surrounding trade and other international disputes could also have a negative effect on consumer confidence and spending, which could adversely affect the Company's business.

Many of the Company's operations and facilities, as well as critical business operations of the Company's suppliers and contract manufacturers, are in locations that are prone to earthquakes and other natural disasters. In addition, such operations and facilities are subject to the risk of interruption by fire, power shortages, nuclear power plant accidents and other industrial accidents, terrorist attacks and other hostile acts, ransomware and other cybersecurity attacks, labor disputes, public health issues, including pandemics such as the COVID-19 pandemic, and other events beyond the Company's control. Global climate change is resulting in certain types of natural disasters occurring more frequently or with more intense effects. Such events can make it difficult or impossible for the Company to manufacture and deliver products to its customers, create delays and inefficiencies in the Company's supply and manufacturing chain, and result in slowdowns and outages to the Company's service offerings. Following an interruption to its business, the Company can require substantial recovery time, experience significant expenditures to resume operations, and lose significant sales. Because the Company relies on single or limited sources for the supply and manufacture of many critical components, a business interruption affecting such sources would exacerbate any negative consequences to the Company.

The Company's operations are also subject to the risks of industrial accidents at its suppliers and contract manufacturers. While the Company's suppliers are required to maintain safe working environments and operations, an industrial accident could occur and could result in serious injuries or loss of life, disruption to the Company's business, and harm to the Company's reputation. Major public health issues, including pandemics such as the COVID-19 pandemic, have adversely affected, and could in the future materially adversely affect, the Company due to their impact on the global economy and demand for consumer products; the imposition of protective public safety measures, such as stringent employee travel restrictions and limitations on freight services and the movement of products between regions; and disruptions in the Company's supply chain and sales and distribution channels, resulting in interruptions of the supply of current products and delays in production ramps of new products.

While the Company maintains insurance coverage for certain types of losses, such insurance coverage may be insufficient to cover all losses that may arise.

Global markets for the Company's products and services are highly competitive and subject to rapid technological change, and the Company may be unable to compete effectively in these markets.

The Company's products and services are offered in highly competitive global markets characterized by aggressive price competition and resulting downward pressure on gross margins, frequent introduction of new products and services, short product life cycles, evolving industry standards, continual improvement in product price and performance characteristics, rapid adoption of technological advancements by competitors, and price sensitivity on the part of consumers and businesses.

The Company's ability to compete successfully depends heavily on ensuring the continuing and timely introduction of innovative new products, services and technologies to the marketplace. The Company designs and develops nearly the entire solution for its products, including the hardware, operating system, numerous software applications and related services. As a result, the Company must make significant investments in R&D. There can be no assurance these investments will achieve expected returns, and the Company may not be able to develop and market new products and services successfully.

The Company currently holds a significant number of patents, trademarks and copyrights and has registered, and applied to register, additional patents, trademarks and copyrights. In contrast, many of the Company's competitors seek to compete primarily through aggressive pricing and very low cost structures, and by imitating the Company's products and infringing on its intellectual property. Effective intellectual property protection is not consistently available in every country in which the Company operates. If the Company is unable to continue to develop and sell innovative new products with attractive margins or if competitors infringe on the Company's intellectual property, the Company's ability to maintain a competitive advantage could be materially adversely affected.

The Company has a minority market share in the global smartphone, personal computer and tablet markets. The Company faces substantial competition in these markets from companies that have significant technical, marketing, distribution and other resources, as well as established hardware, software and digital content supplier relationships. In addition, some of the Company's competitors have broader product lines, lower-priced products and a larger installed base of active devices. Competition has been particularly intense as competitors have aggressively cut prices and lowered product margins. Certain competitors have the resources, experience or cost structures to provide products at little or no profit or even at a loss. Some of the markets in which the Company competes have from time to time experienced little to no growth or contracted overall.

Additionally, the Company faces significant competition as competitors imitate the Company's product features and applications within their products or collaborate to offer solutions that are more competitive than those they currently offer. The Company also expects competition to intensify as competitors imitate the Company's approach to providing components seamlessly within their offerings or work collaboratively to offer integrated solutions.

The Company's services also face substantial competition, including from companies that have significant resources and experience and have established service offerings with large customer bases. The Company competes with business models that provide content to users for free. The Company also competes with illegitimate means to obtain third-party digital content and applications.

The Company's business, results of operations and financial condition depend substantially on the Company's ability to continually improve its products and services to maintain their functional and design advantages. There can be no assurance the Company will be able to continue to provide products and services that compete effectively.

Business Risks

To remain competitive and stimulate customer demand, the Company must successfully manage frequent introductions and transitions of products and services.

Due to the highly volatile and competitive nature of the markets and industries in which the Company competes, the Company must continually introduce new products, services and technologies, enhance existing products and services, effectively stimulate customer demand for new and upgraded products and services, and successfully manage the transition to these new and upgraded products and services. The success of new product and service introductions depends on a number of factors, including timely and successful development, market acceptance, the Company's ability to manage the risks associated with production ramp-up issues, the availability of application software for the Company's products, the effective management of purchase commitments and inventory levels in line with anticipated product demand, the availability of products in appropriate quantities and at expected costs to meet anticipated demand, and the risk that new products and services may have quality or other defects or deficiencies. There can be no assurance the Company will successfully manage future introductions and transitions of products and services.

The Company depends on component and product manufacturing and logistical services provided by outsourcing partners, many of which are located outside of the U.S.

Substantially all of the Company's manufacturing is performed in whole or in part by outsourcing partners located primarily in Asia, including China mainland, India, Japan, South Korea, Taiwan and Vietnam, and a significant concentration of this manufacturing is currently performed by a small number of outsourcing partners, often in single locations. Changes or additions to the Company's supply chain require considerable time and resources and involve significant risks and uncertainties. The Company has also outsourced much of its transportation and logistics management. While these arrangements can lower operating costs, they also reduce the Company's direct control over production and distribution. Such diminished control has from time to time and may in the future have an adverse effect on the quality or quantity of products manufactured or services provided, or adversely affect the Company's flexibility to respond to changing conditions. Although arrangements with these partners may contain provisions for product defect expense reimbursement, the Company generally remains responsible to the consumer for warranty and out-of-warranty service in the event of product defects and experiences unanticipated product defect liabilities from time to time. While the Company relies on its partners to adhere to its supplier code of conduct, violations of the supplier code of conduct occur from time to time and can materially adversely affect the Company's business, reputation, results of operations and financial condition.

The Company relies on single-source outsourcing partners in the U.S., Asia and Europe to supply and manufacture many components, and on outsourcing partners primarily located in Asia, for final assembly of substantially all of the Company's hardware products. Any failure of these partners to perform can have a negative impact on the Company's cost or supply of components or finished goods. In addition, manufacturing or logistics in these locations or transit to final destinations can be disrupted for a variety of reasons, including natural and man-made disasters, information technology system failures, commercial disputes, armed conflict, economic, business, labor, environmental, public health or political issues, or international trade disputes.

The Company has invested in manufacturing process equipment, much of which is held at certain of its outsourcing partners, and has made prepayments to certain of its suppliers associated with long-term supply agreements. While these arrangements help ensure the supply of components and finished goods, if these outsourcing partners or suppliers experience severe financial problems or other disruptions in their business, such continued supply can be reduced or terminated, and the recoverability of manufacturing process equipment or prepayments can be negatively impacted.

Future operating results depend upon the Company's ability to obtain components in sufficient quantities on commercially reasonable terms.

Because the Company currently obtains certain components from single or limited sources, the Company is subject to significant supply and pricing risks. Many components, including those that are available from multiple sources, are at times subject to industry-wide shortages and significant commodity pricing fluctuations that can materially adversely affect the Company's business, results of operations and financial condition. For example, the global semiconductor industry is experiencing high demand and shortages of supply, which has adversely affected, and could materially adversely affect, the Company's ability to obtain sufficient quantities of components and products on commercially reasonable terms or at all. While the Company has entered into agreements for the supply of many components, there can be no assurance the Company will be able to extend or renew these agreements on similar terms, or at all. Component suppliers may suffer from poor financial conditions, which can lead to business failure for the supplier or consolidation within a particular industry, further limiting the Company's ability to obtain sufficient quantities of components on commercially reasonable terms or at all. The effects of global or regional economic conditions on the Company's suppliers, described in "*The Company's operations and performance depend significantly on global and regional economic conditions and adverse economic conditions can materially adversely affect the Company's business, results of operations and financial condition,*" above, can also affect the Company's ability to obtain components. Therefore, the Company remains subject to significant risks of supply shortages and price increases that can materially adversely affect its business, results of operations and financial condition.

The Company's new products often utilize custom components available from only one source. When a component or product uses new technologies, initial capacity constraints may exist until the suppliers' yields have matured or their manufacturing capacities have increased. The continued availability of these components at acceptable prices, or at all, can be affected for any number of reasons, including if suppliers decide to concentrate on the production of common components instead of components customized to meet the Company's requirements. When the Company's supply of components for a new or existing product has been delayed or constrained, or when an outsourcing partner has delayed shipments of completed products to the Company, the Company's business, results of operations and financial condition have been adversely affected and future delays or constraints could materially adversely affect the Company's business, results of operations and financial condition. The Company's business and financial performance could also be materially adversely affected depending on the time required to obtain sufficient quantities from the source, or to identify and obtain sufficient quantities from an alternative source.

The Company's products and services may be affected from time to time by design and manufacturing defects that could materially adversely affect the Company's business and result in harm to the Company's reputation.

The Company offers complex hardware and software products and services that can be affected by design and manufacturing defects. Sophisticated operating system software and applications, such as those offered by the Company, often have issues that can unexpectedly interfere with the intended operation of hardware or software products. Defects can also exist in components and products the Company purchases from third parties. Component defects could make the Company's products unsafe and create a risk of environmental or property damage and personal injury. These risks may increase as the Company's products are introduced into specialized applications, including health. In addition, the Company's service offerings can have quality issues and from time to time experience outages, service slowdowns or errors. As a result, the Company's services from time to time have not performed as anticipated and may not meet customer expectations. There can be no assurance the Company will be able to detect and fix all issues and defects in the hardware, software and services it offers. Failure to do so can result in widespread technical and performance issues affecting the Company's products and services. In addition, the Company can be exposed to product liability claims, recalls, product replacements or modifications, write-offs of inventory, property, plant and equipment, and/or intangible assets, and significant warranty and other expenses, including litigation costs and regulatory fines. Quality problems can also adversely affect the experience for users of the Company's products and services, and result in harm to the Company's reputation, loss of competitive advantage, poor market acceptance, reduced demand for products and services, delay in new product and service introductions and lost sales.

The Company is exposed to the risk of write-downs on the value of its inventory and other assets, in addition to purchase commitment cancellation risk.

The Company records a write-down for product and component inventories that have become obsolete or exceed anticipated demand, or for which cost exceeds net realizable value. The Company also accrues necessary cancellation fee reserves for orders of excess products and components. The Company reviews long-lived assets, including capital assets held at its suppliers' facilities and inventory prepayments, for impairment whenever events or circumstances indicate the assets may not be recoverable. If the Company determines that an impairment has occurred, it records a write-down equal to the amount by which the carrying value of the asset exceeds its fair value. Although the Company believes its inventory, capital assets, inventory prepayments and other assets and purchase commitments are currently recoverable, there can be no assurance the Company will not incur write-downs, fees, impairments and other charges given the rapid and unpredictable pace of product obsolescence in the industries in which the Company competes.

The Company orders components for its products and builds inventory in advance of product announcements and shipments. Manufacturing purchase obligations cover the Company's forecasted component and manufacturing requirements, typically for periods up to 150 days. Because the Company's markets are volatile, competitive and subject to rapid technology and price changes, there is a risk the Company will forecast incorrectly and order or produce excess or insufficient amounts of components or products, or not fully utilize firm purchase commitments.

The Company relies on access to third-party intellectual property, which may not be available to the Company on commercially reasonable terms or at all.

The Company's products and services are designed to include intellectual property owned by third parties, which requires licenses from those third parties. In addition, because of technological changes in the industries in which the Company currently competes or in the future may compete, current extensive patent coverage and the rapid rate of issuance of new patents, the Company's products and services can unknowingly infringe existing patents or intellectual property rights of others. From time to time, the Company has been notified that it may be infringing certain patents or other intellectual property rights of third parties. Based on experience and industry practice, the Company believes licenses to such third-party intellectual property can generally be obtained on commercially reasonable terms. However, there can be no assurance the necessary licenses can be obtained on commercially reasonable terms or at all. Failure to obtain the right to use third-party intellectual property, or to use such intellectual property on commercially reasonable terms, can preclude the Company from selling certain products or services, or otherwise have a material adverse impact on the Company's business, results of operations and financial condition.

The Company's future performance depends in part on support from third-party software developers.

The Company believes decisions by customers to purchase its hardware products depend in part on the availability of third-party software applications and services. There can be no assurance third-party developers will continue to develop and maintain software applications and services for the Company's products. If third-party software applications and services cease to be developed and maintained for the Company's products, customers may choose not to buy the Company's products.

The Company believes the availability of third-party software applications and services for its products depends in part on the developers' perception and analysis of the relative benefits of developing, maintaining and upgrading such software and services for the Company's products compared to competitors' platforms, such as Android for smartphones and tablets, Windows for personal computers and tablets, and PlayStation, Nintendo and Xbox for gaming platforms. This analysis may be based on factors such as the market position of the Company and its products, the anticipated revenue that may be generated, expected future growth of product sales, and the costs of developing such applications and services.

The Company's minority market share in the global smartphone, personal computer and tablet markets can make developers less inclined to develop or upgrade software for the Company's products and more inclined to devote their resources to developing and upgrading software for competitors' products with larger market share. When developers focus their efforts on these competing platforms, the availability and quality of applications for the Company's devices can suffer.

The Company relies on the continued availability and development of compelling and innovative software applications for its products. The Company's products and operating systems are subject to rapid technological change, and when third-party developers are unable to or choose not to keep up with this pace of change, their applications can fail to take advantage of these changes to deliver improved customer experiences and can operate incorrectly and can result in dissatisfied customers.

The Company distributes third-party applications for its products through the App Store. For the vast majority of applications, developers keep all of the revenue they generate on the App Store. The Company only retains a commission from sales of applications and sales of digital services or goods within an application. From time to time, the Company has made changes to its App Store, including actions taken in response to competition, market and legal conditions. The Company may make further business changes in the future. New legislative initiatives, such as the European Union ("EU") Digital Markets Act, could require further changes. The Company is also subject to litigation and investigations relating to the App Store, which have resulted in changes to the Company's business practices, and may in the future result in further changes. These changes could include how and to what extent the Company charges developers for access to its platforms and manages distribution of apps outside of the App Store. This could reduce the volume of sales, and the commission that the Company earns on those sales, would decrease. If the rate of the commission that the Company retains on such sales is reduced, or if it is otherwise narrowed in scope or eliminated, the Company's business, results of operations and financial condition could be materially adversely affected.

Failure to obtain or create digital content that appeals to the Company's customers, or to make such content available on commercially reasonable terms, could have a material adverse impact on the Company's business, results of operations and financial condition.

The Company contracts with numerous third parties to offer their digital content to customers. This includes the right to sell, or offer subscriptions to, third-party content, as well as the right to incorporate specific content into the Company's own services. The licensing or other distribution arrangements for this content can be for relatively short time periods and do not guarantee the continuation or renewal of these arrangements on commercially reasonable terms, or at all. Some third-party content providers and distributors currently or in the future may offer competing products and services, and can take actions to make it difficult or impossible for the Company to license or otherwise distribute their content. Other content owners, providers or distributors may seek to limit the Company's access to, or increase the cost of, such content. The Company may be unable to continue to offer a wide variety of content at commercially reasonable prices with acceptable usage rules.

The Company also produces its own digital content, which can be costly to produce due to intense and increasing competition for talent, content and subscribers, and may fail to appeal to the Company's customers. The COVID-19 pandemic has also caused additional restrictions on production and increased costs for digital content.

Some third-party digital content providers require the Company to provide digital rights management and other security solutions. If requirements change, the Company may have to develop or license new technology to provide these solutions. There can be no assurance the Company will be able to develop or license such solutions at a reasonable cost and in a timely manner.

The Company's success depends largely on the talents and efforts of its team members, the continued service and availability of highly skilled employees, including key personnel, and the Company's ability to nurture its distinctive and inclusive culture.

Much of the Company's future success depends on the talents and efforts of its team members, the continued availability and service of key personnel, including its Chief Executive Officer, executive team and other highly skilled employees. Experienced personnel in the technology industry are in high demand and competition for their talents is intense, especially in Silicon Valley, where most of the Company's key personnel are located. In addition to intense competition for talent, workforce dynamics are constantly evolving. If the Company does not manage changing workforce dynamics effectively, it could materially adversely affect the Company's culture, reputation and operational flexibility.

The Company believes that its distinctive and inclusive culture is a significant driver of its success. If the Company is unable to nurture its culture, it could materially adversely affect the Company's ability to recruit and retain the highly skilled employees who are critical to its success, and could otherwise materially adversely affect the Company's business, reputation, results of operations and financial condition.

The Company depends on the performance of carriers, wholesalers, retailers and other resellers.

The Company distributes its products and certain of its services through cellular network carriers, wholesalers, retailers and resellers, many of which distribute products and services from competitors. The Company also sells its products and services and resells third-party products in most of its major markets directly to consumers, small and mid-sized businesses, and education, enterprise and government customers through its retail and online stores and its direct sales force.

Some carriers providing cellular network service for the Company's products offer financing, installment payment plans or subsidies for users' purchases of the device. There can be no assurance such offers will be continued at all or in the same amounts.

The Company has invested and will continue to invest in programs to enhance reseller sales, including staffing selected resellers' stores with Company employees and contractors, and improving product placement displays. These programs can require a substantial investment while not assuring return or incremental sales. The financial condition of these resellers could weaken, these resellers could stop distributing the Company's products, or uncertainty regarding demand for some or all of the Company's products could cause resellers to reduce their ordering and marketing of the Company's products.

The Company's business and reputation are impacted by information technology system failures and network disruptions.

The Company and its global supply chain are exposed to information technology system failures or network disruptions caused by natural disasters, accidents, power disruptions, telecommunications failures, acts of terrorism or war, computer viruses, physical or electronic break-ins, ransomware or other cybersecurity incidents, or other events or disruptions. System redundancy and other continuity measures may be ineffective or inadequate, and the Company's or its vendors' business continuity and disaster recovery planning may not be sufficient for all eventualities. Such failures or disruptions can adversely impact the Company's business by, among other things, preventing access to the Company's online services, interfering with customer transactions or impeding the manufacturing and shipping of the Company's products. These events could materially adversely affect the Company's business, reputation, results of operations and financial condition.

Losses or unauthorized access to or releases of confidential information, including personal information, could subject the Company to significant reputational, financial, legal and operational consequences.

The Company's business requires it to use and store confidential information, including personal information, with respect to the Company's customers and employees. The Company devotes significant resources to network and data security, including through the use of encryption and other security measures intended to protect its systems and data. But these measures cannot provide absolute security, and losses or unauthorized access to or releases of confidential information occur and could materially adversely affect the Company's business, reputation, results of operations and financial condition.

The Company's business also requires it to share confidential information with suppliers and other third parties. The Company relies on global suppliers that are also exposed to ransomware and other malicious attacks that can disrupt business operations. Although the Company takes steps to secure confidential information that is provided to or accessible by third parties working on the Company's behalf, such measures are not always effective and losses or unauthorized access to or releases of confidential information occur. Such incidents and other malicious attacks could materially adversely affect the Company's business, reputation, results of operations and financial condition.

The Company experiences malicious attacks and other attempts to gain unauthorized access to its systems on a regular basis. These attacks seek to compromise the confidentiality, integrity or availability of confidential information or disrupt normal business operations, and could, among other things, impair the Company's ability to attract and retain customers for its products and services, impact the Company's stock price, materially damage commercial relationships, and expose the Company to litigation or government investigations, which could result in penalties, fines or judgments against the Company. Globally, attacks are expected to continue accelerating in both frequency and sophistication with increasing use by actors of tools and techniques that are designed to circumvent controls, avoid detection, and remove or obfuscate forensic evidence, all of which hinders the Company's ability to identify, investigate and recover from incidents. In addition, attacks against the Company and its customers can escalate during periods of severe diplomatic or armed conflict.

Although malicious attacks perpetrated to gain access to confidential information, including personal information, affect many companies across various industries, the Company is at a relatively greater risk of being targeted because of its high profile and the value of the confidential information it creates, owns, manages, stores and processes.

The Company has implemented systems and processes intended to secure its information technology systems and prevent unauthorized access to or loss of sensitive data, and mitigate the impact of unauthorized access, including through the use of encryption and authentication technologies. As with all companies, these security measures may not be sufficient for all eventualities and may be vulnerable to hacking, ransomware attacks, employee error, malfeasance, system error, faulty password management or other irregularities. For example, third parties can fraudulently induce the Company's or its vendors' employees or customers into disclosing user names, passwords or other sensitive information, which can, in turn, be used for unauthorized access to the Company's or its vendors' systems and services. To help protect customers and the Company, the Company deploys and makes available technologies like multifactor authentication, monitors its services and systems for unusual activity and may freeze accounts under suspicious circumstances, which, among other things, can result in the delay or loss of customer orders or impede customer access to the Company's products and services.

While the Company maintains insurance coverage that is intended to address certain aspects of data security risks, such insurance coverage may be insufficient to cover all losses or all types of claims that may arise.

Investment in new business strategies and acquisitions could disrupt the Company's ongoing business, present risks not originally contemplated and materially adversely affect the Company's business, reputation, results of operations and financial condition.

The Company has invested, and in the future may invest, in new business strategies or acquisitions. Such endeavors may involve significant risks and uncertainties, including distraction of management from current operations, greater-than-expected liabilities and expenses, economic, political, legal and regulatory challenges associated with operating in new businesses, regions or countries, inadequate return on capital, potential impairment of tangible and intangible assets, and significant write-offs. Investment and acquisition transactions are exposed to additional risks, including failing to obtain required regulatory approvals on a timely basis or at all, or the imposition of onerous conditions that could delay or prevent the Company from completing a transaction or otherwise limit the Company's ability to fully realize the anticipated benefits of a transaction. These new ventures are inherently risky and may not be successful. The failure of any significant investment could materially adversely affect the Company's business, reputation, results of operations and financial condition.

The Company's retail stores have required and will continue to require a substantial investment and commitment of resources and are subject to numerous risks and uncertainties.

The Company's retail stores have required substantial investment in equipment and leasehold improvements, information systems, inventory and personnel. The Company also has entered into substantial lease commitments for retail space. Certain stores have been designed and built to serve as high-profile venues to promote brand awareness. Because of their unique design elements, locations and size, these stores require substantially more investment than the Company's more typical retail stores. Due to the high cost structure associated with the Company's retail stores, a decline in sales or the closure or poor performance of an individual store or multiple stores, including as a result of protective public safety measures in response to the COVID-19 pandemic, could result in significant lease termination costs, write-offs of equipment and leasehold improvements and severance costs.

The Company's retail operations are subject to many factors that pose risks and uncertainties and could adversely impact the Company's business, results of operations and financial condition, including macro-economic factors that could have an adverse effect on general retail activity. Other factors include the Company's ability to: manage costs associated with retail store construction and operation; manage relationships with existing retail partners; manage costs associated with fluctuations in the value of retail inventory; and obtain and renew leases in quality retail locations at a reasonable cost.

Legal and Regulatory Compliance Risks

The Company's business, results of operations and financial condition could be adversely impacted by unfavorable results of legal proceedings or government investigations.

The Company is subject to various claims, legal proceedings and government investigations that have arisen in the ordinary course of business and have not yet been fully resolved, and new matters may arise in the future. In addition, agreements entered into by the Company sometimes include indemnification provisions which can subject the Company to costs and damages in the event of a claim against an indemnified third party. The number of claims, legal proceedings and government investigations involving the Company, and the alleged magnitude of such claims, proceedings and government investigations, has generally increased over time and may continue to increase.

The Company has faced and continues to face a significant number of patent claims relating to its cellular-enabled products, and new claims may arise in the future. For example, technology and other patent-holding companies frequently assert their patents and seek royalties and often enter into litigation based on allegations of patent infringement or other violations of intellectual property rights. The Company is vigorously defending infringement actions in courts in several U.S. jurisdictions, as well as internationally in various countries. The plaintiffs in these actions frequently seek injunctions and substantial damages.

Regardless of the merit of particular claims, defending against litigation or responding to government investigations can be expensive, time-consuming and disruptive to the Company's operations. In recognition of these considerations, the Company may enter into agreements or other arrangements to settle litigation and resolve such challenges. There can be no assurance such agreements can be obtained on acceptable terms or that litigation will not occur. These agreements can also significantly increase the Company's cost of sales and operating expenses and require the Company to change its business practices and limit the Company's ability to offer certain products and services.

Except as described in Part I, Item 3 of this Form 10-K under the heading "Legal Proceedings" and in Part II, Item 8 of this Form 10-K in the Notes to Consolidated Financial Statements in Note 10, "Commitments and Contingencies" under the heading "Contingencies," in the opinion of management, there was not at least a reasonable possibility the Company may have incurred a material loss, or a material loss greater than a recorded accrual, concerning loss contingencies for asserted legal and other claims.

The outcome of litigation or government investigations is inherently uncertain. If one or more legal matters were resolved against the Company or an indemnified third party in a reporting period for amounts above management's expectations, the Company's results of operations and financial condition for that reporting period could be materially adversely affected. Further, such an outcome can result in significant compensatory, punitive or trebled monetary damages, disgorgement of revenue or profits, remedial corporate measures or injunctive relief against the Company, and can require the Company to change its business practices and limit the Company's ability to offer certain products and services, all of which could materially adversely affect the Company's business, reputation, results of operations and financial condition.

While the Company maintains insurance coverage for certain types of claims, such insurance coverage may be insufficient to cover all losses or all types of claims that may arise.

The Company is subject to complex and changing laws and regulations worldwide, which exposes the Company to potential liabilities, increased costs and other adverse effects on the Company's business.

The Company's global operations are subject to complex and changing laws and regulations on subjects, including antitrust; privacy, data security and data localization; consumer protection; advertising, sales, billing and e-commerce; financial services and technology; product liability; intellectual property ownership and infringement; digital platforms; internet, telecommunications, and mobile communications; media, television, film and digital content; availability of third-party software applications and services; labor and employment; anticorruption; import, export and trade; foreign exchange controls and cash repatriation restrictions; anti–money laundering; foreign ownership and investment; tax; and environmental, health and safety, including electronic waste, recycling, and climate change.

Compliance with these laws and regulations is onerous and expensive. New and changing laws and regulations can adversely affect the Company's business by increasing the Company's costs, limiting the Company's ability to offer a product, service or feature to customers, impacting customer demand for the Company's products and services, and requiring changes to the Company's supply chain and its business. New and changing laws and regulations can also create uncertainty about how such laws and regulations will be interpreted and applied. These risks and costs may increase as the Company's products and services are introduced into specialized applications, including health and financial services. The Company has implemented policies and procedures designed to ensure compliance with applicable laws and regulations, but there can be no assurance the Company's employees, contractors or agents will not violate such laws and regulations or the Company's policies and procedures. If the Company is found to have violated laws and regulations, it could materially adversely affect the Company's business, reputation, results of operations and financial condition. Regulatory changes and other actions that materially adversely affect the Company's business may be announced with little or no advance notice and the Company may not be able to effectively mitigate all adverse impacts from such measures. For example, the Company is subject to changing regulations relating to the export and import of its products. Although the Company has programs, policies and procedures in place that are designed to satisfy regulatory requirements, there can be no assurance that such policies and procedures will be effective in preventing a violation or a claim of a violation. As a result, the Company's products could be delayed or prohibited from importation, either of which could materially adversely affect the Company's business, reputation, results of operations and financial condition.

Expectations relating to environmental, social and governance considerations expose the Company to potential liabilities, increased costs, reputational harm, and other adverse effects on the Company's business.

Many governments, regulators, investors, employees, customers and other stakeholders are increasingly focused on environmental, social and governance considerations relating to businesses, including climate change and greenhouse gas emissions, human and civil rights, and diversity, equity and inclusion. In addition, the Company makes statements about its environmental, social and governance goals and initiatives through its environmental, social and governance report, its other non-financial reports, information provided on its website, press statements and other communications. Responding to these environmental, social and governance considerations and implementation of these goals and initiatives involves risks and uncertainties, requires investments, and depends in part on third-party performance or data that is outside the Company's control. The Company cannot guarantee that it will achieve its announced environmental, social and governance goals and initiatives. In addition, some stakeholders may disagree with the Company's goals and initiatives. Any failure, or perceived failure, by the Company to achieve its goals, further its initiatives, adhere to its public statements, comply with federal, state or international environmental, social and governance laws and regulations, or meet evolving and varied stakeholder expectations and standards could result in legal and regulatory proceedings against the Company and materially adversely affect the Company's business, reputation, results of operations, financial condition and stock price.

The technology industry, including, in some instances, the Company, is subject to intense media, political and regulatory scrutiny, which exposes the Company to increasing regulation, government investigations, legal actions and penalties.

From time to time, the Company has made changes to its App Store, including actions taken in response to competition, market and legal conditions. The Company may make further business changes in the future. New legislative initiatives, such as the EU Digital Markets Act, or similar laws in other jurisdictions, could require further changes. These changes could include how and to what extent the Company charges developers for access to its platforms and manages distribution of apps outside of the App Store.

The Company is also currently subject to antitrust investigations in various jurisdictions around the world, which can result in legal proceedings and claims against the Company that could, individually or in the aggregate, have a materially adverse impact on the Company's business, results of operations and financial condition. For example, the Company is the subject of investigations in Europe and other jurisdictions relating to App Store terms and conditions. If such investigations result in adverse findings against the Company, the Company could be exposed to significant fines and may be required to make changes to its App Store business, all of which could materially adversely affect the Company's business, results of operations and financial condition. The Company is also subject to litigation relating to the App Store, which has resulted in changes to the Company's business practices, and may in the future result in further changes.

Further, the Company has commercial relationships with other companies in the technology industry that are or may become subject to investigations and litigation that, if resolved against those other companies, could materially adversely affect the Company's commercial relationships with those business partners and materially adversely affect the Company's business, results of operations and financial condition. For example, the Company earns revenue from licensing arrangements with other companies to offer their search services on the Company's platforms and apps, and certain of these arrangements are currently subject to government investigations and legal proceedings.

There can be no assurance the Company's business will not be materially adversely affected, individually or in the aggregate, by the outcomes of such investigations, litigation or changes to laws and regulations in the future. Changes to the Company's business practices to comply with new laws and regulations or in connection with other legal proceedings could negatively impact the reputation of the Company's products for privacy and security and otherwise adversely affect the experience for users of the Company's products and services, and result in harm to the Company's reputation, loss of competitive advantage, poor market acceptance, reduced demand for products and services, and lost sales.

The Company's business is subject to a variety of U.S. and international laws, rules, policies and other obligations regarding data protection.

The Company is subject to federal, state and international laws relating to the collection, use, retention, security and transfer of various types of personal information. In many cases, these laws apply not only to third-party transactions, but also restrict transfers of personal information among the Company and its international subsidiaries. Several jurisdictions have passed laws in this area, and additional jurisdictions are considering imposing additional restrictions or have laws that are pending. These laws continue to develop and may be inconsistent from jurisdiction to jurisdiction. Complying with emerging and changing requirements causes the Company to incur substantial costs and has required and may in the future require the Company to change its business practices. Noncompliance could result in significant penalties or legal liability.

The Company makes statements about its use and disclosure of personal information through its privacy policy, information provided on its website, press statements and other privacy notices provided to customers. Any failure by the Company to comply with these public statements or with other federal, state or international privacy or data protection laws and regulations could result in inquiries or proceedings against the Company by governmental entities or others. In addition to reputational impacts, penalties could include ongoing audit requirements and significant legal liability.

In addition to the risks generally relating to the collection, use, retention, security and transfer of personal information, the Company is also subject to specific obligations relating to information considered sensitive under applicable laws, such as health data, financial data and biometric data. Health data and financial data are subject to additional privacy, security and breach notification requirements, and the Company is subject to audit by governmental authorities regarding the Company's compliance with these obligations. If the Company fails to adequately comply with these rules and requirements, or if health data or financial data is handled in a manner not permitted by law or under the Company's agreements with healthcare or financial institutions, the Company can be subject to litigation or government investigations, and can be liable for associated investigatory expenses, and can also incur significant fees or fines.

Payment card data is also subject to additional requirements. Under payment card rules and obligations, if cardholder information is potentially compromised, the Company can be liable for associated investigatory expenses and can also incur significant fees or fines if the Company fails to follow payment card industry data security standards. The Company could also experience a significant increase in payment card transaction costs or lose the ability to process payment cards if it fails to follow payment card industry data security standards, which could materially adversely affect the Company's business, reputation, results of operations and financial condition.

Financial Risks

The Company expects its quarterly net sales and results of operations to fluctuate.

The Company's profit margins vary across its products, services, geographic segments and distribution channels. For example, the gross margins on the Company's products and services vary significantly and can change over time. The Company's gross margins are subject to volatility and downward pressure due to a variety of factors, including: continued industry-wide global product pricing pressures and product pricing actions that the Company may take in response to such pressures; increased competition; the Company's ability to effectively stimulate demand for certain of its products and services; compressed product life cycles; supply shortages; potential increases in the cost of components, outside manufacturing services, and developing, acquiring and delivering content for the Company's services; the Company's ability to manage product quality and warranty costs effectively; shifts in the mix of products and services, or in the geographic, currency or channel mix, including to the extent that regulatory changes require the Company to modify its product and service offerings; fluctuations in foreign exchange rates; inflation and other macroeconomic pressures; and the introduction of new products or services, including new products or services with higher cost structures. These and other factors could have a materially adverse impact on the Company's results of operations and financial condition.

The Company has historically experienced higher net sales in its first quarter compared to other quarters in its fiscal year due in part to seasonal holiday demand. Additionally, new product and service introductions can significantly impact net sales, cost of sales and operating expenses. Further, the Company generates a significant portion of its net sales from a single product and a decline in demand for that product could significantly impact quarterly net sales. The Company could also be subject to unexpected developments, such as lower-than-anticipated demand for the Company's products or services, issues with new product or service introductions, information technology system failures or network disruptions, or failure of one of the Company's logistics, components supply, or manufacturing partners.

The Company's financial performance is subject to risks associated with changes in the value of the U.S. dollar relative to local currencies.

The Company's primary exposure to movements in foreign currency exchange rates relates to non–U.S. dollar–denominated sales, cost of sales and operating expenses worldwide. Gross margins on the Company's products in foreign countries and on products that include components obtained from foreign suppliers could be materially adversely affected by foreign currency exchange rate fluctuations.

The weakening of foreign currencies relative to the U.S. dollar adversely affects the U.S. dollar value of the Company's foreign currency–denominated sales and earnings, and generally leads the Company to raise international pricing, potentially reducing demand for the Company's products. In some circumstances, for competitive or other reasons, the Company may decide not to raise international pricing to offset the U.S. dollar's strengthening, which would adversely affect the U.S. dollar value of the gross margins the Company earns on foreign currency–denominated sales.

Conversely, a strengthening of foreign currencies relative to the U.S. dollar, while generally beneficial to the Company's foreign currency–denominated sales and earnings, could cause the Company to reduce international pricing and incur losses on its foreign currency derivative instruments, thereby limiting the benefit. Additionally, strengthening of foreign currencies may increase the Company's cost of product components denominated in those currencies, thus adversely affecting gross margins.

The Company uses derivative instruments, such as foreign currency forward and option contracts, to hedge certain exposures to fluctuations in foreign currency exchange rates. The use of such hedging activities may not be effective to offset any, or more than a portion, of the adverse financial effects of unfavorable movements in foreign exchange rates over the limited time the hedges are in place.

The Company is exposed to credit risk and fluctuations in the values of its investment portfolio.

The Company's investments can be negatively affected by changes in liquidity, credit deterioration, financial results, market and economic conditions, political risk, sovereign risk, interest rate fluctuations or other factors. As a result, the value and liquidity of the Company's cash, cash equivalents, and marketable and non-marketable securities may fluctuate substantially. Therefore, although the Company has not realized any significant losses on its cash, cash equivalents, and marketable and non-marketable securities, future fluctuations in their value could result in significant losses and could have a material adverse impact on the Company's results of operations and financial condition.

The Company is exposed to credit risk on its trade accounts receivable, vendor non-trade receivables and prepayments related to long-term supply agreements, and this risk is heightened during periods when economic conditions worsen.

The Company distributes its products and certain of its services through third-party cellular network carriers, wholesalers, retailers and resellers. The Company also sells its products and services directly to small and mid-sized businesses and education, enterprise and government customers. A substantial majority of the Company's outstanding trade receivables are not covered by collateral, third-party bank support or financing arrangements, or credit insurance, and a significant portion of the Company's trade receivables can be concentrated within cellular network carriers or other resellers. The Company's exposure to credit and collectibility risk on its trade receivables is higher in certain international markets and its ability to mitigate such risks may be limited. The Company also has unsecured vendor non-trade receivables resulting from purchases of components by outsourcing partners and other vendors that manufacture subassemblies or assemble final products for the Company. In addition, the Company has made prepayments associated with long-term supply agreements to secure supply of inventory components. As of September 24, 2022, the Company's vendor non-trade receivables and prepayments related to long-term supply agreements were concentrated among a few individual vendors located primarily in Asia. While the Company has procedures to monitor and limit exposure to credit risk on its trade and vendor non-trade receivables, as well as long-term prepayments, there can be no assurance such procedures will effectively limit its credit risk and avoid losses.

The Company is subject to changes in tax rates, the adoption of new U.S. or international tax legislation and exposure to additional tax liabilities.

The Company is subject to taxes in the U.S. and numerous foreign jurisdictions, including Ireland, where a number of the Company's subsidiaries are organized. Due to economic and political conditions, tax laws and tax rates for income taxes and other non-income taxes in various jurisdictions may be subject to significant change. The Company's effective tax rates are affected by changes in the mix of earnings in countries with differing statutory tax rates, changes in the valuation of deferred tax assets and liabilities, the introduction of new taxes, or changes in tax laws or their interpretation, including in the U.S. and Ireland. The application of tax laws may be uncertain, require significant judgment and be subject to differing interpretations.

The Company is also subject to the examination of its tax returns and other tax matters by the U.S. Internal Revenue Service and other tax authorities and governmental bodies. The Company regularly assesses the likelihood of an adverse outcome resulting from these examinations to determine the adequacy of its provision for taxes. There can be no assurance as to the outcome of these examinations. If the Company's effective tax rates were to increase, particularly in the U.S. or Ireland, or if the ultimate determination of the Company's taxes owed is for an amount in excess of amounts previously accrued, the Company's business, results of operations and financial condition could be materially adversely affected.

General Risks

The price of the Company's stock is subject to volatility.

The Company's stock has experienced substantial price volatility in the past and may continue to do so in the future. Additionally, the Company, the technology industry and the stock market as a whole have, from time to time, experienced extreme stock price and volume fluctuations that have affected stock prices in ways that may have been unrelated to these companies' operating performance. Price volatility may cause the average price at which the Company repurchases its stock in a given period to exceed the stock's price at a given point in time. The Company believes the price of its stock should reflect expectations of future growth and profitability. The Company also believes the price of its stock should reflect expectations that its cash dividend will continue at current levels or grow, and that its current share repurchase program will be fully consummated. Future dividends are subject to declaration by the Company's Board of Directors, and the Company's share repurchase program does not obligate it to acquire any specific number of shares. If the Company fails to meet expectations related to future growth, profitability, dividends, share repurchases or other market expectations, the price of the Company's stock may decline significantly, which could have a material adverse impact on investor confidence and employee retention.

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

The Company's headquarters are located in Cupertino, California. As of September 24, 2022, the Company owned or leased facilities and land for corporate functions, R&D, data centers, retail and other purposes at locations throughout the U.S. and in various places outside the U.S. The Company believes its existing facilities and equipment, which are used by all reportable segments, are in good operating condition and are suitable for the conduct of its business.

Item 3. Legal Proceedings

Epic Games

Epic Games, Inc. ("Epic") filed a lawsuit in the U.S. District Court for the Northern District of California (the "Northern California District Court") against the Company alleging violations of federal and state antitrust laws and California's unfair competition law based upon the Company's operation of its App Store. The Company filed a counterclaim for breach of contract. On September 10, 2021, the Northern California District Court ruled in favor of the Company with respect to nine out of the ten counts included in Epic's claim, and in favor of the Company with respect to the Company's claims for breach of contract. The Northern California District Court found that certain provisions of the Company's App Store Review Guidelines violate California's unfair competition law and issued an injunction. Epic appealed the decision. The Company filed a cross-appeal and has been granted a stay pending the appeal.

Other Legal Proceedings

The Company is subject to other legal proceedings and claims that have not been fully resolved and that have arisen in the ordinary course of business. The Company settled certain matters during the fourth quarter of 2022 that did not individually or in the aggregate have a material impact on the Company's financial condition or operating results. The outcome of litigation is inherently uncertain. If one or more legal matters were resolved against the Company in a reporting period for amounts above management's expectations, the Company's financial condition and operating results for that reporting period could be materially adversely affected.

Item 4. Mine Safety Disclosures

Not applicable.

PART II

Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities

The Company's common stock is traded on The Nasdaq Stock Market LLC under the symbol AAPL.

Holders

As of October 14, 2022, there were 23,838 shareholders of record.

Purchases of Equity Securities by the Issuer and Affiliated Purchasers

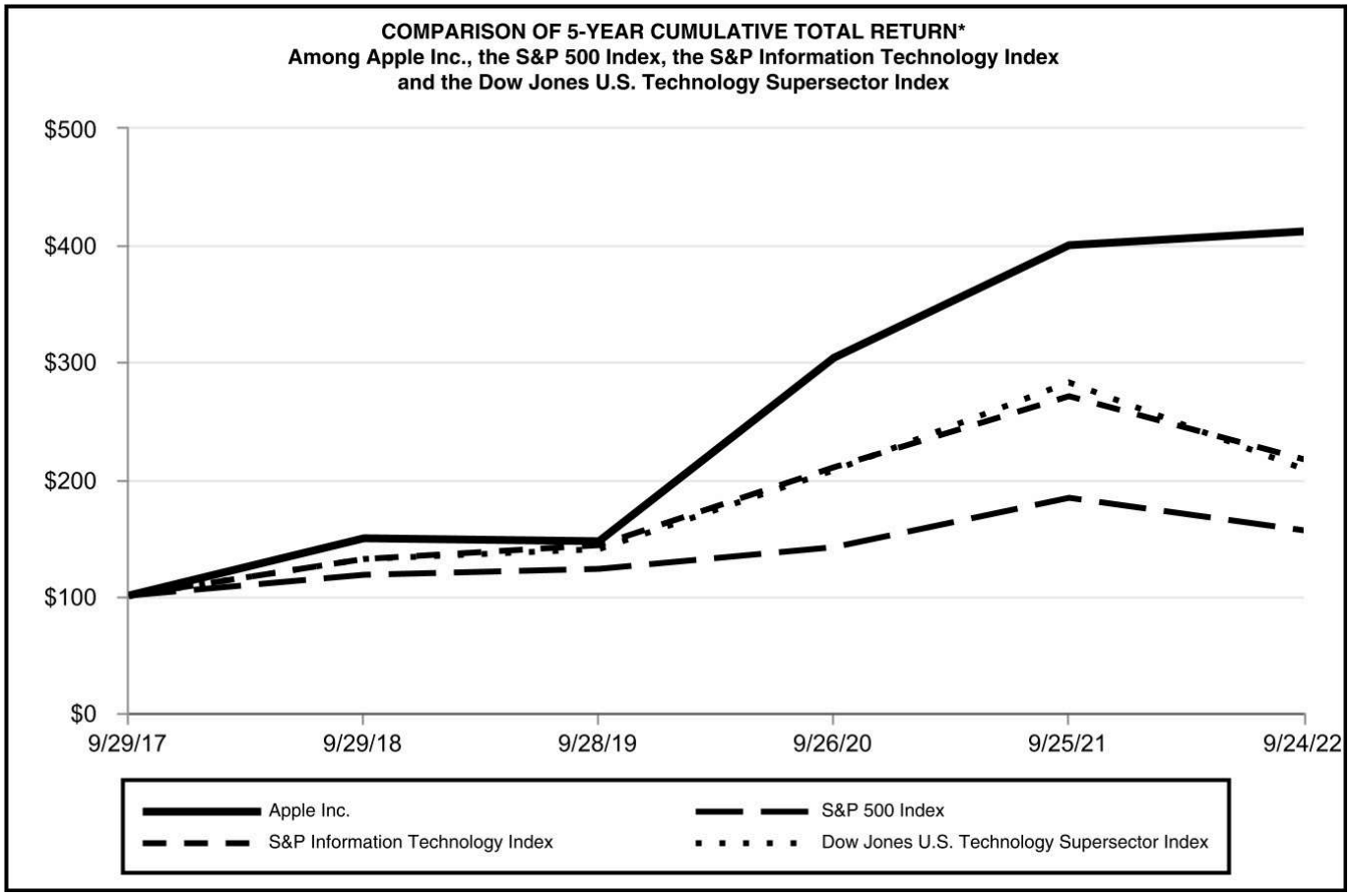
Share repurchase activity during the three months ended September 24, 2022 was as follows (in millions, except number of shares, which are reflected in thousands, and per share amounts):

Periods	Total Number of Shares Purchased	Average Price Paid Per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Approximate Dollar Value of Shares That May Yet Be Purchased Under the Plans or Programs [1]
June 26, 2022 to July 30, 2022:				
Open market and privately negotiated purchases	41,690	$ 145.91	41,690	
July 31, 2022 to August 27, 2022:				
Open market and privately negotiated purchases	54,669	$ 168.29	54,669	
August 28, 2022 to September 24, 2022:				
Open market and privately negotiated purchases	63,813	$ 155.59	63,813	
Total	160,172			$ 60,665

(1) As of September 24, 2022, the Company was authorized by the Board of Directors to purchase up to $405 billion of the Company's common stock under a share repurchase program most recently announced on April 28, 2022 (the "Program"), of which $344.3 billion had been utilized. The Program does not obligate the Company to acquire a minimum amount of shares. Under the Program, shares may be repurchased in privately negotiated and/or open market transactions, including under plans complying with Rule 10b5-1 under the Exchange Act.

Company Stock Performance

The following graph shows a comparison of cumulative total shareholder return, calculated on a dividend-reinvested basis, for the Company, the S&P 500 Index, the S&P Information Technology Index and the Dow Jones U.S. Technology Supersector Index for the five years ended September 24, 2022. The graph assumes $100 was invested in each of the Company's common stock, the S&P 500 Index, the S&P Information Technology Index and the Dow Jones U.S. Technology Supersector Index as of the market close on September 29, 2017. Past stock price performance is not necessarily indicative of future stock price performance.



* $100 invested on September 29, 2017 in stock or index, including reinvestment of dividends. Data points are the last day of each fiscal year for the Company's common stock and September 30th for indexes.

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	September 2017	September 2018	September 2019	September 2020	September 2021	September 2022
Apple Inc.	$ 100	$ 149	$ 146	$ 303	$ 400	$ 411
S&P 500 Index	$ 100	$ 118	$ 123	$ 142	$ 184	$ 156
S&P Information Technology Index	$ 100	$ 131	$ 143	$ 210	$ 271	$ 217
Dow Jones U.S. Technology Supersector Index	$ 100	$ 131	$ 139	$ 208	$ 283	$ 209

Item 6. [Reserved]

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

The following discussion should be read in conjunction with the consolidated financial statements and accompanying notes included in Part II, Item 8 of this Form 10-K. This section of this Form 10-K generally discusses 2022 and 2021 items and year-to-year comparisons between 2022 and 2021. Discussions of 2020 items and year-to-year comparisons between 2021 and 2020 are not included in this Form 10-K, and can be found in "Management's Discussion and Analysis of Financial Condition and Results of Operations" in Part II, Item 7 of the Company's Annual Report on Form 10-K for the fiscal year ended September 25, 2021.

Fiscal Year Highlights

Fiscal 2022 Highlights

Total net sales increased 8% or $28.5 billion during 2022 compared to 2021, driven primarily by higher net sales of iPhone, Services and Mac. The weakness in foreign currencies relative to the U.S. dollar had an unfavorable year-over-year impact on all Products and Services net sales during 2022.

The Company announces new product, service and software offerings at various times during the year. Significant announcements during fiscal 2022 included the following:

First Quarter 2022:

- Updated MacBook Pro 14" and MacBook Pro 16", powered by the Apple M1 Pro or M1 Max chip; and
- Third generation of AirPods.

Second Quarter 2022:

- Updated iPhone SE with 5G technology;
- All-new Mac Studio, powered by the Apple M1 Max or M1 Ultra chip;
- All-new Studio Display™; and
- Updated iPad Air with 5G technology, powered by the Apple M1 chip.

Third Quarter 2022:

- Updated MacBook Air and MacBook Pro 13", both powered by the Apple M2 chip;
- iOS 16, macOS Ventura, iPadOS 16 and watchOS 9, updates to the Company's operating systems; and
- Apple Pay Later, a buy now, pay later service.

Fourth Quarter 2022:

- iPhone 14, iPhone 14 Plus, iPhone 14 Pro and iPhone 14 Pro Max;
- Second generation of AirPods Pro; and
- Apple Watch Series 8, updated Apple Watch SE and all-new Apple Watch Ultra.

In April 2022, the Company announced an increase to its Program authorization from $315 billion to $405 billion and raised its quarterly dividend from $0.22 to $0.23 per share beginning in May 2022. During 2022, the Company repurchased $90.2 billion of its common stock and paid dividends and dividend equivalents of $14.8 billion.

COVID-19

The COVID-19 pandemic has had, and continues to have, a significant impact around the world, prompting governments and businesses to take unprecedented measures, such as restrictions on travel and business operations, temporary closures of businesses, and quarantine and shelter-in-place orders. The COVID-19 pandemic has at times significantly curtailed global economic activity and caused significant volatility and disruption in global financial markets. The COVID-19 pandemic and the measures taken by many countries in response have affected and could in the future materially impact the Company's business, results of operations and financial condition.

Certain of the Company's outsourcing partners, component suppliers and logistical service providers have experienced disruptions during the COVID-19 pandemic, resulting in supply shortages. Similar disruptions could occur in the future.

Products and Services Performance

The following table shows net sales by category for 2022, 2021 and 2020 (dollars in millions):

	2022	Change	2021	Change	2020
Net sales by category:					
iPhone [1]	$ 205,489	7 %	$ 191,973	39 %	$ 137,781
Mac [1]	40,177	14 %	35,190	23 %	28,622
iPad [1]	29,292	(8)%	31,862	34 %	23,724
Wearables, Home and Accessories [1][2]	41,241	7 %	38,367	25 %	30,620
Services [3]	78,129	14 %	68,425	27 %	53,768
Total net sales	$ 394,328	8 %	$ 365,817	33 %	$ 274,515

(1) Products net sales include amortization of the deferred value of unspecified software upgrade rights, which are bundled in the sales price of the respective product.

(2) Wearables, Home and Accessories net sales include sales of AirPods, Apple TV, Apple Watch, Beats products, HomePod mini and accessories.

(3) Services net sales include sales from the Company's advertising, AppleCare, cloud, digital content, payment and other services. Services net sales also include amortization of the deferred value of services bundled in the sales price of certain products.

iPhone

iPhone net sales increased during 2022 compared to 2021 due primarily to higher net sales from the Company's new iPhone models released since the beginning of the fourth quarter of 2021.

Mac

Mac net sales increased during 2022 compared to 2021 due primarily to higher net sales of laptops.

iPad

iPad net sales decreased during 2022 compared to 2021 due primarily to lower net sales of iPad Pro.

Wearables, Home and Accessories

Wearables, Home and Accessories net sales increased during 2022 compared to 2021 due primarily to higher net sales of Apple Watch and AirPods.

Services

Services net sales increased during 2022 compared to 2021 due primarily to higher net sales from advertising, cloud services and the App Store.

Segment Operating Performance

The Company manages its business primarily on a geographic basis. The Company's reportable segments consist of the Americas, Europe, Greater China, Japan and Rest of Asia Pacific. Americas includes both North and South America. Europe includes European countries, as well as India, the Middle East and Africa. Greater China includes China mainland, Hong Kong and Taiwan. Rest of Asia Pacific includes Australia and those Asian countries not included in the Company's other reportable segments. Although the reportable segments provide similar hardware and software products and similar services, each one is managed separately to better align with the location of the Company's customers and distribution partners and the unique market dynamics of each geographic region. Further information regarding the Company's reportable segments can be found in Part II, Item 8 of this Form 10-K in the Notes to Consolidated Financial Statements in Note 11, "Segment Information and Geographic Data."

The following table shows net sales by reportable segment for 2022, 2021 and 2020 (dollars in millions):

	2022	Change	2021	Change	2020
Net sales by reportable segment:					
Americas	$ 169,658	11 %	$ 153,306	23 %	$ 124,556
Europe	95,118	7 %	89,307	30 %	68,640
Greater China	74,200	9 %	68,366	70 %	40,308
Japan	25,977	(9)%	28,482	33 %	21,418
Rest of Asia Pacific	29,375	11 %	26,356	35 %	19,593
Total net sales	$ 394,328	8 %	$ 365,817	33 %	$ 274,515

Americas

Americas net sales increased during 2022 compared to 2021 due primarily to higher net sales of iPhone, Services and Mac.

Europe

Europe net sales increased during 2022 compared to 2021 due primarily to higher net sales of iPhone and Services. The weakness in foreign currencies relative to the U.S. dollar had a net unfavorable year-over-year impact on Europe net sales during 2022.

Greater China

Greater China net sales increased during 2022 compared to 2021 due primarily to higher net sales of iPhone and Services. The strength of the renminbi relative to the U.S. dollar had a favorable year-over-year impact on Greater China net sales during 2022.

Japan

Japan net sales decreased during 2022 compared to 2021 due to the weakness of the yen relative to the U.S. dollar.

Rest of Asia Pacific

Rest of Asia Pacific net sales increased during 2022 compared to 2021 due primarily to higher net sales of iPhone, Mac and Services. The weakness in foreign currencies relative to the U.S. dollar had an unfavorable year-over-year impact on Rest of Asia Pacific net sales during 2022.

Gross Margin

Products and Services gross margin and gross margin percentage for 2022, 2021 and 2020 were as follows (dollars in millions):

	2022	2021	2020
Gross margin:			
Products	$ 114,728	$ 105,126	$ 69,461
Services	56,054	47,710	35,495
Total gross margin	$ 170,782	$ 152,836	$ 104,956
Gross margin percentage:			
Products	36.3 %	35.3 %	31.5 %
Services	71.7 %	69.7 %	66.0 %
Total gross margin percentage	43.3 %	41.8 %	38.2 %

Products Gross Margin

Products gross margin increased during 2022 compared to 2021 due primarily to a different Products mix and higher Products volume, partially offset by the weakness in foreign currencies relative to the U.S. dollar.

Products gross margin percentage increased during 2022 compared to 2021 due primarily to a different Products mix, partially offset by the weakness in foreign currencies relative to the U.S. dollar.

Services Gross Margin

Services gross margin increased during 2022 compared to 2021 due primarily to higher Services net sales, partially offset by the weakness in foreign currencies relative to the U.S. dollar.

Services gross margin percentage increased during 2022 compared to 2021 due primarily to improved leverage and a different Services mix, partially offset by the weakness in foreign currencies relative to the U.S. dollar.

The Company's future gross margins can be impacted by a variety of factors, as discussed in Part I, Item 1A of this Form 10-K under the heading "Risk Factors." As a result, the Company believes, in general, gross margins will be subject to volatility and downward pressure.

Operating Expenses

Operating expenses for 2022, 2021 and 2020 were as follows (dollars in millions):

	2022	Change	2021	Change	2020
Research and development	$ 26,251	20 %	$ 21,914	17 %	$ 18,752
Percentage of total net sales	7 %		6 %		7 %
Selling, general and administrative	$ 25,094	14 %	$ 21,973	10 %	$ 19,916
Percentage of total net sales	6 %		6 %		7 %
Total operating expenses	$ 51,345	17 %	$ 43,887	13 %	$ 38,668
Percentage of total net sales	13 %		12 %		14 %

Research and Development

The year-over-year growth in R&D expense in 2022 was driven primarily by increases in headcount-related expenses and engineering program costs.

Selling, General and Administrative

The year-over-year growth in selling, general and administrative expense in 2022 was driven primarily by increases in headcount-related expenses, advertising and professional services.

Other Income/(Expense), Net

Other income/(expense), net ("OI&E") for 2022, 2021 and 2020 was as follows (dollars in millions):

	2022	Change	2021	Change	2020
Interest and dividend income	$ 2,825		$ 2,843		$ 3,763
Interest expense	(2,931)		(2,645)		(2,873)
Other income/(expense), net	(228)		60		(87)
Total other income/(expense), net	$ (334)	(229)%	$ 258	(68)%	$ 803

The decrease in OI&E during 2022 compared to 2021 was due primarily to higher realized losses on debt securities, unfavorable fair value adjustments on equity securities and higher interest expense, partially offset by higher foreign exchange gains.

Provision for Income Taxes

Provision for income taxes, effective tax rate and statutory federal income tax rate for 2022, 2021 and 2020 were as follows (dollars in millions):

	2022	2021	2020
Provision for income taxes	$ 19,300	$ 14,527	$ 9,680
Effective tax rate	16.2 %	13.3 %	14.4 %
Statutory federal income tax rate	21 %	21 %	21 %

The Company's effective tax rate for 2022 was lower than the statutory federal income tax rate due primarily to a lower effective tax rate on foreign earnings, tax benefits from share-based compensation and the impact of the U.S. federal R&D credit, partially offset by state income taxes. The Company's effective tax rate for 2021 was lower than the statutory federal income tax rate due primarily to a lower effective tax rate on foreign earnings, tax benefits from share-based compensation and foreign-derived intangible income deductions.

The Company's effective tax rate for 2022 was higher compared to 2021 due primarily to a higher effective tax rate on foreign earnings, including the impact to U.S. foreign tax credits as a result of regulatory guidance issued by the U.S. Department of the Treasury in 2022, and lower tax benefits from foreign-derived intangible income deductions and share-based compensation.

Liquidity and Capital Resources

The Company believes its balances of cash, cash equivalents and unrestricted marketable securities, which totaled $156.4 billion as of September 24, 2022, along with cash generated by ongoing operations and continued access to debt markets, will be sufficient to satisfy its cash requirements and capital return program over the next 12 months and beyond.

The Company's material cash requirements include the following contractual obligations.

Debt

As of September 24, 2022, the Company had outstanding fixed-rate notes with varying maturities for an aggregate principal amount of $111.8 billion (collectively the "Notes"), with $11.1 billion payable within 12 months. Future interest payments associated with the Notes total $41.3 billion, with $2.9 billion payable within 12 months.

The Company also issues unsecured short-term promissory notes ("Commercial Paper") pursuant to a commercial paper program. As of September 24, 2022, the Company had $10.0 billion of Commercial Paper outstanding, all of which was payable within 12 months.

Leases

The Company has lease arrangements for certain equipment and facilities, including corporate, data center, manufacturing and retail space. As of September 24, 2022, the Company had fixed lease payment obligations of $15.3 billion, with $2.0 billion payable within 12 months.

Manufacturing Purchase Obligations

The Company utilizes several outsourcing partners to manufacture subassemblies for the Company's products and to perform final assembly and testing of finished products. The Company also obtains individual components for its products from a wide variety of individual suppliers. Outsourcing partners acquire components and build product based on demand information supplied by the Company, which typically covers periods up to 150 days. As of September 24, 2022, the Company had manufacturing purchase obligations of $71.1 billion, with $68.4 billion payable within 12 months. The Company's manufacturing purchase obligations are primarily noncancelable.

Other Purchase Obligations

The Company's other purchase obligations primarily consist of noncancelable obligations to acquire capital assets, including assets related to product manufacturing, and noncancelable obligations related to internet services and content creation. As of September 24, 2022, the Company had other purchase obligations of $17.8 billion, with $6.8 billion payable within 12 months.

Deemed Repatriation Tax Payable

As of September 24, 2022, the balance of the deemed repatriation tax payable imposed by the U.S. Tax Cuts and Jobs Act of 2017 (the "Act") was $22.0 billion, with $5.3 billion expected to be paid within 12 months.

In addition to its contractual cash requirements, the Company has a capital return program authorized by the Board of Directors. The Program does not obligate the Company to acquire a minimum amount of shares. As of September 24, 2022, the Company's quarterly cash dividend was $0.23 per share. The Company intends to increase its dividend on an annual basis, subject to declaration by the Board of Directors.

Critical Accounting Estimates

The preparation of financial statements and related disclosures in conformity with U.S. generally accepted accounting principles ("GAAP") and the Company's discussion and analysis of its financial condition and operating results require the Company's management to make judgments, assumptions and estimates that affect the amounts reported. Note 1, "Summary of Significant Accounting Policies" of the Notes to Consolidated Financial Statements in Part II, Item 8 of this Form 10-K describes the significant accounting policies and methods used in the preparation of the Company's consolidated financial statements. Management bases its estimates on historical experience and on various other assumptions it believes to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities.

Uncertain Tax Positions

The Company is subject to income taxes in the U.S. and numerous foreign jurisdictions. The evaluation of the Company's uncertain tax positions involves significant judgment in the interpretation and application of GAAP and complex domestic and international tax laws, including the Act and matters related to the allocation of international taxation rights between countries. Although management believes the Company's reserves are reasonable, no assurance can be given that the final outcome of these uncertainties will not be different from that which is reflected in the Company's reserves. Reserves are adjusted considering changing facts and circumstances, such as the closing of a tax examination. Resolution of these uncertainties in a manner inconsistent with management's expectations could have a material impact on the Company's financial condition and operating results.

Legal and Other Contingencies

The Company is subject to various legal proceedings and claims that arise in the ordinary course of business, the outcomes of which are inherently uncertain. The Company records a liability when it is probable that a loss has been incurred and the amount is reasonably estimable, the determination of which requires significant judgment. Resolution of legal matters in a manner inconsistent with management's expectations could have a material impact on the Company's financial condition and operating results.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

Interest Rate and Foreign Currency Risk Management

The Company regularly reviews its foreign exchange forward and option positions and interest rate swaps, both on a stand-alone basis and in conjunction with its underlying foreign currency and interest rate exposures. Given the effective horizons of the Company's risk management activities and the anticipatory nature of the exposures, there can be no assurance these positions will offset more than a portion of the financial impact resulting from movements in either foreign exchange or interest rates. Further, the recognition of the gains and losses related to these instruments may not coincide with the timing of gains and losses related to the underlying economic exposures and, therefore, may adversely affect the Company's financial condition and operating results.

Interest Rate Risk

The Company's exposure to changes in interest rates relates primarily to the Company's investment portfolio and outstanding debt. While the Company is exposed to global interest rate fluctuations, it is most affected by fluctuations in U.S. interest rates. Changes in U.S. interest rates affect the interest earned on the Company's cash, cash equivalents and marketable securities and the fair value of those securities, as well as costs associated with hedging and interest paid on the Company's debt.

The Company's investment policy and strategy are focused on the preservation of capital and supporting the Company's liquidity requirements. The Company uses a combination of internal and external management to execute its investment strategy and achieve its investment objectives. The Company typically invests in highly rated securities, with the primary objective of minimizing the potential risk of principal loss. The Company's investment policy generally requires securities to be investment grade and limits the amount of credit exposure to any one issuer. To provide a meaningful assessment of the interest rate risk associated with the Company's investment portfolio, the Company performed a sensitivity analysis to determine the impact a change in interest rates would have on the value of the investment portfolio assuming a 100 basis point parallel shift in the yield curve. Based on investment positions as of September 24, 2022 and September 25, 2021, a hypothetical 100 basis point increase in interest rates across all maturities would result in a $4.0 billion and $4.1 billion incremental decline in the fair market value of the portfolio, respectively. Such losses would only be realized if the Company sold the investments prior to maturity.

As of September 24, 2022, the Company had outstanding fixed-rate notes and as of September 25, 2021, the Company had outstanding floating- and fixed-rate notes with varying maturities for an aggregate carrying amount of $110.1 billion and $118.7 billion, respectively. The Company has entered, and in the future may enter, into interest rate swaps to manage interest rate risk on its outstanding term debt. Interest rate swaps allow the Company to effectively convert fixed-rate payments into floating-rate payments or floating-rate payments into fixed-rate payments. Gains and losses on term debt are generally offset by the corresponding losses and gains on the related hedging instrument. A 100 basis point increase in market interest rates would cause interest expense on the Company's debt as of September 24, 2022 and September 25, 2021 to increase by $201 million and $186 million on an annualized basis, respectively.

Foreign Currency Risk

In general, the Company is a net receiver of currencies other than the U.S. dollar. Accordingly, changes in exchange rates, and in particular a strengthening of the U.S. dollar, will negatively affect the Company's net sales and gross margins as expressed in U.S. dollars. There is a risk that the Company will have to adjust local currency pricing due to competitive pressures when there has been significant volatility in foreign currency exchange rates.

The Company may enter into foreign currency forward and option contracts with financial institutions to protect against foreign exchange risks associated with certain existing assets and liabilities, certain firmly committed transactions, forecasted future cash flows and net investments in foreign subsidiaries. In addition, the Company has entered, and in the future may enter, into foreign currency contracts to partially offset the foreign currency exchange gains and losses on its foreign currency–denominated debt issuances. The Company generally hedges portions of its forecasted foreign currency exposure associated with revenue and inventory purchases, typically for up to 12 months. However, the Company may choose not to hedge certain foreign exchange exposures for a variety of reasons, including accounting considerations or the prohibitive economic cost of hedging particular exposures.

To provide an assessment of the foreign currency risk associated with certain of the Company's foreign currency derivative positions, the Company performed a sensitivity analysis using a value-at-risk ("VAR") model to assess the potential impact of fluctuations in exchange rates. The VAR model consisted of using a Monte Carlo simulation to generate thousands of random market price paths assuming normal market conditions. The VAR is the maximum expected loss in fair value, for a given confidence interval, to the Company's foreign currency derivative positions due to adverse movements in rates. The VAR model is not intended to represent actual losses but is used as a risk estimation and management tool. Forecasted transactions, firm commitments and assets and liabilities denominated in foreign currencies were excluded from the model. Based on the results of the model, the Company estimates with 95% confidence, a maximum one-day loss in fair value of $1.0 billion as of September 24, 2022, compared to a maximum one-day loss in fair value of $550 million as of September 25, 2021. Because the Company uses foreign currency instruments for hedging purposes, the losses in fair value incurred on those instruments are generally offset by increases in the fair value of the underlying exposures.

Actual future gains and losses associated with the Company's investment portfolio, debt and derivative positions may differ materially from the sensitivity analyses performed as of September 24, 2022 due to the inherent limitations associated with predicting the timing and amount of changes in interest rates, foreign currency exchange rates and the Company's actual exposures and positions.

Item 8. Financial Statements and Supplementary Data

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All financial statement schedules have been omitted, since the required information is not applicable or is not present in amounts sufficient to require submission of the schedule, or because the information required is included in the consolidated financial statements and accompanying notes.

Apple Inc.

CONSOLIDATED STATEMENTS OF OPERATIONS

(In millions, except number of shares which are reflected in thousands and per share amounts)

	Years ended		
	September 24, 2022	September 25, 2021	September 26, 2020
Net sales:			
Products	$ 316,199	$ 297,392	$ 220,747
Services	78,129	68,425	53,768
Total net sales	394,328	365,817	274,515
Cost of sales:			
Products	201,471	192,266	151,286
Services	22,075	20,715	18,273
Total cost of sales	223,546	212,981	169,559
Gross margin	170,782	152,836	104,956
Operating expenses:			
Research and development	26,251	21,914	18,752
Selling, general and administrative	25,094	21,973	19,916
Total operating expenses	51,345	43,887	38,668
Operating income	119,437	108,949	66,288
Other income/(expense), net	(334)	258	803
Income before provision for income taxes	119,103	109,207	67,091
Provision for income taxes	19,300	14,527	9,680
Net income	$ 99,803	$ 94,680	$ 57,411
Earnings per share:			
Basic	$ 6.15	$ 5.67	$ 3.31
Diluted	$ 6.11	$ 5.61	$ 3.28
Shares used in computing earnings per share:			
Basic	16,215,963	16,701,272	17,352,119
Diluted	16,325,819	16,864,919	17,528,214

See accompanying Notes to Consolidated Financial Statements.

Apple Inc.

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
(In millions)

	Years ended		
	September 24, 2022	September 25, 2021	September 26, 2020
Net income	$ 99,803	$ 94,680	$ 57,411
Other comprehensive income/(loss):			
Change in foreign currency translation, net of tax	(1,511)	501	88
Change in unrealized gains/losses on derivative instruments, net of tax:			
Change in fair value of derivative instruments	3,212	32	79
Adjustment for net (gains)/losses realized and included in net income	(1,074)	1,003	(1,264)
Total change in unrealized gains/losses on derivative instruments	2,138	1,035	(1,185)
Change in unrealized gains/losses on marketable debt securities, net of tax:			
Change in fair value of marketable debt securities	(12,104)	(694)	1,202
Adjustment for net (gains)/losses realized and included in net income	205	(273)	(63)
Total change in unrealized gains/losses on marketable debt securities	(11,899)	(967)	1,139
Total other comprehensive income/(loss)	(11,272)	569	42
Total comprehensive income	$ 88,531	$ 95,249	$ 57,453

See accompanying Notes to Consolidated Financial Statements.

Apple Inc.

CONSOLIDATED BALANCE SHEETS
(In millions, except number of shares which are reflected in thousands and par value)

	September 24, 2022	September 25, 2021
ASSETS:		
Current assets:		
Cash and cash equivalents	$ 23,646	$ 34,940
Marketable securities	24,658	27,699
Accounts receivable, net	28,184	26,278
Inventories	4,946	6,580
Vendor non-trade receivables	32,748	25,228
Other current assets	21,223	14,111
Total current assets	135,405	134,836
Non-current assets:		
Marketable securities	120,805	127,877
Property, plant and equipment, net	42,117	39,440
Other non-current assets	54,428	48,849
Total non-current assets	217,350	216,166
Total assets	$ 352,755	$ 351,002
LIABILITIES AND SHAREHOLDERS' EQUITY:		
Current liabilities:		
Accounts payable	$ 64,115	$ 54,763
Other current liabilities	60,845	47,493
Deferred revenue	7,912	7,612
Commercial paper	9,982	6,000
Term debt	11,128	9,613
Total current liabilities	153,982	125,481
Non-current liabilities:		
Term debt	98,959	109,106
Other non-current liabilities	49,142	53,325
Total non-current liabilities	148,101	162,431
Total liabilities	302,083	287,912
Commitments and contingencies		
Shareholders' equity:		
Common stock and additional paid-in capital, $0.00001 par value: 50,400,000 shares authorized; 15,943,425 and 16,426,786 shares issued and outstanding, respectively	64,849	57,365
Retained earnings/(Accumulated deficit)	(3,068)	5,562
Accumulated other comprehensive income/(loss)	(11,109)	163
Total shareholders' equity	50,672	63,090
Total liabilities and shareholders' equity	$ 352,755	$ 351,002

See accompanying Notes to Consolidated Financial Statements.

Apple Inc.

CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY
(In millions, except per share amounts)

	Years ended		
	September 24, 2022	September 25, 2021	September 26, 2020
Total shareholders' equity, beginning balances	$ 63,090	$ 65,339	$ 90,488
Common stock and additional paid-in capital:			
Beginning balances	57,365	50,779	45,174
Common stock issued	1,175	1,105	880
Common stock withheld related to net share settlement of equity awards	(2,971)	(2,627)	(2,250)
Share-based compensation	9,280	8,108	6,975
Ending balances	64,849	57,365	50,779
Retained earnings/(Accumulated deficit):			
Beginning balances	5,562	14,966	45,898
Net income	99,803	94,680	57,411
Dividends and dividend equivalents declared	(14,793)	(14,431)	(14,087)
Common stock withheld related to net share settlement of equity awards	(3,454)	(4,151)	(1,604)
Common stock repurchased	(90,186)	(85,502)	(72,516)
Cumulative effect of change in accounting principle	—	—	(136)
Ending balances	(3,068)	5,562	14,966
Accumulated other comprehensive income/(loss):			
Beginning balances	163	(406)	(584)
Other comprehensive income/(loss)	(11,272)	569	42
Cumulative effect of change in accounting principle	—	—	136
Ending balances	(11,109)	163	(406)
Total shareholders' equity, ending balances	$ 50,672	$ 63,090	$ 65,339
Dividends and dividend equivalents declared per share or RSU	$ 0.90	$ 0.85	$ 0.795

See accompanying Notes to Consolidated Financial Statements.

Apple Inc.

CONSOLIDATED STATEMENTS OF CASH FLOWS
(In millions)

	Years ended		
	September 24, 2022	September 25, 2021	September 26, 2020
Cash, cash equivalents and restricted cash, beginning balances	$ 35,929	$ 39,789	$ 50,224
Operating activities:			
Net income	99,803	94,680	57,411
Adjustments to reconcile net income to cash generated by operating activities:			
Depreciation and amortization	11,104	11,284	11,056
Share-based compensation expense	9,038	7,906	6,829
Deferred income tax expense/(benefit)	895	(4,774)	(215)
Other	111	(147)	(97)
Changes in operating assets and liabilities:			
Accounts receivable, net	(1,823)	(10,125)	6,917
Inventories	1,484	(2,642)	(127)
Vendor non-trade receivables	(7,520)	(3,903)	1,553
Other current and non-current assets	(6,499)	(8,042)	(9,588)
Accounts payable	9,448	12,326	(4,062)
Deferred revenue	478	1,676	2,081
Other current and non-current liabilities	5,632	5,799	8,916
Cash generated by operating activities	122,151	104,038	80,674
Investing activities:			
Purchases of marketable securities	(76,923)	(109,558)	(114,938)
Proceeds from maturities of marketable securities	29,917	59,023	69,918
Proceeds from sales of marketable securities	37,446	47,460	50,473
Payments for acquisition of property, plant and equipment	(10,708)	(11,085)	(7,309)
Payments made in connection with business acquisitions, net	(306)	(33)	(1,524)
Other	(1,780)	(352)	(909)
Cash used in investing activities	(22,354)	(14,545)	(4,289)
Financing activities:			
Payments for taxes related to net share settlement of equity awards	(6,223)	(6,556)	(3,634)
Payments for dividends and dividend equivalents	(14,841)	(14,467)	(14,081)
Repurchases of common stock	(89,402)	(85,971)	(72,358)
Proceeds from issuance of term debt, net	5,465	20,393	16,091
Repayments of term debt	(9,543)	(8,750)	(12,629)
Proceeds from/(Repayments of) commercial paper, net	3,955	1,022	(963)
Other	(160)	976	754
Cash used in financing activities	(110,749)	(93,353)	(86,820)
Decrease in cash, cash equivalents and restricted cash	(10,952)	(3,860)	(10,435)
Cash, cash equivalents and restricted cash, ending balances	$ 24,977	$ 35,929	$ 39,789
Supplemental cash flow disclosure:			
Cash paid for income taxes, net	$ 19,573	$ 25,385	$ 9,501
Cash paid for interest	$ 2,865	$ 2,687	$ 3,002

See accompanying Notes to Consolidated Financial Statements.

Apple Inc.

Notes to Consolidated Financial Statements

Note 1 – Summary of Significant Accounting Policies

Basis of Presentation and Preparation

The consolidated financial statements include the accounts of Apple Inc. and its wholly owned subsidiaries (collectively "Apple" or the "Company"). Intercompany accounts and transactions have been eliminated. The preparation of these consolidated financial statements and accompanying notes in conformity with U.S. generally accepted accounting principles requires management to make estimates and assumptions that affect the amounts reported. Actual results could differ materially from those estimates. Certain prior period amounts in the consolidated financial statements and accompanying notes have been reclassified to conform to the current period's presentation.

The Company's fiscal year is the 52- or 53-week period that ends on the last Saturday of September. An additional week is included in the first fiscal quarter every five or six years to realign the Company's fiscal quarters with calendar quarters, which will occur in the first quarter of the Company's fiscal year ending September 30, 2023. The Company's fiscal years 2022, 2021 and 2020 spanned 52 weeks each. Unless otherwise stated, references to particular years, quarters, months and periods refer to the Company's fiscal years ended in September and the associated quarters, months and periods of those fiscal years.

Revenue Recognition

Net sales consist of revenue from the sale of iPhone, Mac, iPad, Services and other products. The Company recognizes revenue at the amount to which it expects to be entitled when control of the products or services is transferred to its customers. Control is generally transferred when the Company has a present right to payment and title and the significant risks and rewards of ownership of products or services are transferred to its customers. For most of the Company's Products net sales, control transfers when products are shipped. For the Company's Services net sales, control transfers over time as services are delivered. Payment for Products and Services net sales is collected within a short period following transfer of control or commencement of delivery of services, as applicable.

The Company records reductions to Products net sales related to future product returns, price protection and other customer incentive programs based on the Company's expectations and historical experience.

For arrangements with multiple performance obligations, which represent promises within an arrangement that are distinct, the Company allocates revenue to all distinct performance obligations based on their relative stand-alone selling prices ("SSPs"). When available, the Company uses observable prices to determine SSPs. When observable prices are not available, SSPs are established that reflect the Company's best estimates of what the selling prices of the performance obligations would be if they were sold regularly on a stand-alone basis. The Company's process for estimating SSPs without observable prices considers multiple factors that may vary depending upon the unique facts and circumstances related to each performance obligation including, where applicable, prices charged by the Company for similar offerings, market trends in the pricing for similar offerings, product-specific business objectives and the estimated cost to provide the performance obligation.

The Company has identified up to three performance obligations regularly included in arrangements involving the sale of iPhone, Mac, iPad and certain other products. The first performance obligation, which represents the substantial portion of the allocated sales price, is the hardware and bundled software delivered at the time of sale. The second performance obligation is the right to receive certain product-related bundled services, which include iCloud®, Siri® and Maps. The third performance obligation is the right to receive, on a when-and-if-available basis, future unspecified software upgrades relating to the software bundled with each device. The Company allocates revenue and any related discounts to these performance obligations based on their relative SSPs. Because the Company lacks observable prices for the undelivered performance obligations, the allocation of revenue is based on the Company's estimated SSPs. Revenue allocated to the delivered hardware and bundled software is recognized when control has transferred to the customer, which generally occurs when the product is shipped. Revenue allocated to the product-related bundled services and unspecified software upgrade rights is deferred and recognized on a straight-line basis over the estimated period they are expected to be provided. Cost of sales related to delivered hardware and bundled software, including estimated warranty costs, are recognized at the time of sale. Costs incurred to provide product-related bundled services and unspecified software upgrade rights are recognized as cost of sales as incurred.

For certain long-term service arrangements, the Company has performance obligations for services it has not yet delivered. For these arrangements, the Company does not have a right to bill for the undelivered services. The Company has determined that any unbilled consideration relates entirely to the value of the undelivered services. Accordingly, the Company has not recognized revenue, and does not disclose amounts, related to these undelivered services.

For the sale of third-party products where the Company obtains control of the product before transferring it to the customer, the Company recognizes revenue based on the gross amount billed to customers. The Company considers multiple factors when determining whether it obtains control of third-party products, including evaluating if it can establish the price of the product, retains inventory risk for tangible products or has the responsibility for ensuring acceptability of the product. For third-party applications sold through the App Store and certain digital content sold through the Company's other digital content stores, the Company does not obtain control of the product before transferring it to the customer. Therefore, the Company accounts for such sales on a net basis by recognizing in Services net sales only the commission it retains.

The Company records revenue net of taxes collected from customers that are remitted to governmental authorities, with the collected taxes recorded within other current liabilities until remitted to the relevant government authority.

Share-Based Compensation

The Company generally measures share-based compensation based on the closing price of the Company's common stock on the date of grant, and recognizes expense on a straight-line basis for its estimate of equity awards that will ultimately vest. Further information regarding share-based compensation can be found in Note 9, "Benefit Plans."

Earnings Per Share

The following table shows the computation of basic and diluted earnings per share for 2022, 2021 and 2020 (net income in millions and shares in thousands):

	2022	2021	2020
Numerator:			
Net income	$ 99,803	$ 94,680	$ 57,411
Denominator:			
Weighted-average basic shares outstanding	16,215,963	16,701,272	17,352,119
Effect of dilutive securities	109,856	163,647	176,095
Weighted-average diluted shares	16,325,819	16,864,919	17,528,214
Basic earnings per share	$ 6.15	$ 5.67	$ 3.31
Diluted earnings per share	$ 6.11	$ 5.61	$ 3.28

The Company applies the treasury stock method to determine the dilutive effect of potentially dilutive securities.

Cash Equivalents and Marketable Securities

All highly liquid investments with maturities of three months or less at the date of purchase are classified as cash equivalents.

The Company's investments in marketable debt securities have been classified and accounted for as available-for-sale. The Company classifies its marketable debt securities as either short-term or long-term based on each instrument's underlying contractual maturity date.

The Company's investments in marketable equity securities are classified based on the nature of the securities and their availability for use in current operations.

The cost of securities sold is determined using the specific identification method.

Inventories

Inventories are measured using the first-in, first-out method.

Restricted Marketable Securities

The Company considers marketable securities to be restricted when withdrawal or general use is legally restricted. The Company reports restricted marketable securities as current or non-current marketable securities in the Consolidated Balance Sheets based on the classification of the underlying securities.

Property, Plant and Equipment

Depreciation on property, plant and equipment is recognized on a straight-line basis over the estimated useful lives of the assets, which for buildings is the shorter of 40 years or the remaining life of the building; between one and five years for machinery and equipment, including manufacturing equipment; and the shorter of the lease term or useful life for leasehold improvements. Capitalized costs related to internal-use software are amortized on a straight-line basis over the estimated useful lives of the assets, which range from five to seven years. Depreciation and amortization expense on property, plant and equipment was $8.7 billion, $9.5 billion and $9.7 billion during 2022, 2021 and 2020, respectively.

Derivative Instruments and Hedging

All derivative instruments are recorded in the Consolidated Balance Sheets at fair value. The accounting treatment for derivative gains and losses is based on intended use and hedge designation.

Gains and losses arising from amounts that are included in the assessment of cash flow hedge effectiveness are initially deferred in accumulated other comprehensive income/(loss) ("AOCI") and subsequently reclassified into earnings when the hedged transaction affects earnings, and in the same line item in the Consolidated Statements of Operations. For options designated as cash flow hedges, the Company excludes time value from the assessment of hedge effectiveness and recognizes it on a straight-line basis over the life of the hedge in the Consolidated Statements of Operations line item to which the hedge relates. Changes in the fair value of amounts excluded from the assessment of hedge effectiveness are recognized in other comprehensive income/(loss) ("OCI").

Gains and losses arising from amounts that are included in the assessment of fair value hedge effectiveness are recognized in the Consolidated Statements of Operations line item to which the hedge relates along with offsetting losses and gains related to the change in value of the hedged item. For foreign exchange forward contracts designated as fair value hedges, the Company excludes the forward carry component from the assessment of hedge effectiveness and recognizes it in other income/(expense), net ("OI&E") on a straight-line basis over the life of the hedge. Changes in the fair value of amounts excluded from the assessment of hedge effectiveness are recognized in OCI.

Gains and losses arising from changes in the fair values of derivative instruments that are not designated as accounting hedges are recognized in the Consolidated Statements of Operations line items to which the derivative instruments relate.

The Company presents derivative assets and liabilities at their gross fair values in the Consolidated Balance Sheets. The Company classifies cash flows related to derivative instruments as operating activities in the Consolidated Statements of Cash Flows.

Fair Value Measurements

The fair values of the Company's money market funds and certain marketable equity securities are based on quoted prices in active markets for identical assets. The valuation techniques used to measure the fair value of the Company's debt instruments and all other financial instruments, which generally have counterparties with high credit ratings, are based on quoted market prices or model-driven valuations using significant inputs derived from or corroborated by observable market data.

Income Taxes

The Company records certain deferred tax assets and liabilities in connection with the minimum tax on certain foreign earnings created by the U.S. Tax Cuts and Jobs Act of 2017 (the "Act").

Leases

The Company combines and accounts for lease and nonlease components as a single lease component for leases of corporate, data center and retail facilities. The discount rates related to the Company's lease liabilities are generally based on estimates of the Company's incremental borrowing rate, as the discount rates implicit in the Company's leases cannot be readily determined.

Segment Reporting

The Company reports segment information based on the "management" approach. The management approach designates the internal reporting used by management for making decisions and assessing performance as the source of the Company's reportable segments.

The Company manages its business primarily on a geographic basis. The Company's reportable segments consist of the Americas, Europe, Greater China, Japan and Rest of Asia Pacific. Americas includes both North and South America. Europe includes European countries, as well as India, the Middle East and Africa. Greater China includes China mainland, Hong Kong and Taiwan. Rest of Asia Pacific includes Australia and those Asian countries not included in the Company's other reportable segments. Although the reportable segments provide similar hardware and software products and similar services, each one is managed separately to better align with the location of the Company's customers and distribution partners and the unique market dynamics of each geographic region. The accounting policies of the various segments are the same as those described elsewhere in this Note 1, "Summary of Significant Accounting Policies."

The Company evaluates the performance of its reportable segments based on net sales and operating income. Net sales for geographic segments are generally based on the location of customers and sales through the Company's retail stores located in those geographic locations. Operating income for each segment includes net sales to third parties, related cost of sales and operating expenses directly attributable to the segment. Advertising expenses are generally included in the geographic segment in which the expenditures are incurred. Operating income for each segment excludes other income and expense and certain expenses managed outside the reportable segments. Costs excluded from segment operating income include various corporate expenses such as research and development ("R&D"), corporate marketing expenses, certain share-based compensation expenses, income taxes, various nonrecurring charges and other separately managed general and administrative costs. The Company does not include intercompany transfers between segments for management reporting purposes.

Note 2 – Revenue

Net sales disaggregated by significant products and services for 2022, 2021 and 2020 were as follows (in millions):

	2022	2021	2020
iPhone [1]	$ 205,489	$ 191,973	$ 137,781
Mac [1]	40,177	35,190	28,622
iPad [1]	29,292	31,862	23,724
Wearables, Home and Accessories [1][2]	41,241	38,367	30,620
Services [3]	78,129	68,425	53,768
Total net sales [4]	$ 394,328	$ 365,817	$ 274,515

(1) Products net sales include amortization of the deferred value of unspecified software upgrade rights, which are bundled in the sales price of the respective product.

(2) Wearables, Home and Accessories net sales include sales of AirPods, Apple TV, Apple Watch, Beats products, HomePod mini and accessories.

(3) Services net sales include sales from the Company's advertising, AppleCare, cloud, digital content, payment and other services. Services net sales also include amortization of the deferred value of services bundled in the sales price of certain products.

(4) Includes $7.5 billion of revenue recognized in 2022 that was included in deferred revenue as of September 25, 2021, $6.7 billion of revenue recognized in 2021 that was included in deferred revenue as of September 26, 2020, and $5.0 billion of revenue recognized in 2020 that was included in deferred revenue as of September 28, 2019.

The Company's proportion of net sales by disaggregated revenue source was generally consistent for each reportable segment in Note 11, "Segment Information and Geographic Data" for 2022, 2021 and 2020, except in Greater China, where iPhone revenue represented a moderately higher proportion of net sales in 2022 and 2021.

As of September 24, 2022 and September 25, 2021, the Company had total deferred revenue of $12.4 billion and $11.9 billion, respectively. As of September 24, 2022, the Company expects 64% of total deferred revenue to be realized in less than a year, 27% within one-to-two years, 7% within two-to-three years and 2% in greater than three years.

Note 3 – Financial Instruments

Cash, Cash Equivalents and Marketable Securities

The following tables show the Company's cash, cash equivalents and marketable securities by significant investment category as of September 24, 2022 and September 25, 2021 (in millions):

	2022						
	Adjusted Cost	Unrealized Gains	Unrealized Losses	Fair Value	Cash and Cash Equivalents	Current Marketable Securities	Non-Current Marketable Securities
Cash	$ 18,546	$ —	$ —	$ 18,546	$ 18,546	$ —	$ —
Level 1 [1]:							
Money market funds	2,929	—	—	2,929	2,929	—	—
Mutual funds	274	—	(47)	227	—	227	—
Subtotal	3,203	—	(47)	3,156	2,929	227	—
Level 2 [2]:							
U.S. Treasury securities	25,134	—	(1,725)	23,409	338	5,091	17,980
U.S. agency securities	5,823	—	(655)	5,168	—	240	4,928
Non-U.S. government securities	16,948	2	(1,201)	15,749	—	8,806	6,943
Certificates of deposit and time deposits	2,067	—	—	2,067	1,805	262	—
Commercial paper	718	—	—	718	28	690	—
Corporate debt securities	87,148	9	(7,707)	79,450	—	9,023	70,427
Municipal securities	921	—	(35)	886	—	266	620
Mortgage- and asset-backed securities	22,553	—	(2,593)	19,960	—	53	19,907
Subtotal	161,312	11	(13,916)	147,407	2,171	24,431	120,805
Total [3]	$ 183,061	$ 11	$ (13,963)	$ 169,109	$ 23,646	$ 24,658	$ 120,805

	2021						
	Adjusted Cost	Unrealized Gains	Unrealized Losses	Fair Value	Cash and Cash Equivalents	Current Marketable Securities	Non-Current Marketable Securities
Cash	$ 17,305	$ —	$ —	$ 17,305	$ 17,305	$ —	$ —
Level 1 [1]:							
Money market funds	9,608	—	—	9,608	9,608	—	—
Mutual funds	175	11	(1)	185	—	185	—
Subtotal	9,783	11	(1)	9,793	9,608	185	—
Level 2 [2]:							
Equity securities	1,527	—	(564)	963	—	963	—
U.S. Treasury securities	22,878	102	(77)	22,903	3,596	6,625	12,682
U.S. agency securities	8,949	2	(64)	8,887	1,775	1,930	5,182
Non-U.S. government securities	20,201	211	(101)	20,311	390	3,091	16,830
Certificates of deposit and time deposits	1,300	—	—	1,300	490	810	—
Commercial paper	2,639	—	—	2,639	1,776	863	—
Corporate debt securities	83,883	1,242	(267)	84,858	—	12,327	72,531
Municipal securities	967	14	—	981	—	130	851
Mortgage- and asset-backed securities	20,529	171	(124)	20,576	—	775	19,801
Subtotal	162,873	1,742	(1,197)	163,418	8,027	27,514	127,877
Total [3]	$ 189,961	$ 1,753	$ (1,198)	$ 190,516	$ 34,940	$ 27,699	$ 127,877

(1) Level 1 fair value estimates are based on quoted prices in active markets for identical assets or liabilities.

(2) Level 2 fair value estimates are based on observable inputs other than quoted prices in active markets for identical assets and liabilities, quoted prices for identical or similar assets or liabilities in inactive markets, or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities.

(3) As of September 24, 2022 and September 25, 2021, total marketable securities included $12.7 billion and $17.9 billion, respectively, that were restricted from general use, related to the State Aid Decision (refer to Note 5, "Income Taxes") and other agreements.

The following table shows the fair value of the Company's non-current marketable debt securities, by contractual maturity, as of September 24, 2022 (in millions):

Due after 1 year through 5 years	$	87,031
Due after 5 years through 10 years		16,429
Due after 10 years		17,345
Total fair value	$	120,805

Derivative Instruments and Hedging

The Company may use derivative instruments to partially offset its business exposure to foreign exchange and interest rate risk. However, the Company may choose not to hedge certain exposures for a variety of reasons including accounting considerations or the prohibitive economic cost of hedging particular exposures. There can be no assurance the hedges will offset more than a portion of the financial impact resulting from movements in foreign exchange or interest rates.

Foreign Exchange Risk

To protect gross margins from fluctuations in foreign currency exchange rates, the Company may enter into forward contracts, option contracts or other instruments, and may designate these instruments as cash flow hedges. The Company generally hedges portions of its forecasted foreign currency exposure associated with revenue and inventory purchases, typically for up to 12 months.

To protect the Company's foreign currency–denominated term debt or marketable securities from fluctuations in foreign currency exchange rates, the Company may enter into forward contracts, cross-currency swaps or other instruments. The Company designates these instruments as either cash flow or fair value hedges. As of September 24, 2022, the maximum length of time over which the Company is hedging its exposure to the variability in future cash flows for term debt–related foreign currency transactions is 20 years.

The Company may also enter into derivative instruments that are not designated as accounting hedges to protect gross margins from certain fluctuations in foreign currency exchange rates, as well as to offset a portion of the foreign currency exchange gains and losses generated by the remeasurement of certain assets and liabilities denominated in non-functional currencies.

Interest Rate Risk

To protect the Company's term debt or marketable securities from fluctuations in interest rates, the Company may enter into interest rate swaps, options or other instruments. The Company designates these instruments as either cash flow or fair value hedges.

The notional amounts of the Company's outstanding derivative instruments as of September 24, 2022 and September 25, 2021 were as follows (in millions):

	2022		2021	
Derivative instruments designated as accounting hedges:				
Foreign exchange contracts	$	102,670	$	76,475
Interest rate contracts	$	20,125	$	16,875
Derivative instruments not designated as accounting hedges:				
Foreign exchange contracts	$	185,381	$	126,918

The gross fair values of the Company's derivative assets and liabilities as of September 24, 2022 were as follows (in millions):

	2022		
	Fair Value of Derivatives Designated as Accounting Hedges	Fair Value of Derivatives Not Designated as Accounting Hedges	Total Fair Value
Derivative assets [1]:			
Foreign exchange contracts	$ 4,317	$ 2,819	$ 7,136
Derivative liabilities [2]:			
Foreign exchange contracts	$ 2,205	$ 2,547	$ 4,752
Interest rate contracts	$ 1,367	$ —	$ 1,367

(1) Derivative assets are measured using Level 2 fair value inputs and are included in other current assets and other non-current assets in the Consolidated Balance Sheets.

(2) Derivative liabilities are measured using Level 2 fair value inputs and are included in other current liabilities and other non-current liabilities in the Consolidated Balance Sheets.

The derivative assets above represent the Company's gross credit exposure if all counterparties failed to perform. To mitigate credit risk, the Company generally enters into collateral security arrangements that provide for collateral to be received or posted when the net fair values of certain derivatives fluctuate from contractually established thresholds. To further limit credit risk, the Company generally enters into master netting arrangements with the respective counterparties to the Company's derivative contracts, under which the Company is allowed to settle transactions with a single net amount payable by one party to the other. As of September 24, 2022, the potential effects of these rights of set-off associated with the Company's derivative contracts, including the effects of collateral, would be a reduction to both derivative assets and derivative liabilities of $7.8 billion, resulting in a net derivative asset of $412 million.

The carrying amounts of the Company's hedged items in fair value hedges as of September 24, 2022 and September 25, 2021 were as follows (in millions):

	2022	2021
Hedged assets/(liabilities):		
Current and non-current marketable securities	$ 13,378	$ 15,954
Current and non-current term debt	$ (18,739)	$ (17,857)

Accounts Receivable

Trade Receivables

The Company has considerable trade receivables outstanding with its third-party cellular network carriers, wholesalers, retailers, resellers, small and mid-sized businesses and education, enterprise and government customers. The Company generally does not require collateral from its customers; however, the Company will require collateral or third-party credit support in certain instances to limit credit risk. In addition, when possible, the Company attempts to limit credit risk on trade receivables with credit insurance for certain customers or by requiring third-party financing, loans or leases to support credit exposure. These credit-financing arrangements are directly between the third-party financing company and the end customer. As such, the Company generally does not assume any recourse or credit risk sharing related to any of these arrangements.

As of September 24, 2022, the Company had one customer that represented 10% or more of total trade receivables, which accounted for 10%. The Company's cellular network carriers accounted for 44% and 42% of total trade receivables as of September 24, 2022 and September 25, 2021, respectively.

Vendor Non-Trade Receivables

The Company has non-trade receivables from certain of its manufacturing vendors resulting from the sale of components to these vendors who manufacture subassemblies or assemble final products for the Company. The Company purchases these components directly from suppliers. As of September 24, 2022, the Company had two vendors that individually represented 10% or more of total vendor non-trade receivables, which accounted for 54% and 13%. As of September 25, 2021, the Company had three vendors that individually represented 10% or more of total vendor non-trade receivables, which accounted for 52%, 11% and 11%.

Note 4 – Consolidated Financial Statement Details

The following tables show the Company's consolidated financial statement details as of September 24, 2022 and September 25, 2021 (in millions):

Property, Plant and Equipment, Net

	2022	2021
Land and buildings	$ 22,126	$ 20,041
Machinery, equipment and internal-use software	81,060	78,659
Leasehold improvements	11,271	11,023
Gross property, plant and equipment	114,457	109,723
Accumulated depreciation and amortization	(72,340)	(70,283)
Total property, plant and equipment, net	$ 42,117	$ 39,440

Other Non-Current Liabilities

	2022	2021
Long-term taxes payable	$ 16,657	$ 24,689
Other non-current liabilities	32,485	28,636
Total other non-current liabilities	$ 49,142	$ 53,325

Other Income/(Expense), Net

The following table shows the detail of OI&E for 2022, 2021 and 2020 (in millions):

	2022	2021	2020
Interest and dividend income	$ 2,825	$ 2,843	$ 3,763
Interest expense	(2,931)	(2,645)	(2,873)
Other income/(expense), net	(228)	60	(87)
Total other income/(expense), net	$ (334)	$ 258	$ 803

Note 5 – Income Taxes

Provision for Income Taxes and Effective Tax Rate

The provision for income taxes for 2022, 2021 and 2020, consisted of the following (in millions):

	2022	2021	2020
Federal:			
Current	$ 7,890	$ 8,257	$ 6,306
Deferred	(2,265)	(7,176)	(3,619)
Total	5,625	1,081	2,687
State:			
Current	1,519	1,620	455
Deferred	84	(338)	21
Total	1,603	1,282	476
Foreign:			
Current	8,996	9,424	3,134
Deferred	3,076	2,740	3,383
Total	12,072	12,164	6,517
Provision for income taxes	$ 19,300	$ 14,527	$ 9,680

The foreign provision for income taxes is based on foreign pretax earnings of $71.3 billion, $68.7 billion and $38.1 billion in 2022, 2021 and 2020, respectively.

A reconciliation of the provision for income taxes to the amount computed by applying the statutory federal income tax rate (21% in 2022, 2021 and 2020) to income before provision for income taxes for 2022, 2021 and 2020, is as follows (dollars in millions):

	2022	2021	2020
Computed expected tax	$ 25,012	$ 22,933	$ 14,089
State taxes, net of federal effect	1,518	1,151	423
Impacts of the Act	542	—	(582)
Earnings of foreign subsidiaries	(4,366)	(4,715)	(2,534)
Foreign-derived intangible income deduction	(296)	(1,372)	(169)
Research and development credit, net	(1,153)	(1,033)	(728)
Excess tax benefits from equity awards	(1,871)	(2,137)	(930)
Other	(86)	(300)	111
Provision for income taxes	$ 19,300	$ 14,527	$ 9,680
Effective tax rate	16.2 %	13.3 %	14.4 %

Deferred Tax Assets and Liabilities

As of September 24, 2022 and September 25, 2021, the significant components of the Company's deferred tax assets and liabilities were (in millions):

	2022	2021
Deferred tax assets:		
Amortization and depreciation	$ 1,496	$ 5,575
Accrued liabilities and other reserves	6,515	5,895
Lease liabilities	2,400	2,406
Deferred revenue	5,742	5,399
Unrealized losses	2,913	53
Tax credit carryforwards	6,962	4,262
Other	1,596	1,639
Total deferred tax assets	27,624	25,229
Less: Valuation allowance	(7,530)	(4,903)
Total deferred tax assets, net	20,094	20,326
Deferred tax liabilities:		
Minimum tax on foreign earnings	1,983	4,318
Right-of-use assets	2,163	2,167
Unrealized gains	942	203
Other	469	565
Total deferred tax liabilities	5,557	7,253
Net deferred tax assets	$ 14,537	$ 13,073

As of September 24, 2022, the Company had $4.4 billion in foreign tax credit carryforwards in Ireland and $2.5 billion in California R&D credit carryforwards, both of which can be carried forward indefinitely. A valuation allowance has been recorded for the credit carryforwards and a portion of other temporary differences.

Uncertain Tax Positions

As of September 24, 2022, the total amount of gross unrecognized tax benefits was $16.8 billion, of which $8.0 billion, if recognized, would impact the Company's effective tax rate. As of September 25, 2021, the total amount of gross unrecognized tax benefits was $15.5 billion, of which $6.6 billion, if recognized, would have impacted the Company's effective tax rate.

The aggregate change in the balance of gross unrecognized tax benefits, which excludes interest and penalties, for 2022, 2021 and 2020, is as follows (in millions):

	2022	2021	2020
Beginning balances	$ 15,477	$ 16,475	$ 15,619
Increases related to tax positions taken during a prior year	2,284	816	454
Decreases related to tax positions taken during a prior year	(1,982)	(1,402)	(791)
Increases related to tax positions taken during the current year	1,936	1,607	1,347
Decreases related to settlements with taxing authorities	(28)	(1,838)	(85)
Decreases related to expiration of the statute of limitations	(929)	(181)	(69)
Ending balances	$ 16,758	$ 15,477	$ 16,475

The Company is subject to taxation and files income tax returns in the U.S. federal jurisdiction and many state and foreign jurisdictions. Tax years after 2017 for the U.S. federal jurisdiction, and after 2014 in certain major foreign jurisdictions, remain subject to examination. Although the timing of resolution and/or closure of examinations is not certain, the Company believes it is reasonably possible that its gross unrecognized tax benefits could decrease in the next 12 months by as much as $4.8 billion.

European Commission State Aid Decision

On August 30, 2016, the European Commission announced its decision that Ireland granted state aid to the Company by providing tax opinions in 1991 and 2007 concerning the tax allocation of profits of the Irish branches of two subsidiaries of the Company (the "State Aid Decision"). The State Aid Decision ordered Ireland to calculate and recover additional taxes from the Company for the period June 2003 through December 2014. Irish legislative changes, effective as of January 2015, eliminated the application of the tax opinions from that date forward. The recovery amount was calculated to be €13.1 billion, plus interest of €1.2 billion. The Company and Ireland appealed the State Aid Decision to the General Court of the Court of Justice of the European Union (the "General Court"). On July 15, 2020, the General Court annulled the State Aid Decision. On September 25, 2020, the European Commission appealed the General Court's decision to the European Court of Justice. The Company believes that any incremental Irish corporate income taxes potentially due related to the State Aid Decision would be creditable against U.S. taxes, subject to any foreign tax credit limitations in the Act.

On an annual basis, the Company may request approval from the Irish Minister for Finance to reduce the recovery amount for certain taxes paid to other countries. As of September 24, 2022, the adjusted recovery amount was €12.7 billion, excluding interest. The adjusted recovery amount plus interest is funded into escrow, where it will remain restricted from general use pending the conclusion of all legal proceedings. Refer to the Cash, Cash Equivalents and Marketable Securities section of Note 3, "Financial Instruments" for more information.

Note 6 – Leases

The Company has lease arrangements for certain equipment and facilities, including corporate, data center, manufacturing and retail space. These leases typically have original terms not exceeding 10 years and generally contain multiyear renewal options, some of which are reasonably certain of exercise.

Payments under the Company's lease arrangements may be fixed or variable, and variable lease payments are primarily based on purchases of output of the underlying leased assets. Lease costs associated with fixed payments on the Company's operating leases were $1.9 billion, $1.7 billion and $1.5 billion for 2022, 2021 and 2020, respectively. Lease costs associated with variable payments on the Company's leases were $14.9 billion, $12.9 billion and $9.3 billion for 2022, 2021 and 2020, respectively.

The Company made $1.8 billion, $1.4 billion and $1.5 billion of fixed cash payments related to operating leases in 2022, 2021 and 2020, respectively. Noncash activities involving right-of-use ("ROU") assets obtained in exchange for lease liabilities were $2.8 billion for 2022, $3.3 billion for 2021 and $10.5 billion for 2020, including the impact of adopting the Financial Accounting Standards Board's Accounting Standards Update No. 2016-02, Leases (Topic 842) in the first quarter of 2020.

The following table shows ROU assets and lease liabilities, and the associated financial statement line items, as of September 24, 2022 and September 25, 2021 (in millions):

Lease-Related Assets and Liabilities	Financial Statement Line Items	2022	2021
Right-of-use assets:			
Operating leases	Other non-current assets	$ 10,417	$ 10,087
Finance leases	Property, plant and equipment, net	952	861
Total right-of-use assets		$ 11,369	$ 10,948
Lease liabilities:			
Operating leases	Other current liabilities	$ 1,534	$ 1,449
	Other non-current liabilities	9,936	9,506
Finance leases	Other current liabilities	129	79
	Other non-current liabilities	812	769
Total lease liabilities		$ 12,411	$ 11,803

Lease liability maturities as of September 24, 2022, are as follows (in millions):

	Operating Leases	Finance Leases	Total
2023	$ 1,758	$ 155	$ 1,913
2024	1,742	130	1,872
2025	1,677	81	1,758
2026	1,382	48	1,430
2027	1,143	34	1,177
Thereafter	5,080	906	5,986
Total undiscounted liabilities	12,782	1,354	14,136
Less: Imputed interest	(1,312)	(413)	(1,725)
Total lease liabilities	$ 11,470	$ 941	$ 12,411

The weighted-average remaining lease term related to the Company's lease liabilities as of September 24, 2022 and September 25, 2021 was 10.1 years and 10.8 years, respectively. The discount rate related to the Company's lease liabilities as of September 24, 2022 and September 25, 2021 was 2.3% and 2.0%, respectively.

As of September 24, 2022, the Company had $1.2 billion of future payments under additional leases, primarily for corporate facilities and retail space, that had not yet commenced. These leases will commence between 2023 and 2026, with lease terms ranging from less than 1 year to 21 years.

Note 7 – Debt

Commercial Paper and Repurchase Agreements

The Company issues unsecured short-term promissory notes ("Commercial Paper") pursuant to a commercial paper program. The Company uses net proceeds from the commercial paper program for general corporate purposes, including dividends and share repurchases. As of September 24, 2022 and September 25, 2021, the Company had $10.0 billion and $6.0 billion of Commercial Paper outstanding, respectively, with maturities generally less than nine months. The weighted-average interest rate of the Company's Commercial Paper was 2.31% and 0.06% as of September 24, 2022 and September 25, 2021, respectively. The following table provides a summary of cash flows associated with the issuance and maturities of Commercial Paper for 2022, 2021 and 2020 (in millions):

	2022	2021	2020
Maturities 90 days or less:			
Proceeds from/(Repayments of) commercial paper, net	$ 5,264	$ (357)	$ 100
Maturities greater than 90 days:			
Proceeds from commercial paper	5,948	7,946	6,185
Repayments of commercial paper	(7,257)	(6,567)	(7,248)
Proceeds from/(Repayments of) commercial paper, net	(1,309)	1,379	(1,063)
Total proceeds from/(repayments of) commercial paper, net	$ 3,955	$ 1,022	$ (963)

In 2020, the Company entered into agreements to sell certain of its marketable securities with a promise to repurchase the securities at a specified time and amount ("Repos"). Due to the Company's continuing involvement with the marketable securities, the Company accounted for its Repos as collateralized borrowings. The Company entered into $5.2 billion of Repos during 2020, all of which had been settled as of September 26, 2020.

Term Debt

The Company has outstanding fixed-rate notes with varying maturities (collectively the "Notes"). The Notes are senior unsecured obligations and interest is payable in arrears. The following table provides a summary of the Company's term debt as of September 24, 2022 and September 25, 2021:

		2022		2021	
	Maturities (calendar year)	**Amount** (in millions)	**Effective Interest Rate**	**Amount** (in millions)	**Effective Interest Rate**
2013 – 2021 debt issuances:					
Floating-rate notes		$ —		$ 1,750	0.48% – 0.63%
Fixed-rate 0.000% – 4.650% notes	2022 – 2061	106,324	0.03% – 4.78%	116,313	0.03% – 4.78%
Fourth quarter 2022 debt issuance:					
Fixed-rate 3.250% – 4.100% notes	2029 – 2062	5,500	3.27% – 4.12%	—	
Total term debt		111,824		118,063	
Unamortized premium/(discount) and issuance costs, net		(374)		(380)	
Hedge accounting fair value adjustments		(1,363)		1,036	
Less: Current portion of term debt		(11,128)		(9,613)	
Total non-current portion of term debt		$ 98,959		$ 109,106	

To manage interest rate risk on certain of its U.S. dollar–denominated fixed-rate notes, the Company has entered into interest rate swaps to effectively convert the fixed interest rates to floating interest rates on a portion of these notes. Additionally, to manage foreign currency risk on certain of its foreign currency–denominated notes, the Company has entered into foreign currency swaps to effectively convert these notes to U.S. dollar–denominated notes.

The effective interest rates for the Notes include the interest on the Notes, amortization of the discount or premium and, if applicable, adjustments related to hedging. The Company recognized $2.8 billion, $2.6 billion and $2.8 billion of interest expense on its term debt for 2022, 2021 and 2020, respectively.

The future principal payments for the Company's Notes as of September 24, 2022, are as follows (in millions):

2023	$	11,139
2024		9,910
2025		10,645
2026		11,209
2027		9,631
Thereafter		59,290
Total term debt	$	111,824

As of September 24, 2022 and September 25, 2021, the fair value of the Company's Notes, based on Level 2 inputs, was $98.8 billion and $125.3 billion, respectively.

Note 8 – Shareholders' Equity

Share Repurchase Program

During 2022, the Company repurchased 569 million shares of its common stock for $90.2 billion under a share repurchase program authorized by the Board of Directors (the "Program"). The Program does not obligate the Company to acquire a minimum amount of shares. Under the Program, shares may be repurchased in privately negotiated and/or open market transactions, including under plans complying with Rule 10b5-1 under the Securities Exchange Act of 1934, as amended.

Shares of Common Stock

The following table shows the changes in shares of common stock for 2022, 2021 and 2020 (in thousands):

	2022	2021	2020
Common stock outstanding, beginning balances	16,426,786	16,976,763	17,772,945
Common stock repurchased	(568,589)	(656,340)	(917,270)
Common stock issued, net of shares withheld for employee taxes	85,228	106,363	121,088
Common stock outstanding, ending balances	15,943,425	16,426,786	16,976,763

Note 9 – Benefit Plans

2022 Employee Stock Plan

In the second quarter of 2022, shareholders approved the Apple Inc. 2022 Employee Stock Plan (the "2022 Plan"), which provides for broad-based equity grants to employees, including executive officers, and permits the granting of restricted stock units ("RSUs"), stock grants, performance-based awards, stock options and stock appreciation rights. RSUs granted under the 2022 Plan generally vest over four years, based on continued employment, and are settled upon vesting in shares of the Company's common stock on a one-for-one basis. RSUs granted under the 2022 Plan reduce the number of shares available for grant under the plan by a factor of two times the number of RSUs granted. RSUs canceled and shares withheld to satisfy tax withholding obligations increase the number of shares available for grant under the 2022 Plan utilizing a factor of two times the number of RSUs canceled or shares withheld. All RSUs granted under the 2022 Plan have dividend equivalent rights ("DERs"), which entitle holders of RSUs to the same dividend value per share as holders of common stock. DERs are subject to the same vesting and other terms and conditions as the underlying RSUs. A maximum of approximately 1.3 billion shares were authorized for issuance pursuant to 2022 Plan awards at the time the plan was approved on March 4, 2022.

2014 Employee Stock Plan

The Apple Inc. 2014 Employee Stock Plan (the "2014 Plan") is a shareholder-approved plan that provided for broad-based equity grants to employees, including executive officers. The 2014 Plan permitted the granting of substantially the same types of equity awards with substantially the same terms as the 2022 Plan. The 2014 Plan also permitted the granting of cash bonus awards. In the third quarter of 2022, the Company terminated the authority to grant new awards under the 2014 Plan.

Apple Inc. Non-Employee Director Stock Plan

The Apple Inc. Non-Employee Director Stock Plan (the "Director Plan") is a shareholder-approved plan that (i) permits the Company to grant awards of RSUs or stock options to the Company's non-employee directors, (ii) provides for automatic initial grants of RSUs upon a non-employee director joining the Board of Directors and automatic annual grants of RSUs at each annual meeting of shareholders, and (iii) permits the Board of Directors to prospectively change the value and relative mixture of stock options and RSUs for the initial and annual award grants and the methodology for determining the number of shares of the Company's common stock subject to these grants, in each case within the limits set forth in the Director Plan and without further shareholder approval. RSUs granted under the Director Plan reduce the number of shares available for grant under the plan by a factor of two times the number of RSUs granted. The Director Plan expires on November 12, 2027. All RSUs granted under the Director Plan are entitled to DERs, which are subject to the same vesting and other terms and conditions as the underlying RSUs. A maximum of approximately 45 million shares (split-adjusted) were authorized for issuance pursuant to Director Plan awards at the time the plan was last amended on November 9, 2021.

Employee Stock Purchase Plan

The Employee Stock Purchase Plan (the "Purchase Plan") is a shareholder-approved plan under which substantially all employees may voluntarily enroll to purchase the Company's common stock through payroll deductions at a price equal to 85% of the lower of the fair market values of the stock as of the beginning or the end of six-month offering periods. An employee's payroll deductions under the Purchase Plan are limited to 10% of the employee's eligible compensation and employees may not purchase more than $25,000 of stock during any calendar year. A maximum of approximately 230 million shares (split-adjusted) were authorized for issuance under the Purchase Plan at the time the plan was last amended and restated on March 10, 2015.

401(k) Plan

The Company's 401(k) Plan is a tax-qualified deferred compensation arrangement under Section 401(k) of the Internal Revenue Code. Under the 401(k) Plan, participating U.S. employees may contribute a portion of their eligible earnings, subject to applicable U.S. Internal Revenue Service and plan limits. The Company matches 50% to 100% of each employee's contributions, depending on length of service, up to a maximum of 6% of the employee's eligible earnings.

Restricted Stock Units

A summary of the Company's RSU activity and related information for 2022, 2021 and 2020, is as follows:

	Number of RSUs (in thousands)	Weighted-Average Grant Date Fair Value Per RSU	Aggregate Fair Value (in millions)
Balance as of September 28, 2019	326,068	$ 42.30	
RSUs granted	156,800	$ 59.20	
RSUs vested	(157,743)	$ 40.29	
RSUs canceled	(14,347)	$ 48.07	
Balance as of September 26, 2020	310,778	$ 51.58	
RSUs granted	89,363	$ 116.33	
RSUs vested	(145,766)	$ 50.71	
RSUs canceled	(13,948)	$ 68.95	
Balance as of September 25, 2021	240,427	$ 75.16	
RSUs granted	91,674	$ 150.70	
RSUs vested	(115,861)	$ 72.12	
RSUs canceled	(14,739)	$ 99.77	
Balance as of September 24, 2022	201,501	$ 109.48	$ 30,312

The fair value as of the respective vesting dates of RSUs was $18.2 billion, $19.0 billion and $10.8 billion for 2022, 2021 and 2020, respectively. The majority of RSUs that vested in 2022, 2021 and 2020 were net share settled such that the Company withheld shares with a value equivalent to the employees' obligation for the applicable income and other employment taxes, and remitted the cash to the appropriate taxing authorities. The total shares withheld were approximately 41 million, 53 million and 56 million for 2022, 2021 and 2020, respectively, and were based on the value of the RSUs on their respective vesting dates as determined by the Company's closing stock price. Total payments to taxing authorities for employees' tax obligations were $6.4 billion, $6.8 billion and $3.9 billion in 2022, 2021 and 2020, respectively.

Share-Based Compensation

The following table shows share-based compensation expense and the related income tax benefit included in the Consolidated Statements of Operations for 2022, 2021 and 2020 (in millions):

	2022	2021	2020
Share-based compensation expense	$ 9,038	$ 7,906	$ 6,829
Income tax benefit related to share-based compensation expense	$ (4,002)	$ (4,056)	$ (2,476)

As of September 24, 2022, the total unrecognized compensation cost related to outstanding RSUs and stock options was $16.7 billion, which the Company expects to recognize over a weighted-average period of 2.6 years.

Note 10 – Commitments and Contingencies

Concentrations in the Available Sources of Supply of Materials and Product

Although most components essential to the Company's business are generally available from multiple sources, certain components are currently obtained from single or limited sources. The Company also competes for various components with other participants in the markets for smartphones, personal computers, tablets, wearables and accessories. Therefore, many components used by the Company, including those that are available from multiple sources, are at times subject to industry-wide shortage and significant commodity pricing fluctuations.

The Company uses some custom components that are not commonly used by its competitors, and new products introduced by the Company often utilize custom components available from only one source. When a component or product uses new technologies, initial capacity constraints may exist until the suppliers' yields have matured or their manufacturing capacities have increased. The continued availability of these components at acceptable prices, or at all, may be affected if suppliers decide to concentrate on the production of common components instead of components customized to meet the Company's requirements.

Substantially all of the Company's hardware products are manufactured by outsourcing partners that are located primarily in Asia, with some Mac computers manufactured in the U.S. and Ireland.

Unconditional Purchase Obligations

The Company has entered into certain off–balance sheet commitments that require the future purchase of goods or services ("unconditional purchase obligations"). The Company's unconditional purchase obligations primarily consist of payments for supplier arrangements, internet services and content creation. Future payments under noncancelable unconditional purchase obligations with a remaining term in excess of one year as of September 24, 2022, are as follows (in millions):

2023	$ 13,488
2024	4,876
2025	1,418
2026	6,780
2027	312
Thereafter	412
Total	$ 27,286

Contingencies

The Company is subject to various legal proceedings and claims that have arisen in the ordinary course of business and that have not been fully resolved. The outcome of litigation is inherently uncertain. In the opinion of management, there was not at least a reasonable possibility the Company may have incurred a material loss, or a material loss greater than a recorded accrual, concerning loss contingencies for asserted legal and other claims.

Note 11 – Segment Information and Geographic Data

The following table shows information by reportable segment for 2022, 2021 and 2020 (in millions):

	2022	2021	2020
Americas:			
Net sales	$ 169,658	$ 153,306	$ 124,556
Operating income	$ 62,683	$ 53,382	$ 37,722
Europe:			
Net sales	$ 95,118	$ 89,307	$ 68,640
Operating income	$ 35,233	$ 32,505	$ 22,170
Greater China:			
Net sales	$ 74,200	$ 68,366	$ 40,308
Operating income	$ 31,153	$ 28,504	$ 15,261
Japan:			
Net sales	$ 25,977	$ 28,482	$ 21,418
Operating income	$ 12,257	$ 12,798	$ 9,279
Rest of Asia Pacific:			
Net sales	$ 29,375	$ 26,356	$ 19,593
Operating income	$ 11,569	$ 9,817	$ 6,808

A reconciliation of the Company's segment operating income to the Consolidated Statements of Operations for 2022, 2021 and 2020 is as follows (in millions):

	2022	2021	2020
Segment operating income	$ 152,895	$ 137,006	$ 91,240
Research and development expense	(26,251)	(21,914)	(18,752)
Other corporate expenses, net	(7,207)	(6,143)	(6,200)
Total operating income	$ 119,437	$ 108,949	$ 66,288

The U.S. and China were the only countries that accounted for more than 10% of the Company's net sales in 2022, 2021 and 2020. Net sales for 2022, 2021 and 2020 and long-lived assets as of September 24, 2022 and September 25, 2021 were as follows (in millions):

	2022	2021	2020
Net sales:			
U.S.	$ 147,859	$ 133,803	$ 109,197
China [1]	74,200	68,366	40,308
Other countries	172,269	163,648	125,010
Total net sales	$ 394,328	$ 365,817	$ 274,515

	2022	2021
Long-lived assets:		
U.S.	$ 31,119	$ 28,203
China [1]	7,260	7,521
Other countries	3,738	3,716
Total long-lived assets	$ 42,117	$ 39,440

(1) China includes Hong Kong and Taiwan. Long-lived assets located in China consist primarily of assets related to product manufacturing, retail stores and related infrastructure.

Report of Independent Registered Public Accounting Firm

To the Shareholders and the Board of Directors of Apple Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Apple Inc. as of September 24, 2022 and September 25, 2021, the related consolidated statements of operations, comprehensive income, shareholders' equity and cash flows for each of the three years in the period ended September 24, 2022, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of Apple Inc. at September 24, 2022 and September 25, 2021, and the results of its operations and its cash flows for each of the three years in the period ended September 24, 2022, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (the "PCAOB"), Apple Inc.'s internal control over financial reporting as of September 24, 2022, based on criteria established in *Internal Control – Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) and our report dated October 27, 2022 expressed an unqualified opinion thereon.

Basis for Opinion

These financial statements are the responsibility of Apple Inc.'s management. Our responsibility is to express an opinion on Apple Inc.'s financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to Apple Inc. in accordance with the U.S. federal securities laws and the applicable rules and regulations of the U.S. 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 audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the 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 financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matter

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

	Uncertain Tax Positions
Description of the Matter	As discussed in Note 5 to the financial statements, Apple Inc. is subject to taxation and files income tax returns in the U.S. federal jurisdiction and many state and foreign jurisdictions. As of September 24, 2022, the total amount of gross unrecognized tax benefits was $16.8 billion, of which $8.0 billion, if recognized, would impact Apple Inc.'s effective tax rate. In accounting for uncertain tax positions, Apple Inc. uses significant judgment in the interpretation and application of complex domestic and international tax laws. Auditing management's evaluation of whether an uncertain tax position is more likely than not to be sustained and the measurement of the benefit of various tax positions can be complex, involves significant judgment, and is based on interpretations of tax laws and legal rulings.

How We Addressed the Matter in Our Audit	We tested controls relating to the evaluation of uncertain tax positions, including controls over management's assessment as to whether tax positions are more likely than not to be sustained, management's process to measure the benefit of its tax positions, and the development of the related disclosures. To evaluate Apple Inc.'s assessment of which tax positions are more likely than not to be sustained, our audit procedures included, among others, reading and evaluating management's assumptions and analysis, and, as applicable, Apple Inc.'s communications with taxing authorities, that detailed the basis and technical merits of the uncertain tax positions. We involved our tax subject matter resources in assessing the technical merits of certain of Apple Inc.'s tax positions based on our knowledge of relevant tax laws and experience with related taxing authorities. For certain tax positions, we also received external legal counsel confirmation letters and discussed the matters with external advisors and Apple Inc. tax personnel. In addition, we evaluated Apple Inc.'s disclosure in relation to these matters included in Note 5 to the financial statements.

/s/ Ernst & Young LLP

We have served as Apple Inc.'s auditor since 2009.

San Jose, California
October 27, 2022

Report of Independent Registered Public Accounting Firm

To the Shareholders and the Board of Directors of Apple Inc.

Opinion on Internal Control Over Financial Reporting

We have audited Apple Inc.'s internal control over financial reporting as of September 24, 2022, based on criteria established in *Internal Control – Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the "COSO criteria"). In our opinion, Apple Inc. maintained, in all material respects, effective internal control over financial reporting as of September 24, 2022, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (the "PCAOB"), the consolidated balance sheets of Apple Inc. as of September 24, 2022 and September 25, 2021, the related consolidated statements of operations, comprehensive income, shareholders' equity and cash flows for each of the three years in the period ended September 24, 2022, and the related notes and our report dated October 27, 2022 expressed an unqualified opinion thereon.

Basis for Opinion

Apple Inc.'s management is responsible 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 Annual Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on Apple Inc.'s internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to Apple Inc. in accordance with the U.S. federal securities laws and the applicable rules and regulations of the U.S. Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects.

Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

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

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

/s/ Ernst & Young LLP

San Jose, California
October 27, 2022

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure

None.

Item 9A. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

Based on an evaluation under the supervision and with the participation of the Company's management, the Company's principal executive officer and principal financial officer have concluded that the Company's disclosure controls and procedures as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act were effective as of September 24, 2022 to provide reasonable assurance that information required to be disclosed by the Company in reports that it files or submits under the Exchange Act is (i) recorded, processed, summarized and reported within the time periods specified in the SEC rules and forms and (ii) accumulated and communicated to the Company's management, including its principal executive officer and principal financial officer, as appropriate to allow timely decisions regarding required disclosure.

Inherent Limitations over Internal Controls

The Company's internal control over financial reporting is designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with U.S. generally accepted accounting principles ("GAAP"). 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 Company's assets;

(ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with GAAP, and that the Company's receipts and expenditures are being made only in accordance with authorizations of the Company's management and directors; 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.

Management, including the Company's Chief Executive Officer and Chief Financial Officer, does not expect that the Company's internal controls will prevent or detect all errors and all fraud. A control system, no matter how well designed and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. Further, the design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Because of the inherent limitations in all control systems, no evaluation of internal controls can provide absolute assurance that all control issues and instances of fraud, if any, have been detected. Also, any evaluation of the effectiveness of controls in future periods are subject to the risk that those internal controls may become inadequate because of changes in business conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Management's Annual Report on Internal Control over Financial Reporting

The Company's management is responsible for establishing and maintaining adequate internal control over financial reporting (as defined in Rule 13a-15(f) under the Exchange Act). Management conducted an assessment of the effectiveness of the Company's internal control over financial reporting based on the criteria set forth in Internal Control – Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework). Based on the Company's assessment, management has concluded that its internal control over financial reporting was effective as of September 24, 2022 to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements in accordance with GAAP. The Company's independent registered public accounting firm, Ernst & Young LLP, has issued an audit report on the Company's internal control over financial reporting, which appears in Part II, Item 8 of this Form 10-K.

Changes in Internal Control over Financial Reporting

There were no changes in the Company's internal control over financial reporting during the fourth quarter of 2022, which were identified in connection with management's evaluation required by paragraph (d) of Rules 13a-15 and 15d-15 under the Exchange Act, that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

Item 9B. Other Information

Rule 10b5-1 Trading Plans

During the three months ended September 24, 2022, Katherine L. Adams, Timothy D. Cook, Luca Maestri, Deirdre O'Brien and Jeffrey Williams, each an officer for purposes of Section 16 of the Exchange Act, had equity trading plans in place in accordance with Rule 10b5-1(c)(1) under the Exchange Act. An equity trading plan is a written document that preestablishes the amounts, prices and dates (or formula for determining the amounts, prices and dates) of future purchases or sales of the Company's stock, including sales of shares acquired under the Company's employee and director equity plans.

Item 9C. Disclosure Regarding Foreign Jurisdictions that Prevent Inspections

Not applicable.

PART III

Item 10. Directors, Executive Officers and Corporate Governance

The information required by this Item will be included in the Company's definitive proxy statement to be filed with the SEC within 120 days after September 24, 2022, in connection with the solicitation of proxies for the Company's 2023 annual meeting of shareholders (the "2023 Proxy Statement"), and is incorporated herein by reference.

Item 11. Executive Compensation

The information required by this Item will be included in the 2023 Proxy Statement, and is incorporated herein by reference.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters

The information required by this Item will be included in the 2023 Proxy Statement, and is incorporated herein by reference.

Item 13. Certain Relationships and Related Transactions, and Director Independence

The information required by this Item will be included in the 2023 Proxy Statement, and is incorporated herein by reference.

Item 14. Principal Accountant Fees and Services

The information required by this Item will be included in the 2023 Proxy Statement, and is incorporated herein by reference.

PART IV

Item 15. Exhibit and Financial Statement Schedules

(a) Documents filed as part of this report

(1) All financial statements

Index to Consolidated Financial Statements	Page
Consolidated Statements of Operations for the years ended September 24, 2022, September 25, 2021 and September 26, 2020	29
Consolidated Statements of Comprehensive Income for the years ended September 24, 2022, September 25, 2021 and September 26, 2020	30
Consolidated Balance Sheets as of September 24, 2022 and September 25, 2021	31
Consolidated Statements of Shareholders' Equity for the years ended September 24, 2022, September 25, 2021 and September 26, 2020	32
Consolidated Statements of Cash Flows for the years ended September 24, 2022, September 25, 2021 and September 26, 2020	33
Notes to Consolidated Financial Statements	34
Reports of Independent Registered Public Accounting Firm*	50

* Ernst & Young LLP, PCAOB Firm ID No. 00042.

(2) Financial Statement Schedules

All financial statement schedules have been omitted, since the required information is not applicable or is not present in amounts sufficient to require submission of the schedule, or because the information required is included in the consolidated financial statements and accompanying notes included in this Form 10-K.

(3) Exhibits required by Item 601 of Regulation S-K (1)

		Incorporated by Reference		
Exhibit Number	Exhibit Description	Form	Exhibit	Filing Date/ Period End Date
3.1	Restated Articles of Incorporation of the Registrant filed on August 3, 2020.	8-K	3.1	8/7/20
3.2	Amended and Restated Bylaws of the Registrant effective as of August 17, 2022.	8-K	3.2	8/19/22
4.1**	Description of Securities of the Registrant.			
4.2	Indenture, dated as of April 29, 2013, between the Registrant and The Bank of New York Mellon Trust Company, N.A., as Trustee.	S-3	4.1	4/29/13
4.3	Officer's Certificate of the Registrant, dated as of May 3, 2013, including forms of global notes representing the Floating Rate Notes due 2016, Floating Rate Notes due 2018, 0.45% Notes due 2016, 1.00% Notes due 2018, 2.40% Notes due 2023 and 3.85% Notes due 2043.	8-K	4.1	5/3/13
4.4	Officer's Certificate of the Registrant, dated as of May 6, 2014, including forms of global notes representing the Floating Rate Notes due 2017, Floating Rate Notes due 2019, 1.05% Notes due 2017, 2.10% Notes due 2019, 2.85% Notes due 2021, 3.45% Notes due 2024 and 4.45% Notes due 2044.	8-K	4.1	5/6/14
4.5	Officer's Certificate of the Registrant, dated as of November 10, 2014, including forms of global notes representing the 1.000% Notes due 2022 and 1.625% Notes due 2026.	8-K	4.1	11/10/14
4.6	Officer's Certificate of the Registrant, dated as of February 9, 2015, including forms of global notes representing the Floating Rate Notes due 2020, 1.55% Notes due 2020, 2.15% Notes due 2022, 2.50% Notes due 2025 and 3.45% Notes due 2045.	8-K	4.1	2/9/15
4.7	Officer's Certificate of the Registrant, dated as of May 13, 2015, including forms of global notes representing the Floating Rate Notes due 2017, Floating Rate Notes due 2020, 0.900% Notes due 2017, 2.000% Notes due 2020, 2.700% Notes due 2022, 3.200% Notes due 2025, and 4.375% Notes due 2045.	8-K	4.1	5/13/15
4.8	Officer's Certificate of the Registrant, dated as of July 31, 2015, including forms of global notes representing the 3.05% Notes due 2029 and 3.60% Notes due 2042.	8-K	4.1	7/31/15
4.9	Officer's Certificate of the Registrant, dated as of September 17, 2015, including forms of global notes representing the 1.375% Notes due 2024 and 2.000% Notes due 2027.	8-K	4.1	9/17/15

Exhibit Number	Exhibit Description	Incorporated by Reference		
		Form	Exhibit	Filing Date/ Period End Date
4.10	Officer's Certificate of the Registrant, dated as of February 23, 2016, including forms of global notes representing the Floating Rate Notes due 2019, Floating Rate Notes due 2021, 1.300% Notes due 2018, 1.700% Notes due 2019, 2.250% Notes due 2021, 2.850% Notes due 2023, 3.250% Notes due 2026, 4.500% Notes due 2036 and 4.650% Notes due 2046.	8-K	4.1	2/23/16
4.11	Supplement No. 1 to the Officer's Certificate of the Registrant, dated as of March 24, 2016.	8-K	4.1	3/24/16
4.12	Officer's Certificate of the Registrant, dated as of August 4, 2016, including forms of global notes representing the Floating Rate Notes due 2019, 1.100% Notes due 2019, 1.550% Notes due 2021, 2.450% Notes due 2026 and 3.850% Notes due 2046.	8-K	4.1	8/4/16
4.13	Officer's Certificate of the Registrant, dated as of February 9, 2017, including forms of global notes representing the Floating Rate Notes due 2019, Floating Rate Notes due 2020, Floating Rate Notes due 2022, 1.550% Notes due 2019, 1.900% Notes due 2020, 2.500% Notes due 2022, 3.000% Notes due 2024, 3.350% Notes due 2027 and 4.250% Notes due 2047.	8-K	4.1	2/9/17
4.14	Officer's Certificate of the Registrant, dated as of May 11, 2017, including forms of global notes representing the Floating Rate Notes due 2020, Floating Rate Notes due 2022, 1.800% Notes due 2020, 2.300% Notes due 2022, 2.850% Notes due 2024 and 3.200% Notes due 2027.	8-K	4.1	5/11/17
4.15	Officer's Certificate of the Registrant, dated as of May 24, 2017, including forms of global notes representing the 0.875% Notes due 2025 and 1.375% Notes due 2029.	8-K	4.1	5/24/17
4.16	Officer's Certificate of the Registrant, dated as of June 20, 2017, including form of global note representing the 3.000% Notes due 2027.	8-K	4.1	6/20/17
4.17	Officer's Certificate of the Registrant, dated as of August 18, 2017, including form of global note representing the 2.513% Notes due 2024.	8-K	4.1	8/18/17
4.18	Officer's Certificate of the Registrant, dated as of September 12, 2017, including forms of global notes representing the 1.500% Notes due 2019, 2.100% Notes due 2022, 2.900% Notes due 2027 and 3.750% Notes due 2047.	8-K	4.1	9/12/17
4.19	Officer's Certificate of the Registrant, dated as of November 13, 2017, including forms of global notes representing the 1.800% Notes due 2019, 2.000% Notes due 2020, 2.400% Notes due 2023, 2.750% Notes due 2025, 3.000% Notes due 2027 and 3.750% Notes due 2047.	8-K	4.1	11/13/17
4.20	Indenture, dated as of November 5, 2018, between the Registrant and The Bank of New York Mellon Trust Company, N.A., as Trustee.	S-3	4.1	11/5/18
4.21	Officer's Certificate of the Registrant, dated as of September 11, 2019, including forms of global notes representing the 1.700% Notes due 2022, 1.800% Notes due 2024, 2.050% Notes due 2026, 2.200% Notes due 2029 and 2.950% Notes due 2049.	8-K	4.1	9/11/19
4.22	Officer's Certificate of the Registrant, dated as of November 15, 2019, including forms of global notes representing the 0.000% Notes due 2025 and 0.500% Notes due 2031.	8-K	4.1	11/15/19
4.23	Officer's Certificate of the Registrant, dated as of May 11, 2020, including forms of global notes representing the 0.750% Notes due 2023, 1.125% Notes due 2025, 1.650% Notes due 2030 and 2.650% Notes due 2050.	8-K	4.1	5/11/20
4.24	Officer's Certificate of the Registrant, dated as of August 20, 2020, including forms of global notes representing the 0.550% Notes due 2025, 1.25% Notes due 2030, 2.400% Notes due 2050 and 2.550% Notes due 2060.	8-K	4.1	8/20/20
4.25	Officer's Certificate of the Registrant, dated as of February 8, 2021, including forms of global notes representing the 0.700% Notes due 2026, 1.200% Notes due 2028, 1.650% Notes due 2031, 2.375% Notes due 2041, 2.650% Notes due 2051 and 2.800% Notes due 2061.	8-K	4.1	2/8/21
4.26	Officer's Certificate of the Registrant, dated as of August 5, 2021, including forms of global notes representing the 1.400% Notes due 2028, 1.700% Notes due 2031, 2.700% Notes due 2051 and 2.850% Notes due 2061.	8-K	4.1	8/5/21
4.27	Indenture, dated as of October 28, 2021, between the Registrant and The Bank of New York Mellon Trust Company, N.A., as Trustee.	S-3	4.1	10/29/21
4.28	Officer's Certificate of the Registrant, dated as of August 8, 2022, including forms of global notes representing the 3.250% Notes due 2029, 3.350% Notes due 2032, 3.950% Notes due 2052 and 4.100% Notes due 2062.	8-K	4.1	8/8/22

Exhibit Number	Exhibit Description	Incorporated by Reference		
		Form	Exhibit	Filing Date/ Period End Date
4.29*	Apple Inc. Deferred Compensation Plan.	S-8	4.1	8/23/18
10.1*	Employee Stock Purchase Plan, as amended and restated as of March 10, 2015.	8-K	10.1	3/13/15
10.2*	Form of Indemnification Agreement between the Registrant and each director and executive officer of the Registrant.	10-Q	10.2	6/27/09
10.3*	Apple Inc. Non-Employee Director Stock Plan, as amended November 9, 2021.	10-Q	10.1	12/25/21
10.4*	2014 Employee Stock Plan, as amended and restated as of October 1, 2017.	10-K	10.8	9/30/17
10.5*	Form of Restricted Stock Unit Award Agreement under 2014 Employee Stock Plan effective as of September 26, 2017.	10-K	10.20	9/30/17
10.6*	Form of Restricted Stock Unit Award Agreement under Non-Employee Director Stock Plan effective as of February 13, 2018.	10-Q	10.2	3/31/18
10.7*	Form of Restricted Stock Unit Award Agreement under 2014 Employee Stock Plan effective as of August 21, 2018.	10-K	10.17	9/29/18
10.8*	Form of Performance Award Agreement under 2014 Employee Stock Plan effective as of August 21, 2018.	10-K	10.18	9/29/18
10.9*	Form of Restricted Stock Unit Award Agreement under 2014 Employee Stock Plan effective as of September 29, 2019.	10-K	10.15	9/28/19
10.10*	Form of Performance Award Agreement under 2014 Employee Stock Plan effective as of September 29, 2019.	10-K	10.16	9/28/19
10.11*	Form of Restricted Stock Unit Award Agreement under 2014 Employee Stock Plan effective as of August 18, 2020.	10-K	10.16	9/26/20
10.12*	Form of Performance Award Agreement under 2014 Employee Stock Plan effective as of August 18, 2020.	10-K	10.17	9/26/20
10.13*	Form of CEO Restricted Stock Unit Award Agreement under 2014 Employee Stock Plan effective as of September 27, 2020.	10-Q	10.1	12/26/20
10.14*	Form of CEO Performance Award Agreement under 2014 Employee Stock Plan effective as of September 27, 2020.	10-Q	10.2	12/26/20
10.15*	2022 Employee Stock Plan.	8-K	10.1	3/4/22
10.16*	Form of Restricted Stock Unit Award Agreement under 2022 Employee Stock Plan effective as of March 4, 2022.	8-K	10.2	3/4/22
10.17*	Form of Performance Award Agreement under 2022 Employee Stock Plan effective as of March 4, 2022.	8-K	10.3	3/4/22
10.18*	Apple Inc. Executive Cash Incentive Plan.	8-K	10.1	8/19/22
21.1**	Subsidiaries of the Registrant.			
23.1**	Consent of Independent Registered Public Accounting Firm.			
24.1**	Power of Attorney (included on the Signatures page of this Annual Report on Form 10-K).			
31.1**	Rule 13a-14(a) / 15d-14(a) Certification of Chief Executive Officer.			
31.2**	Rule 13a-14(a) / 15d-14(a) Certification of Chief Financial Officer.			
32.1***	Section 1350 Certifications of Chief Executive Officer and Chief Financial Officer.			
101**	Inline XBRL Document Set for the consolidated financial statements and accompanying notes in Part II, Item 8, “Financial Statements and Supplementary Data” of this Annual Report on Form 10-K.			
104**	Inline XBRL for the cover page of this Annual Report on Form 10-K, included in the Exhibit 101 Inline XBRL Document Set.			

* Indicates management contract or compensatory plan or arrangement.

** Filed herewith.

*** Furnished herewith.

(1) Certain instruments defining the rights of holders of long-term debt securities of the Registrant are omitted pursuant to Item 601(b)(4)(iii) of Regulation S-K. The Registrant hereby undertakes to furnish to the SEC, upon request, copies of any such instruments.

Item 16. Form 10-K Summary

None.

SIGNATURES

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

Date: October 27, 2022

Apple Inc.

By: /s/ Luca Maestri
Luca Maestri
Senior Vice President,
Chief Financial Officer

Power of Attorney

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Timothy D. Cook and Luca Maestri, jointly and severally, his or her attorneys-in-fact, each with the power of substitution, for him or her in any and all capacities, to sign any amendments to this Annual Report on Form 10-K, and to file the same, with exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, hereby ratifying and confirming all that each of said attorneys-in-fact, or his substitute or substitutes, may do or cause to be done by virtue hereof.

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

Name	Title	Date
/s/ Timothy D. Cook TIMOTHY D. COOK	Chief Executive Officer and Director (Principal Executive Officer)	October 27, 2022
/s/ Luca Maestri LUCA MAESTRI	Senior Vice President, Chief Financial Officer (Principal Financial Officer)	October 27, 2022
/s/ Chris Kondo CHRIS KONDO	Senior Director of Corporate Accounting (Principal Accounting Officer)	October 27, 2022
/s/ James A. Bell JAMES A. BELL	Director	October 27, 2022
/s/ Al Gore AL GORE	Director	October 27, 2022
/s/ Alex Gorsky ALEX GORSKY	Director	October 27, 2022
/s/ Andrea Jung ANDREA JUNG	Director	October 27, 2022
/s/ Arthur D. Levinson ARTHUR D. LEVINSON	Director and Chair of the Board	October 27, 2022
/s/ Monica Lozano MONICA LOZANO	Director	October 27, 2022
/s/ Ronald D. Sugar RONALD D. SUGAR	Director	October 27, 2022
/s/ Susan L. Wagner SUSAN L. WAGNER	Director	October 27, 2022