

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 28, 2019

or

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

For the transition period from _____ to _____.

Commission File Number: 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
0.875% 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
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	<input checked="" type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input type="checkbox"/>	Smaller reporting company	<input type="checkbox"/>
		Emerging growth company	<input type="checkbox"/>

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 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 29, 2019, the last business day of the Registrant's most recently completed second fiscal quarter, was approximately \$874,698,000,000. 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.

4,443,265,000 shares of common stock were issued and outstanding as of October 18, 2019.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the Registrant's definitive proxy statement relating to its 2020 annual meeting of shareholders (the "2020 Proxy Statement") are incorporated by reference into Part III of this Annual Report on Form 10-K where indicated. The 2020 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 28, 2019
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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 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. 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," which are incorporated herein by reference. 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. The Company assumes no obligation to revise or update any forward-looking statements for any reason, except as required by law.

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. The Company is a California corporation established in 1977.

Products

iPhone

iPhone® is the Company's line of smartphones based on its iOS operating system. In September 2019, the Company introduced three new iPhones: iPhone 11, iPhone 11 Pro and iPhone 11 Pro Max.

Mac

Mac® is the Company's line of personal computers based on its macOS® operating system. During 2019, the Company released a new version of MacBook Air® and a new Mac mini®, and introduced an updated Mac Pro®, which is expected to be available in the fall of 2019.

iPad

iPad® is the Company's line of multi-purpose tablets. iPad is based on the Company's iPadOS™ operating system, which was introduced during 2019. Also during 2019, the Company released two new versions of iPad Pro®, an iPad Air®, an updated iPad mini® and a new 10.2-inch iPad.

Wearables, Home and Accessories

Wearables, Home and Accessories includes AirPods®, Apple TV®, Apple Watch®, Beats® products, HomePod™, iPod touch® and other Apple-branded and third-party accessories. AirPods are the Company's wireless headphones that interact with Siri. In October 2019, the Company introduced AirPods Pro™. Apple Watch is a personal electronic device that combines the watchOS® user interface and other technologies created specifically for a smaller device. In September 2019, the Company introduced Apple Watch Series 5.

Services

Digital Content Stores and Streaming Services

The Company operates various platforms that allow customers to discover and download applications and digital content, such as books, music, video, games and podcasts. These platforms include the App Store®, available for iPhone and iPad, the Mac App Store, the TV App Store and the Watch App Store.

The Company also offers subscription-based digital content streaming services, including Apple Music®, which offers users a curated listening experience with on-demand radio stations, and Apple TV+, which offers exclusive original content, and is expected to be available in November 2019.

AppleCare

AppleCare® includes AppleCare+ (“AC+”) and the AppleCare Protection Plan, which are fee-based services that extend the coverage of phone support eligibility and hardware repairs. AC+ offers additional coverage for instances of accidental damage and is available in certain countries for certain products. Additionally, AC+ with theft and loss protection is available for iPhone in the U.S.

iCloud

iCloud® is the Company’s cloud service, which stores music, photos, contacts, calendars, mail, documents and more, keeping them up-to-date and available across multiple Apple devices and Windows personal computers.

Licensing

The Company licenses the use of certain of its intellectual property, and provides other related services.

Other Services

The Company delivers a variety of other services available in certain countries, including Apple Arcade™, a game subscription service; Apple Card™, a co-branded credit card; Apple News+, a subscription news and magazine service; 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 2019, the Company’s net sales through its direct and indirect distribution channels accounted for 31% and 69%, respectively, of total net sales.

No single customer accounted for more than 10% of net sales in 2019, 2018 and 2017.

Competition

The markets for the Company’s products and services are highly competitive and the Company is confronted by aggressive competition in all areas of its business. These markets are characterized by frequent product introductions and rapid technological advances that have substantially increased the capabilities and use of smartphones, personal computers, tablets and other electronic devices. Many of the Company’s competitors that sell mobile devices and personal computers based on other operating systems seek to compete primarily through aggressive pricing and very low cost structures. 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 and other electronic devices. These markets are highly competitive and include many large, well-funded and experienced participants. The Company expects competition in these markets to intensify significantly as competitors imitate features of the Company’s products and applications within their products, or collaborate to offer solutions that are more competitive than those they currently offer. These markets are characterized by aggressive price competition, frequent product introductions, evolving design approaches and technologies, rapid adoption of technological advancements by competitors, and price sensitivity on the part of consumers and businesses.

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 believes it offers superior innovation and integration of the entire solution, including hardware, software and services. Some of the Company’s current and potential competitors have substantial resources and may be able to provide such products and services at little or no profit, or even at a loss, to compete with the Company’s offerings.

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 and other electronic devices. 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, copyrights, trademarks, service marks, trade dress 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 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 applications to protect innovations arising from its research, development and design, and is currently pursuing thousands of patent applications around the world. Over time, the Company has accumulated a large portfolio of issued patents, including utility patents, design patents and others. The Company also holds copyrights relating to certain aspects of its products and services. No single intellectual property right is solely responsible for protecting the Company's products. The Company believes the duration of its intellectual property rights is adequate relative to the expected lives of its products.

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.

Employees

As of September 28, 2019, the Company had approximately 137,000 full-time equivalent employees.

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 Securities and Exchange Commission (the "SEC"). The Company is subject to the informational requirements of the Exchange Act and files or furnishes reports, proxy statements and other information with 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 SEC maintains an Internet site that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC at www.sec.gov. The Company periodically provides other 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 corporate governance 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 following discussion of risk factors contains forward-looking statements. These risk factors may be important to understanding other statements in this Form 10-K. The following information 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.

The business, financial condition and operating results of the Company can be affected by a number of factors, whether currently known or unknown, including but not limited to those described below, any one or more of which could, directly or indirectly, cause the Company's actual financial condition and operating results to vary materially from past, or from anticipated future, financial condition and operating results. Any of these factors, in whole or in part, could materially and adversely affect the Company's business, financial condition, operating results and stock price.

Because of the following factors, as well as other factors affecting the Company's financial condition and operating results, 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.

Global and regional economic conditions could materially adversely affect the Company's business, results of operations, financial condition and growth.

The Company has international operations with sales outside the U.S. representing a majority of the Company's total net sales. In addition, a majority of the Company's supply chain, and its manufacturing and assembly activities, 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, changes to fiscal and monetary policy, tighter credit, higher interest rates, high unemployment and currency fluctuations could materially adversely affect demand for the Company's products and services. In addition, consumer confidence and spending could be 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, changes to fuel and other energy costs, 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 could 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 could 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 could materially adversely affect the Company's business, results of operations, financial condition and growth.

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/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 its ability to ensure a continuing and timely introduction of innovative new products, services and technologies to the marketplace. The Company believes it is unique in that it 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 that 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, numerous 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 emulating the Company's products and infringing on its intellectual property. 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 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 may have the resources, experience or cost structures to provide products at little or no profit or even at a loss.

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.

Some of the markets in which the Company competes have from time to time experienced little to no growth or contracted. In addition, an increasing number of Internet-enabled devices that include software applications and are smaller, simpler and cheaper than traditional personal computers compete with some of the Company's existing products.

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 financial condition and operating results 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.

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 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, but not limited to, timely and successful development, market acceptance, the Company's ability to manage the risks associated with new product production ramp-up issues, the availability of application software for new 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. Accordingly, the Company cannot determine in advance the ultimate effect of new product and service introductions and transitions.

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

The Company distributes its products through cellular network carriers, wholesalers, retailers and resellers, many of whom distribute products from competing manufacturers. The Company also 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.

Some carriers providing cellular network service for iPhone offer financing, installment payment plans or subsidies for users' purchases of the device. There is no assurance that such offers will be continued at all or in the same amounts upon renewal of the Company's agreements with these carriers or in agreements the Company enters into with new carriers.

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 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, no assurance can be given that 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.

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 could materially adversely affect the Company's financial condition and operating results. While the Company has entered into agreements for the supply of many components, there can be no assurance that 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. The effects of global or regional economic conditions on the Company's suppliers, described in "Global and regional economic conditions could materially adversely affect the Company's business, results of operations, financial condition and growth," above, also could affect the Company's ability to obtain components. Therefore, the Company remains subject to significant risks of supply shortages and price increases that could materially adversely affect its financial condition and operating results.

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. If the Company's supply of components for a new or existing product were delayed or constrained, or if an outsourcing partner delayed shipments of completed products to the Company, the Company's financial condition and operating results could be materially adversely affected. 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 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. A significant concentration of this manufacturing is currently performed by a small number of outsourcing partners, often in single locations. 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 may have an adverse effect on the quality or quantity of products or services, or 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 could experience an unanticipated product defect liability. While the Company relies on its partners to adhere to its supplier code of conduct, material violations of the supplier code of conduct could occur.

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, but not limited to, natural and man-made disasters, information technology system failures, commercial disputes, military actions, 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.

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 healthcare. In addition, the Company's service offerings may have quality issues and from time to time experience outages, service slowdowns or errors. As a result, the Company's services may not perform 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 could 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 relies on access to third-party digital content, which may not be available to the Company on commercially reasonable terms or at all.

The Company contracts with numerous third parties to offer their digital content to customers. This includes the right to sell currently available content. The licensing or other distribution arrangements with these third parties are for relatively short terms and do not guarantee the continuation or renewal of these arrangements on commercially reasonable terms, if 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 more difficult or impossible for the Company to license or otherwise distribute their content in the future. 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, or continue to expand its geographic reach. Failure to obtain the right to make third-party digital content available, or to make such content available on commercially reasonable terms, could have a material adverse impact on the Company's financial condition and operating results.

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 is no assurance the Company will be able to develop or license such solutions at a reasonable cost and in a timely manner. In addition, certain countries have passed or may propose and adopt legislation that would force the Company to license its digital rights management, which could lessen the protection of content and subject it to piracy and also could negatively affect arrangements with the Company's content providers.

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 is no assurance that 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 and Windows for personal computers. 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 could 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. If developers focus their efforts on these competing platforms, the availability and quality of applications for the Company's devices may 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 if third-party developers are unable to or choose not to keep up with this pace of change, third-party applications might not take advantage of these changes to deliver improved customer experiences or might not operate correctly and may result in dissatisfied customers.

The Company sells and delivers third-party applications for its products through the App Store, Mac App Store, TV App Store and Watch App Store. The Company retains a commission from sales through these platforms. If developers reduce their use of these platforms to distribute their applications and offer in-app purchases to customers, then the volume of sales, and the commission that the Company earns on those sales, would decrease.

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.

Many of 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 may 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. There is, however, no assurance that 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, could preclude the Company from selling certain products or services, or otherwise have a material adverse impact on the Company's financial condition and operating results.

The Company could be impacted by unfavorable results of legal proceedings, such as being found to have infringed on intellectual property rights.

The Company is subject to various legal proceedings and claims that have arisen in the ordinary course of business and have not yet been fully resolved, and new claims 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.

Claims against the Company based on allegations of patent infringement or other violations of intellectual property rights have generally increased over time and may continue to increase. In particular, the Company has historically faced 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, litigation can be expensive, time-consuming, disruptive to the Company's operations and distracting to management. In recognition of these considerations, the Company may enter into licensing agreements or other arrangements to settle litigation and resolve such disputes. No assurance can be given that such agreements can be obtained on acceptable terms or that litigation will not occur. These agreements may also significantly increase the Company's cost of sales and operating expenses.

Except as described 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, including matters related to infringement of intellectual property rights.

The outcome of litigation 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 financial condition and operating results for that reporting period could be materially adversely affected. Further, such an outcome could result in significant compensatory, punitive or trebled monetary damages, disgorgement of revenue or profits, remedial corporate measures or injunctive relief against the Company that could materially adversely affect its financial condition and operating results.

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, but not limited to: antitrust; privacy, data security and data localization; consumer protection; advertising, sales, billing and e-commerce; 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; anti-corruption; import, export and trade; foreign exchange controls and cash repatriation restrictions; anti-money laundering; foreign ownership and investment; tax; and environmental, health and safety.

Compliance with these laws and regulations may be onerous and expensive, increasing the cost of conducting the Company's global operations. Changes to 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 or service to customers, requiring changes to the Company's business practices or otherwise making the Company's products and services less attractive to customers. The Company has implemented policies and procedures designed to ensure compliance with applicable laws and regulations, but there can be no assurance that 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 reputation, financial condition and operating results.

The technology industry, including, in some instances, the Company, is subject to intense media, political and regulatory scrutiny, which exposes the Company to government investigations, legal actions and penalties. For example, the Company is 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 material impact on the Company's financial condition and operating results. There can be no assurance that the Company's business will not be materially adversely affected, individually or in the aggregate, by the outcomes of such investigations or changes to laws and regulations in the future.

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 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 financial condition and operating results, including macro-economic factors that could have an adverse effect on general retail activity. Other factors include, but are not limited to, 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.

Investment in new business strategies and acquisitions could disrupt the Company's ongoing business and present risks not originally contemplated.

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, inadequate return on capital, and unidentified issues not discovered in the Company's due diligence. These new ventures are inherently risky and may not be successful.

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

The Company is 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, or other events or disruptions. System redundancy and other continuity measures may be ineffective or inadequate, and the Company's 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 reputation, financial condition and operating results.

There may be losses or unauthorized access to or releases of confidential information, including personally identifiable information, that 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, among other things, personally identifiable information ("PII") 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 reputation, financial condition and operating results.

The Company's business also requires it to share confidential information with suppliers and other third parties. Although the Company takes steps to secure confidential information that is provided to third parties, such measures are not always effective and losses or unauthorized access to or releases of confidential information occur and could materially adversely affect the Company's reputation, financial condition and operating results.

For example, the Company may experience a security breach impacting the Company's information technology systems that compromises the confidentiality, integrity or availability of confidential information. Such an incident 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 supplier relationships, and expose the Company to litigation or government investigations, which could result in penalties, fines or judgments against the Company.

Although malicious attacks perpetrated to gain access to confidential information, including PII, 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, 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, employee error, malfeasance, system error, faulty password management or other irregularities. For example, third parties fraudulently induce employees or customers into disclosing user names, passwords or other sensitive information, which may, in turn, be used to access the Company's information technology systems. To help protect customers and the Company, the Company monitors its services and systems for unusual activity and may freeze accounts under suspicious circumstances, which, among other things, may result in the delay or loss of customer orders or impede customer access to the Company's products and services.

In addition to the risks relating to general confidential information described above, the Company is also subject to specific obligations relating to health data and payment card data. Health data is subject to additional privacy, security and breach notification requirements, and the Company can be 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 is handled in a manner not permitted by law or under the Company's agreements with healthcare institutions, the Company could be subject to litigation or government investigations, may be liable for associated investigatory expenses, and could also incur significant fees or fines.

Under payment card rules and obligations, if cardholder information is potentially compromised, the Company could be liable for associated investigatory expenses and could 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 would materially adversely affect the Company's reputation, financial condition and operating results.

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.

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 PII. In many cases, these laws apply not only to third-party transactions, but also may restrict transfers of PII among the Company and its international subsidiaries. Several jurisdictions have passed laws in this area, and other jurisdictions are considering imposing additional restrictions. These laws continue to develop and may be inconsistent from jurisdiction to jurisdiction. Complying with emerging and changing international requirements may cause the Company to incur substantial costs or 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 PII through its privacy policy, information provided on its website and press statements. Any failure by the Company to comply with these public statements or with other federal, state or international privacy-related or data protection laws and regulations could result in proceedings against the Company by governmental entities or others. In addition to reputational impacts, penalties could include ongoing audit requirements and significant legal liability.

The Company's success depends largely on the continued service and availability of key personnel.

Much of the Company's future success depends on 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.

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

Political events, international trade disputes, war, terrorism, natural disasters, public health issues, industrial accidents and other business interruptions could 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.

International trade disputes can result in tariffs and other measures that can adversely affect the Company's business. For example, trade tensions have led to a series of tariffs imposed by the U.S. on imports from China. Tariffs increase the cost of the Company's products and the components and raw materials that go into making them. These increased costs 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 that could limit the Company's ability to offer its products and services. Political uncertainty surrounding international trade disputes and measures 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, labor disputes, public health issues and other events beyond the Company's control. Global climate change could result in certain types of natural disasters occurring more frequently or with more intense effects. Such events could 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 could 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 disruption to the Company's business and harm to the Company's reputation. Should major public health issues, including pandemics, arise, the Company could be adversely affected by more stringent employee travel restrictions, additional limitations in freight services, governmental actions limiting the movement of products between regions, delays in production ramps of new products, and disruptions in the operations of the Company's suppliers and contract manufacturers.

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

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

The Company's profit margins vary across its products, services, geographic segments and distribution channels. For example, gross margins on the Company's hardware products vary across product lines 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; potential increases in the cost of components, outside manufacturing services, and 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; fluctuations in foreign exchange rates; 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 financial condition and operating results.

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 stock price is subject to volatility.

The Company's stock price 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 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 over a given period may cause the average price at which the Company repurchases its stock to exceed the stock's price at a given point in time. The Company believes its stock price should reflect expectations of future growth and profitability. The Company also believes its stock price 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, its stock price may decline significantly, which could have a material adverse impact on investor confidence and employee retention.

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 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 financial condition and operating results.

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 through third-party cellular network carriers, wholesalers, retailers and resellers. The Company also sells its products 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. 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 sub-assemblies 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 28, 2019, a significant portion of the Company's trade receivables was concentrated within cellular network carriers, and its 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 could be subject to changes in its tax rates, the adoption of new U.S. or international tax legislation or 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 rates in various jurisdictions may be subject to significant change. The Company's effective tax rates could be 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, or changes in tax laws or their interpretation, including in the U.S. and Ireland.

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 financial condition and operating results could be materially adversely affected.

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

The Company's headquarters are located in Cupertino, California. As of September 28, 2019, 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

The Company is subject to legal proceedings and claims that have not been fully resolved and that have arisen in the ordinary course of business. Except as described 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 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. Refer to the risk factor "*The Company could be impacted by unfavorable results of legal proceedings, such as being found to have infringed on intellectual property rights*" in Part I, Item 1A of this Form 10-K under the heading "Risk Factors." The Company settled certain matters during the fourth quarter of 2019 that did not individually or in the aggregate have a material impact on the Company's financial condition or operating results.

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 18, 2019, there were 23,233 shareholders of record.

Purchases of Equity Securities by the Issuer and Affiliated Purchasers

Share repurchase activity during the three months ended September 28, 2019 was as follows (in millions, except number of shares, which are reflected in thousands, and per share amounts):

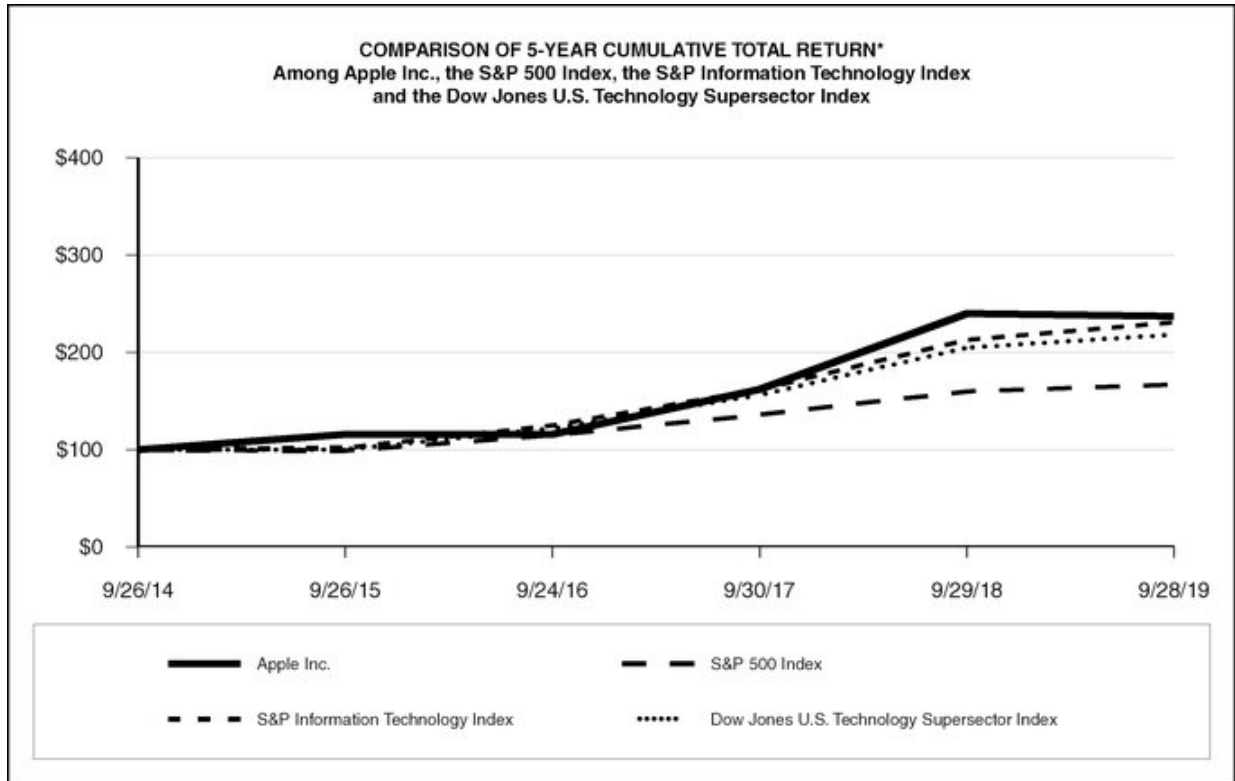
Periods	Total Number of Shares Purchased	Average Price Paid Per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Approximate Dollar Value of Shares That May Yet Be Purchased Under the Plans or Programs (1)
June 30, 2019 to August 3, 2019:				
Open market and privately negotiated purchases	23,860	\$ 205.36	23,860	
August 4, 2019 to August 31, 2019:				
February 2019 ASR	6,886	(2)	6,886	
Open market and privately negotiated purchases	34,705	\$ 204.59	34,705	
September 1, 2019 to September 28, 2019:				
Open market and privately negotiated purchases	27,178	\$ 217.17	27,178	
Total	<u>92,629</u>			<u>\$ 78,869</u>

(1) On April 30, 2019, the Company announced the Board of Directors increased the current share repurchase program authorization from \$100 billion to \$175 billion of the Company's common stock, of which \$96.1 billion had been utilized as of September 28, 2019. The remaining \$78.9 billion in the table represents the amount available to repurchase shares under the authorized repurchase program as of September 28, 2019. The Company's share repurchase program does not obligate it to acquire any specific number of shares. Under this 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.

(2) In February 2019, the Company entered into an accelerated share repurchase arrangement ("ASR") to purchase up to \$12.0 billion of the Company's common stock. In August 2019, the purchase period for this ASR ended and an additional 6.9 million shares were delivered and retired. In total, 62.0 million shares were delivered under this ASR at an average repurchase price of \$193.69.

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 28, 2019. 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 26, 2014. Note that historic stock price performance is not necessarily indicative of future stock price performance.



* \$100 invested on September 26, 2014 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 2014	September 2015	September 2016	September 2017	September 2018	September 2019
Apple Inc.	\$ 100	\$ 116	\$ 116	\$ 162	\$ 240	\$ 237
S&P 500 Index	\$ 100	\$ 99	\$ 115	\$ 136	\$ 160	\$ 167
S&P Information Technology Index	\$ 100	\$ 102	\$ 125	\$ 162	\$ 213	\$ 231
Dow Jones U.S. Technology Supersector Index	\$ 100	\$ 100	\$ 122	\$ 156	\$ 205	\$ 218

Item 6. Selected Financial Data

The information set forth below for the five years ended September 28, 2019, is not necessarily indicative of results of future operations, and 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 thereto included in Part II, Item 8 of this Form 10-K to fully understand factors that may affect the comparability of the information presented below (in millions, except number of shares, which are reflected in thousands, and per share amounts).

	<u>2019</u>	<u>2018</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>
Total net sales	\$ 260,174	\$ 265,595	\$ 229,234	\$ 215,639	\$ 233,715
Net income	\$ 55,256	\$ 59,531	\$ 48,351	\$ 45,687	\$ 53,394
Earnings per share:					
Basic	\$ 11.97	\$ 12.01	\$ 9.27	\$ 8.35	\$ 9.28
Diluted	\$ 11.89	\$ 11.91	\$ 9.21	\$ 8.31	\$ 9.22
Cash dividends declared per share					
	\$ 3.00	\$ 2.72	\$ 2.40	\$ 2.18	\$ 1.98
Shares used in computing earnings per share:					
Basic	4,617,834	4,955,377	5,217,242	5,470,820	5,753,421
Diluted	4,648,913	5,000,109	5,251,692	5,500,281	5,793,069
Total cash, cash equivalents and marketable securities	\$ 205,898	\$ 237,100	\$ 268,895	\$ 237,585	\$ 205,666
Total assets	\$ 338,516	\$ 365,725	\$ 375,319	\$ 321,686	\$ 290,345
Non-current portion of term debt	\$ 91,807	\$ 93,735	\$ 97,207	\$ 75,427	\$ 53,329
Other non-current liabilities	\$ 50,503	\$ 48,914	\$ 44,212	\$ 39,986	\$ 38,104

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

This section and other parts of this Annual Report on Form 10-K ("Form 10-K") contain forward-looking statements, within the meaning of the Private Securities Litigation Reform Act of 1995, that involve risks and uncertainties. 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. 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," which are incorporated herein by reference. 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. 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. The Company assumes no obligation to revise or update any forward-looking statements for any reason, except as required by law.

This section of this Form 10-K generally discusses 2019 and 2018 items and year-to-year comparisons between 2019 and 2018. Discussions of 2017 items and year-to-year comparisons between 2018 and 2017 that are not included in this Form 10-K 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 29, 2018.

Fiscal Period

The Company's fiscal year is the 52- or 53-week period that ends on the last Saturday of September. The Company's fiscal years 2019 and 2018 spanned 52 weeks each, whereas fiscal year 2017 included 53 weeks. A 14th week was included in the first quarter of 2017, as is done every five or six years, to realign the Company's fiscal quarters with calendar quarters.

Fiscal 2019 Highlights

Total net sales decreased 2% or \$5.4 billion during 2019 compared to 2018, driven by lower net sales of iPhone, partially offset by higher net sales of Wearables, Home and Accessories and Services in all geographic operating segments. The weakness in foreign currencies had a significant unfavorable impact on net sales during 2019.

In April 2019, the Company announced an increase to its current share repurchase program authorization from \$100 billion to \$175 billion and raised its quarterly dividend from \$0.73 to \$0.77 per share beginning in May 2019. During 2019, the Company repurchased \$67.1 billion of its common stock and paid dividends and dividend equivalents of \$14.1 billion.

Products and Services Performance

Beginning in the first quarter of 2019, the Company classified the amortization of the deferred value of Maps, Siri and free iCloud services, which are bundled in the sales price of iPhone, Mac, iPad and certain other products, in Services net sales. Historically, the Company classified the amortization of these amounts in Products net sales consistent with its management reporting framework. As a result, Products and Services net sales for 2018 and 2017 were reclassified to conform to the 2019 presentation.

The following table shows net sales by category for 2019, 2018 and 2017 (dollars in millions):

	2019	Change	2018	Change	2017
Net sales by category:					
iPhone (1)	\$ 142,381	(14)%	\$ 164,888	18 %	\$ 139,337
Mac (1)	25,740	2 %	25,198	(1)%	25,569
iPad (1)	21,280	16 %	18,380	(2)%	18,802
Wearables, Home and Accessories (1)(2)	24,482	41 %	17,381	36 %	12,826
Services (3)	46,291	16 %	39,748	22 %	32,700
Total net sales	\$ 260,174	(2)%	\$ 265,595	16 %	\$ 229,234

(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, iPod touch and Apple-branded and third-party accessories.

(3) Services net sales include sales from the Company's digital content stores and streaming services, AppleCare, licensing and other services. Services net sales also include amortization of the deferred value of Maps, Siri and free iCloud services, which are bundled in the sales price of certain products.

iPhone

iPhone net sales decreased during 2019 compared to 2018 due primarily to lower iPhone unit sales.

Mac

Mac net sales increased during 2019 compared to 2018 due primarily to higher net sales of MacBook Air, partially offset by lower net sales of MacBook® and MacBook Pro®.

iPad

iPad net sales increased during 2019 compared to 2018 due primarily to higher net sales of iPad Pro.

Wearables, Home and Accessories

Wearables, Home and Accessories net sales increased during 2019 compared to 2018 due primarily to higher net sales of AirPods and Apple Watch.

Services

Services net sales increased during 2019 compared to 2018 due primarily to higher net sales from the App Store, licensing and AppleCare.

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, 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 2019, 2018 and 2017 (dollars in millions):

	<u>2019</u>	<u>Change</u>	<u>2018</u>	<u>Change</u>	<u>2017</u>
Net sales by reportable segment:					
Americas	\$ 116,914	4 %	\$ 112,093	16%	\$ 96,600
Europe	60,288	(3)%	62,420	14%	54,938
Greater China	43,678	(16)%	51,942	16%	44,764
Japan	21,506	(1)%	21,733	23%	17,733
Rest of Asia Pacific	17,788	2 %	17,407	15%	15,199
Total net sales	<u>\$ 260,174</u>	<u>(2)%</u>	<u>\$ 265,595</u>	<u>16%</u>	<u>\$ 229,234</u>

Americas

Americas net sales increased during 2019 compared to 2018 due primarily to higher Services and Wearables, Home and Accessories net sales, partially offset by lower iPhone net sales. The weakness in foreign currencies relative to the U.S. dollar had an unfavorable impact on Americas net sales during 2019.

Europe

Europe net sales decreased during 2019 compared to 2018 due to lower iPhone net sales, partially offset by higher Wearables, Home and Accessories and Services net sales. The weakness in foreign currencies relative to the U.S. dollar had a significant unfavorable impact on Europe net sales during 2019.

Greater China

Greater China net sales decreased during 2019 compared to 2018 due primarily to lower iPhone net sales, partially offset by higher Wearables, Home and Accessories and Services net sales. The weakness in foreign currencies relative to the U.S. dollar had an unfavorable impact on Greater China net sales during 2019.

Japan

Japan net sales decreased during 2019 compared to 2018 due to lower iPhone net sales, partially offset by higher Services and Wearables, Home and Accessories net sales. The value of the Japanese Yen relative to the U.S. dollar had a favorable impact on Japan net sales during 2019.

Rest of Asia Pacific

Rest of Asia Pacific net sales increased during 2019 compared to 2018 due primarily to higher Wearables, Home and Accessories and Services net sales, partially offset by lower iPhone net sales. The weakness in foreign currencies relative to the U.S. dollar had a significant unfavorable impact on Rest of Asia Pacific net sales during 2019.

Gross Margin

Products and Services gross margin and gross margin percentage for 2019, 2018 and 2017 were as follows (dollars in millions):

	2019	2018	2017
Gross margin:			
Products	\$ 68,887	\$ 77,683	\$ 70,197
Services	29,505	24,156	17,989
Total gross margin	\$ 98,392	\$ 101,839	\$ 88,186
Gross margin percentage:			
Products	32.2%	34.4%	35.7%
Services	63.7%	60.8%	55.0%
Total gross margin percentage	37.8%	38.3%	38.5%

Products Gross Margin

Products gross margin and Products gross margin percentage decreased during 2019 compared to 2018 due primarily to lower iPhone unit sales and the weakness in foreign currencies relative to the U.S. dollar.

Products gross margin increased during 2018 compared to 2017 due primarily to a favorable shift in mix of iPhones and the strength in foreign currencies relative to the U.S. dollar, partially offset by higher product cost structures. Year-over-year Products gross margin percentage decreased during 2018 due primarily to higher product cost structures, partially offset by the strength in foreign currencies relative to the U.S. dollar.

Services Gross Margin

Year-over-year Services gross margin increased during 2019 and 2018 due primarily to higher Services net sales and a different services mix. Year-over-year Services gross margin percentage increased during 2019 and 2018 due primarily to a different services mix and leverage of the Company's services fixed cost structure from higher Services net sales.

The Company's future gross margins can be impacted by a variety of factors, as set forth 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 remain under downward pressure.

Operating Expenses

Operating expenses for 2019, 2018 and 2017 were as follows (dollars in millions):

	2019	Change	2018	Change	2017
Research and development	\$ 16,217	14%	\$ 14,236	23%	\$ 11,581
Percentage of total net sales	6%		5%		5%
Selling, general and administrative	\$ 18,245	9%	\$ 16,705	9%	\$ 15,261
Percentage of total net sales	7%		6%		7%
Total operating expenses	\$ 34,462	11%	\$ 30,941	15%	\$ 26,842
Percentage of total net sales	13%		12%		12%

Research and Development

The year-over-year growth in R&D expense in 2019 was driven primarily by increases in headcount-related expenses. The Company continues to believe that focused investments in R&D are critical to its future growth and competitive position in the marketplace, and to the development of new and updated products and services that are central to the Company's core business strategy.

Selling, General and Administrative

The year-over-year growth in selling, general and administrative expense in 2019 was driven primarily by increases in headcount-related expenses and higher spending on marketing and advertising and infrastructure-related costs.

Other Income/(Expense), Net

Other income/(expense), net (“OI&E”) for 2019, 2018 and 2017 was as follows (dollars in millions):

	2019	Change	2018	Change	2017
Interest and dividend income	\$ 4,961		\$ 5,686		\$ 5,201
Interest expense	(3,576)		(3,240)		(2,323)
Other income/(expense), net	422		(441)		(133)
Total other income/(expense), net	\$ 1,807	(10)%	\$ 2,005	(27)%	\$ 2,745

The year-over-year decrease in OI&E during 2019 was due primarily to lower interest income and higher interest expense, partially offset by the impact of foreign exchange–related items. The weighted-average interest rate earned by the Company on its cash, cash equivalents and marketable securities was 2.19% and 2.16% in 2019 and 2018, respectively.

Provision for Income Taxes

Provision for income taxes, effective tax rate and statutory federal income tax rate for 2019, 2018 and 2017 were as follows (dollars in millions):

	2019	2018	2017
Provision for income taxes	\$ 10,481	\$ 13,372	\$ 15,738
Effective tax rate	15.9%	18.3%	24.6%
Statutory federal income tax rate	21.0%	24.5%	35.0%

On December 22, 2017, the U.S. enacted the Tax Cuts and Jobs Act (the “Act”), which significantly changed U.S. tax law. The Act lowered the Company’s U.S. statutory federal income tax rate from 35% to 21% effective January 1, 2018, while also imposing a deemed repatriation tax on previously deferred foreign income. By operation of law, the Company applied a blended U.S. statutory federal income tax rate of 24.5% for 2018 (the “2018 blended U.S. tax rate”). The Act also created a new minimum tax on certain foreign earnings.

The Company’s effective tax rate for 2019 was lower than the statutory federal income tax rate due primarily to the lower tax rate on foreign earnings and tax benefits from share-based compensation. The Company’s effective tax rate for 2018 was lower than the 2018 blended U.S. tax rate due primarily to the lower tax rate on foreign earnings, partially offset by the remeasurement of deferred tax assets and liabilities as a result of the Act.

The Company’s effective tax rate for 2019 was lower compared to 2018 due primarily to a lower statutory federal income tax rate in 2019 and the impact of the Act in 2018, partially offset by higher taxes on foreign earnings in 2019.

As of September 28, 2019, the Company had net deferred tax assets arising from deductible temporary differences and tax credits of \$14.3 billion and deferred tax liabilities of \$6.2 billion. Management believes it is more likely than not that forecasted income, including income that may be generated as a result of certain tax planning strategies, together with future reversals of existing taxable temporary differences, will be sufficient to recover the net deferred tax assets. The Company will continue to evaluate the amount of the valuation allowance, if any, by assessing the realizability of deferred tax assets.

Recent Accounting Pronouncements

Hedging

In August 2017, the Financial Accounting Standards Board (the “FASB”) issued Accounting Standards Update (“ASU”) No. 2017-12, *Derivatives and Hedging (Topic 815): Targeted Improvements to Accounting for Hedging Activities* (“ASU 2017-12”). ASU 2017-12 expands component and fair value hedging, specifies the presentation of the effects of hedging instruments, and eliminates the separate measurement and presentation of hedge ineffectiveness. The Company will adopt ASU 2017-12 in its first quarter of 2020 utilizing the modified retrospective transition method. Based on the Company’s derivative portfolio and hedging strategies, the adoption of ASU 2017-12 is not expected to have a material impact on its consolidated financial statements.

Financial Instruments

In June 2016, the FASB issued ASU No. 2016-13, *Financial Instruments – Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments* (“ASU 2016-13”), which modifies the measurement of expected credit losses on certain financial instruments. The Company will adopt ASU 2016-13 in its first quarter of 2021 utilizing the modified retrospective transition method. Based on the composition of the Company’s investment portfolio, current market conditions, and historical credit loss activity, the adoption of ASU 2016-13 is not expected to have a material impact on its consolidated financial statements.

Leases

In February 2016, the FASB issued ASU No. 2016-02, *Leases (Topic 842)* (“ASU 2016-02”), which modifies lease accounting for lessees to increase transparency and comparability by recording lease assets and liabilities for operating leases and disclosing key information about leasing arrangements. The Company will adopt ASU 2016-02 utilizing the modified retrospective transition method through a cumulative-effect adjustment at the beginning of its first quarter of 2020. Upon adoption, the Company anticipates recording lease-related assets and liabilities of approximately \$8 billion on its Condensed Consolidated Balance Sheet, with no material impact to its Condensed Consolidated Statements of Operations.

Liquidity and Capital Resources

The following table presents selected financial information and statistics as of and for the years ended September 28, 2019, September 29, 2018 and September 30, 2017 (in millions):

	2019	2018	2017
Cash, cash equivalents and marketable securities (1)	\$ 205,898	\$ 237,100	\$ 268,895
Property, plant and equipment, net	\$ 37,378	\$ 41,304	\$ 33,783
Commercial paper	\$ 5,980	\$ 11,964	\$ 11,977
Total term debt	\$ 102,067	\$ 102,519	\$ 103,703
Working capital	\$ 57,101	\$ 15,410	\$ 28,792
Cash generated by operating activities	\$ 69,391	\$ 77,434	\$ 64,225
Cash generated by/(used in) investing activities	\$ 45,896	\$ 16,066	\$ (46,446)
Cash used in financing activities	\$ (90,976)	\$ (87,876)	\$ (17,974)

(1) As of September 28, 2019 and September 29, 2018, total cash, cash equivalents and marketable securities included \$18.9 billion and \$20.3 billion, respectively, that was restricted from general use, related to the State Aid Decision (refer to Note 5, “Income Taxes” in the Notes to Consolidated Financial Statements in Part II, Item 8 of this Form 10-K) and other agreements.

The Company believes its existing balances of cash, cash equivalents and marketable securities, along with commercial paper and other short-term liquidity arrangements, will be sufficient to satisfy its working capital needs, capital asset purchases, dividends, share repurchases, debt repayments and other liquidity requirements associated with its existing operations over the next 12 months.

In connection with the State Aid Decision, as of September 28, 2019, the entire adjusted recovery amount of €12.9 billion plus interest of €1.2 billion was funded into escrow, where it will remain restricted from general use pending the conclusion of all appeals. Further information regarding the State Aid Decision can be found in Part II, Item 8 of this Form 10-K in the Notes to Consolidated Financial Statements in Note 5, “Income Taxes.”

The Company’s marketable securities investment portfolio is primarily invested 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.

During 2019, cash generated by operating activities of \$69.4 billion was a result of \$55.3 billion of net income and non-cash adjustments to net income of \$17.6 billion, partially offset by a decrease in the net change in operating assets and liabilities of \$3.5 billion. Cash generated by investing activities of \$45.9 billion during 2019 consisted primarily of proceeds from sales and maturities of marketable securities, net of purchases, of \$57.5 billion, partially offset by cash used to acquire property, plant and equipment of \$10.5 billion. Cash used in financing activities of \$91.0 billion during 2019 consisted primarily of cash used to repurchase common stock of \$66.9 billion, cash used to pay dividends and dividend equivalents of \$14.1 billion, cash used to repay term debt of \$8.8 billion and net repayments of commercial paper of \$6.0 billion, partially offset by net proceeds from the issuance of term debt of \$7.0 billion.

During 2018, cash generated by operating activities of \$77.4 billion was a result of \$59.5 billion of net income and an increase in the net change in operating assets and liabilities of \$34.7 billion, partially offset by non-cash adjustments to net income of \$16.8 billion. Cash generated by investing activities of \$16.1 billion during 2018 consisted primarily of proceeds from maturities and sales of marketable securities, net of purchases, of \$32.4 billion, partially offset by cash used to acquire property, plant and equipment of \$13.3 billion. Cash used in financing activities of \$87.9 billion during 2018 consisted primarily of cash used to repurchase common stock of \$72.7 billion, cash used to pay dividends and dividend equivalents of \$13.7 billion and cash used to repay term debt of \$6.5 billion, partially offset by net proceeds from the issuance of term debt of \$7.0 billion.

Capital Assets

The Company's capital expenditures were \$7.6 billion during 2019, which included product tooling and manufacturing process equipment; data centers; corporate facilities and infrastructure, including information systems hardware, software and enhancements; and retail store facilities.

Debt

The Company issues unsecured short-term promissory notes ("Commercial Paper") pursuant to a commercial paper program. The Company uses the net proceeds from the commercial paper program for general corporate purposes, including dividends and share repurchases. As of September 28, 2019, the Company had \$6.0 billion of Commercial Paper outstanding, with a weighted-average interest rate of 2.24% and maturities generally less than nine months.

As of September 28, 2019, the Company had outstanding floating- and fixed-rate notes with varying maturities for an aggregate principal amount of \$101.7 billion (collectively the "Notes"). During 2019, the Company issued \$7.0 billion and repaid \$8.8 billion of Notes. The Company has entered, and in the future may enter, into interest rate swaps to manage interest rate risk on the Notes. In addition, the Company has entered, and in the future may enter, into foreign currency swaps to manage foreign currency risk on the Notes.

Further information regarding the Company's debt issuances and related hedging activity can be found in Part II, Item 8 of this Form 10-K in the Notes to Consolidated Financial Statements in Note 3, "Financial Instruments" and Note 6, "Debt."

Capital Return Program

On April 30, 2019, the Company announced the Board of Directors increased the current share repurchase program authorization from \$100 billion to \$175 billion of the Company's common stock, of which \$96.1 billion had been utilized as of September 28, 2019. During 2019, the Company repurchased 345.2 million shares of its common stock for \$67.1 billion, including 62.0 million shares delivered under a \$12.0 billion ASR dated February 2019, which settled in August 2019. The Company's share repurchase program does not obligate it to acquire any specific number of shares. Under this 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.

On April 30, 2019, the Company also announced the Board of Directors raised the Company's quarterly cash dividend from \$0.73 to \$0.77 per share, beginning with the dividend paid during the third quarter of 2019. The Company intends to increase its dividend on an annual basis, subject to declaration by the Board of Directors.

Contractual Obligations

The following table presents certain payments due by the Company as of September 28, 2019, and excludes amounts already recorded on the Consolidated Balance Sheet, except for term debt and the deemed repatriation tax payable (in millions):

	Payments due in 2020	Payments due in 2021–2022	Payments due in 2023–2024	Payments due after 2024	Total
Term debt	\$ 10,270	\$ 18,278	\$ 19,329	\$ 53,802	\$ 101,679
Operating leases	1,306	2,413	1,746	5,373	10,838
Manufacturing purchase obligations (1)	40,076	1,974	808	69	42,927
Other purchase obligations	3,744	2,271	572	41	6,628
Deemed repatriation tax payable	—	4,350	8,501	16,655	29,506
Total	\$ 55,396	\$ 29,286	\$ 30,956	\$ 75,940	\$ 191,578

(1) Represents amount expected to be paid under manufacturing-related supplier arrangements, which are primarily noncancelable.

Operating Leases

The Company's retail store and other facility leases typically have original terms not exceeding 10 years and generally contain multi-year renewal options.

Manufacturing Purchase Obligations

The Company utilizes several outsourcing partners to manufacture sub-assemblies for the Company's products and to perform final assembly and testing of finished products. These outsourcing partners acquire components and build product based on demand information supplied by the Company, which typically covers periods up to 150 days. The Company also obtains individual components for its products from a wide variety of individual suppliers.

Other Purchase Obligations

The Company's other purchase obligations consist of noncancelable obligations to acquire capital assets, including product tooling and manufacturing process equipment, and noncancelable obligations related to advertising, licensing, R&D, Internet and telecommunications services, content creation and other activities.

Deemed Repatriation Tax Payable

As of September 28, 2019, a significant portion of the other non-current liabilities in the Company's Consolidated Balance Sheet consisted of the deemed repatriation tax payable imposed by the Act. The Company plans to pay the deemed repatriation tax payable in installments in accordance with the Act.

Other Non-Current Liabilities

The Company's remaining other non-current liabilities primarily consist of items for which the Company is unable to make a reasonably reliable estimate of the timing or amount of payments; therefore, such amounts are not included in the above contractual obligation table.

Critical Accounting Policies and 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. Actual results may differ from these estimates, and such differences may be material.

Management believes the Company's critical accounting policies and estimates are those related to revenue recognition, valuation of manufacturing-related assets and estimation of inventory purchase commitment cancellation fees, warranty costs, income taxes, and legal and other contingencies. Management considers these policies critical because they are both important to the portrayal of the Company's financial condition and operating results, and they require management to make judgments and estimates about inherently uncertain matters. The Company's senior management has reviewed these critical accounting policies and related disclosures with the Audit and Finance Committee of the Company's Board of Directors.

Revenue Recognition

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 stand-alone selling prices ("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 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.

The Company's process for determining estimated SSPs involves management's judgment and considers multiple factors that may vary over time depending upon the unique facts and circumstances related to each deliverable. Should future facts and circumstances change, the Company's SSPs and the future rate of related amortization for product-related bundled services and unspecified software upgrade rights related to future sales of these devices could change. Factors subject to change include the nature of the product-related bundled services and unspecified software upgrade rights offered, their estimated value and the estimated period they are expected to be provided.

Valuation of Manufacturing-Related Assets and Estimation of Inventory Purchase Commitment Cancellation Fees

The Company invests in manufacturing-related assets, including capital assets held at its suppliers' facilities and prepayments provided to certain of its suppliers associated with long-term agreements to secure the supply of inventory. The Company also accrues estimated purchase commitment cancellation fees related to inventory orders that have been canceled or are expected to be canceled. The Company's estimates of future product development plans and demand for its products are the key inputs in the determination of the recoverability of manufacturing-related assets and the assessment of the adequacy of any purchase commitment cancellation fee accruals. If there is an abrupt and substantial decline in estimated demand for one or more of the Company's products, a change in the Company's product development plans, or an unanticipated change in technological requirements for any of the Company's products, the Company may be required to record write-downs or impairments of manufacturing-related assets or accrue purchase commitment cancellation fees.

Warranty Costs

The Company offers limited warranties on its new hardware products and on parts used to repair its hardware products, and customers may purchase extended service coverage, where available, on many of the Company's hardware products. The Company accrues the estimated cost of warranties in the period the related revenue is recognized based on historical and projected warranty claim rates, historical and projected cost per claim and knowledge of specific product failures outside the Company's typical experience. The Company regularly reviews these estimates and adjusts the amounts as necessary. If actual product failure rates or repair costs differ from estimates, revisions to the estimated warranty liabilities would be required.

Income Taxes

The Company recognizes tax benefits from uncertain tax positions only if it is more likely than not that the tax position will be sustained on examination by the taxing authorities, based on the technical merits of the position. The tax benefits recognized in the financial statements from such positions are then measured based on the largest benefit that has a greater-than-50% likelihood of being realized upon ultimate settlement. The calculation of tax liabilities involves significant judgment in estimating the impact of uncertainties in the application of GAAP and complex tax laws. 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

As discussed 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," the Company is subject to various legal proceedings and claims that arise in the ordinary course of business. 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. Except as described 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 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 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, the Company's interest income and expense are most sensitive to 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 28, 2019 and September 29, 2018, a hypothetical 100 basis point increase in interest rates across all maturities would result in a \$2.8 billion and \$4.9 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 28, 2019 and September 29, 2018, the Company had outstanding floating- and fixed-rate notes with varying maturities for an aggregate carrying amount of \$102.1 billion and \$102.5 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 28, 2019 and September 29, 2018 to increase by \$325 million and \$399 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, but not limited to, 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 \$452 million as of September 28, 2019, compared to a maximum one-day loss in fair value of \$592 million as of September 29, 2018. 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 28, 2019 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 28, 2019	September 29, 2018	September 30, 2017
Net sales:			
Products	\$ 213,883	\$ 225,847	\$ 196,534
Services	46,291	39,748	32,700
Total net sales	260,174	265,595	229,234
Cost of sales:			
Products	144,996	148,164	126,337
Services	16,786	15,592	14,711
Total cost of sales	161,782	163,756	141,048
Gross margin	98,392	101,839	88,186
Operating expenses:			
Research and development	16,217	14,236	11,581
Selling, general and administrative	18,245	16,705	15,261
Total operating expenses	34,462	30,941	26,842
Operating income	63,930	70,898	61,344
Other income/(expense), net	1,807	2,005	2,745
Income before provision for income taxes	65,737	72,903	64,089
Provision for income taxes	10,481	13,372	15,738
Net income	\$ 55,256	\$ 59,531	\$ 48,351
Earnings per share:			
Basic	\$ 11.97	\$ 12.01	\$ 9.27
Diluted	\$ 11.89	\$ 11.91	\$ 9.21
Shares used in computing earnings per share:			
Basic	4,617,834	4,955,377	5,217,242
Diluted	4,648,913	5,000,109	5,251,692

See accompanying Notes to Consolidated Financial Statements.

Apple Inc.

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

(In millions)

	Years ended		
	September 28, 2019	September 29, 2018	September 30, 2017
Net income	\$ 55,256	\$ 59,531	\$ 48,351
Other comprehensive income/(loss):			
Change in foreign currency translation, net of tax	(408)	(525)	224
Change in unrealized gains/losses on derivative instruments, net of tax:			
Change in fair value of derivatives	(661)	523	1,315
Adjustment for net (gains)/losses realized and included in net income	23	382	(1,477)
Total change in unrealized gains/losses on derivative instruments	(638)	905	(162)
Change in unrealized gains/losses on marketable securities, net of tax:			
Change in fair value of marketable securities	3,802	(3,407)	(782)
Adjustment for net (gains)/losses realized and included in net income	25	1	(64)
Total change in unrealized gains/losses on marketable securities	3,827	(3,406)	(846)
Total other comprehensive income/(loss)	2,781	(3,026)	(784)
Total comprehensive income	\$ 58,037	\$ 56,505	\$ 47,567

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 28, 2019	September 29, 2018
ASSETS:		
Current assets:		
Cash and cash equivalents	\$ 48,844	\$ 25,913
Marketable securities	51,713	40,388
Accounts receivable, net	22,926	23,186
Inventories	4,106	3,956
Vendor non-trade receivables	22,878	25,809
Other current assets	12,352	12,087
Total current assets	162,819	131,339
Non-current assets:		
Marketable securities	105,341	170,799
Property, plant and equipment, net	37,378	41,304
Other non-current assets	32,978	22,283
Total non-current assets	175,697	234,386
Total assets	\$ 338,516	\$ 365,725
LIABILITIES AND SHAREHOLDERS' EQUITY:		
Current liabilities:		
Accounts payable	\$ 46,236	\$ 55,888
Other current liabilities	37,720	33,327
Deferred revenue	5,522	5,966
Commercial paper	5,980	11,964
Term debt	10,260	8,784
Total current liabilities	105,718	115,929
Non-current liabilities:		
Term debt	91,807	93,735
Other non-current liabilities	50,503	48,914
Total non-current liabilities	142,310	142,649
Total liabilities	248,028	258,578
Commitments and contingencies		
Shareholders' equity:		
Common stock and additional paid-in capital, \$0.00001 par value: 12,600,000 shares authorized; 4,443,236 and 4,754,986 shares issued and outstanding, respectively	45,174	40,201
Retained earnings	45,898	70,400
Accumulated other comprehensive income/(loss)	(584)	(3,454)
Total shareholders' equity	90,488	107,147
Total liabilities and shareholders' equity	\$ 338,516	\$ 365,725

See accompanying Notes to Consolidated Financial Statements.

Apple Inc.

CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY

(In millions, except per share amounts)

	Years ended		
	September 28, 2019	September 29, 2018	September 30, 2017
Total shareholders' equity, beginning balances	\$ 107,147	\$ 134,047	\$ 128,249
Common stock and additional paid-in capital:			
Beginning balances	40,201	35,867	31,251
Common stock issued	781	669	555
Common stock withheld related to net share settlement of equity awards	(2,002)	(1,778)	(1,468)
Share-based compensation	6,194	5,443	4,909
Tax benefit from equity awards, including transfer pricing adjustments	—	—	620
Ending balances	45,174	40,201	35,867
Retained earnings:			
Beginning balances	70,400	98,330	96,364
Net income	55,256	59,531	48,351
Dividends and dividend equivalents declared	(14,129)	(13,735)	(12,803)
Common stock withheld related to net share settlement of equity awards	(1,029)	(948)	(581)
Common stock repurchased	(67,101)	(73,056)	(33,001)
Cumulative effects of changes in accounting principles	2,501	278	—
Ending balances	45,898	70,400	98,330
Accumulated other comprehensive income/(loss):			
Beginning balances	(3,454)	(150)	634
Other comprehensive income/(loss)	2,781	(3,026)	(784)
Cumulative effects of changes in accounting principles	89	(278)	—
Ending balances	(584)	(3,454)	(150)
Total shareholders' equity, ending balances	\$ 90,488	\$ 107,147	\$ 134,047
Dividends and dividend equivalents declared per share or RSU	\$ 3.00	\$ 2.72	\$ 2.40

See accompanying Notes to Consolidated Financial Statements.

Apple Inc.
CONSOLIDATED STATEMENTS OF CASH FLOWS
(In millions)

	Years ended		
	September 28, 2019	September 29, 2018	September 30, 2017
Cash, cash equivalents and restricted cash, beginning balances	\$ 25,913	\$ 20,289	\$ 20,484
Operating activities:			
Net income	55,256	59,531	48,351
Adjustments to reconcile net income to cash generated by operating activities:			
Depreciation and amortization	12,547	10,903	10,157
Share-based compensation expense	6,068	5,340	4,840
Deferred income tax expense/(benefit)	(340)	(32,590)	5,966
Other	(652)	(444)	(166)
Changes in operating assets and liabilities:			
Accounts receivable, net	245	(5,322)	(2,093)
Inventories	(289)	828	(2,723)
Vendor non-trade receivables	2,931	(8,010)	(4,254)
Other current and non-current assets	873	(423)	(5,318)
Accounts payable	(1,923)	9,175	8,966
Deferred revenue	(625)	(3)	(593)
Other current and non-current liabilities	(4,700)	38,449	1,092
Cash generated by operating activities	69,391	77,434	64,225
Investing activities:			
Purchases of marketable securities	(39,630)	(71,356)	(159,486)
Proceeds from maturities of marketable securities	40,102	55,881	31,775
Proceeds from sales of marketable securities	56,988	47,838	94,564
Payments for acquisition of property, plant and equipment	(10,495)	(13,313)	(12,451)
Payments made in connection with business acquisitions, net	(624)	(721)	(329)
Purchases of non-marketable securities	(1,001)	(1,871)	(521)
Proceeds from non-marketable securities	1,634	353	126
Other	(1,078)	(745)	(124)
Cash generated by/(used in) investing activities	45,896	16,066	(46,446)
Financing activities:			
Proceeds from issuance of common stock	781	669	555
Payments for taxes related to net share settlement of equity awards	(2,817)	(2,527)	(1,874)
Payments for dividends and dividend equivalents	(14,119)	(13,712)	(12,769)
Repurchases of common stock	(66,897)	(72,738)	(32,900)
Proceeds from issuance of term debt, net	6,963	6,969	28,662
Repayments of term debt	(8,805)	(6,500)	(3,500)
Proceeds from/(Repayments of) commercial paper, net	(5,977)	(37)	3,852
Other	(105)	—	—
Cash used in financing activities	(90,976)	(87,876)	(17,974)
Increase/(Decrease) in cash, cash equivalents and restricted cash	24,311	5,624	(195)
Cash, cash equivalents and restricted cash, ending balances	\$ 50,224	\$ 25,913	\$ 20,289
Supplemental cash flow disclosure:			
Cash paid for income taxes, net	\$ 15,263	\$ 10,417	\$ 11,591
Cash paid for interest	\$ 3,423	\$ 3,022	\$ 2,092

See accompanying Notes to Consolidated Financial Statements.

Notes to Consolidated Financial Statements

Note 1 – Summary of Significant Accounting Policies

Basis of Presentation and Preparation

The accompanying 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. In the opinion of the Company’s management, the consolidated financial statements reflect all adjustments, which are normal and recurring in nature, necessary for fair financial statement presentation. 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. The Company’s fiscal years 2019 and 2018 spanned 52 weeks each, whereas fiscal year 2017 included 53 weeks. A 14th week was included in the first fiscal quarter of 2017, as is done every five or six years, to realign the Company’s fiscal quarters with calendar quarters. 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.

Recently Adopted Accounting Pronouncements

Revenue Recognition

In the first quarter of 2019, the Company adopted the Financial Accounting Standards Board’s (the “FASB”) Accounting Standards Update (“ASU”) No. 2014-09, *Revenue from Contracts with Customers (Topic 606)* (“ASU 2014-09”), and additional ASUs issued to clarify the guidance in ASU 2014-09 (collectively the “new revenue standard”), which amends the existing accounting standards for revenue recognition. The Company adopted the new revenue standard utilizing the full retrospective transition method. The Company did not restate total net sales in the prior periods presented, as the adoption of the new revenue standard did not have a material impact on previously reported amounts.

Additionally, beginning in the first quarter of 2019, the Company classified the amortization of the deferred value of Maps, Siri and free iCloud services, which are bundled in the sales price of iPhone, Mac, iPad and certain other products, in Services net sales. Historically, the Company classified the amortization of these amounts in Products net sales consistent with its management reporting framework. As a result, Products and Services net sales for 2018 and 2017 were reclassified to conform to the 2019 presentation.

Financial Instruments

In the first quarter of 2019, the Company adopted FASB ASU No. 2016-01, *Financial Instruments – Overall (Subtopic 825-10): Recognition and Measurement of Financial Assets and Financial Liabilities* (“ASU 2016-01”), which updates certain aspects of the recognition, measurement, presentation and disclosure of financial instruments. The adoption of ASU 2016-01 did not have a material impact on the Company’s consolidated financial statements.

Income Taxes

In the first quarter of 2019, the Company adopted FASB ASU No. 2016-16, *Income Taxes (Topic 740): Intra-Entity Transfers of Assets Other Than Inventory* (“ASU 2016-16”), which requires the recognition of the income tax consequences of an intra-entity transfer of an asset, other than inventory, when the transfer occurs. The Company adopted ASU 2016-16 utilizing the modified retrospective transition method. Upon adoption, the Company recorded \$2.7 billion of net deferred tax assets, reduced other non-current assets by \$128 million, and increased retained earnings by \$2.6 billion on its Consolidated Balance Sheet. The Company will recognize incremental deferred income tax expense as these net deferred tax assets are utilized.

Restricted Cash

In the first quarter of 2019, the Company adopted FASB ASU No. 2016-18, *Statement of Cash Flows (Topic 230): Restricted Cash* (“ASU 2016-18”), which enhances and clarifies the guidance on the classification and presentation of restricted cash in the statement of cash flows and requires additional disclosures about restricted cash balances.

Advertising Costs

Advertising costs are expensed as incurred and included in selling, general and administrative expenses.

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 2019, 2018 and 2017 (net income in millions and shares in thousands):

	2019	2018	2017
Numerator:			
Net income	\$ 55,256	\$ 59,531	\$ 48,351
Denominator:			
Weighted-average basic shares outstanding	4,617,834	4,955,377	5,217,242
Effect of dilutive securities	31,079	44,732	34,450
Weighted-average diluted shares	4,648,913	5,000,109	5,251,692
Basic earnings per share	\$ 11.97	\$ 12.01	\$ 9.27
Diluted earnings per share	\$ 11.89	\$ 11.91	\$ 9.21

The Company applies the treasury stock method to determine the dilutive effect of potentially dilutive securities. Potentially dilutive securities representing 15.5 million shares of common stock were excluded from the computation of diluted earnings per share for 2019 because their effect would have been antidilutive.

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. Unrealized gains and losses on marketable debt securities classified as available-for-sale are recognized in other comprehensive income/(loss) ("OCI").

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 Company's marketable equity securities are measured at fair value with gains and losses recognized in other income/(expense), net ("OI&E").

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

Inventories

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

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 lesser of 30 years or the remaining life of the underlying building; between one and five years for machinery and equipment, including product tooling and manufacturing process equipment; and the shorter of 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 three to five years. Depreciation and amortization expense on property and equipment was \$11.3 billion, \$9.3 billion and \$8.2 billion during 2019, 2018 and 2017, respectively.

Non-cash investing activities involving property, plant and equipment resulted in a net increase/(decrease) to accounts payable and other current liabilities of \$(2.9) billion and \$3.4 billion during 2019 and 2018, respectively.

Non-Marketable Securities

The Company has elected to apply the measurement alternative to equity securities without readily determinable fair values. As such, the Company's non-marketable equity securities are measured at cost, less any impairment, and are adjusted for changes in fair value resulting from observable transactions for identical or similar investments of the same issuer. Gains and losses on non-marketable equity securities are recognized in OI&E.

Restricted Cash and Restricted Marketable Securities

The Company considers cash and marketable securities to be restricted when withdrawal or general use is legally restricted. The Company records restricted cash as other assets in the Consolidated Balance Sheets, and determines current or non-current classification based on the expected duration of the restriction. The Company records restricted marketable securities as current or non-current marketable securities in the Consolidated Balance Sheets based on the classification of the underlying securities.

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.

Note 2 – 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 capable of being 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 has elected not to 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, but not limited to, 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, Mac App Store, TV App Store and Watch 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 has elected to record 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.

Deferred Revenue

As of September 28, 2019 and September 29, 2018, the Company had total deferred revenue of \$8.1 billion and \$8.8 billion, respectively. As of September 28, 2019, the Company expects 68% of total deferred revenue to be realized in less than a year, 25% within one-to-two years, 6% within two-to-three years and 1% in greater than three years.

Disaggregated Revenue

Net sales disaggregated by significant products and services for 2019, 2018 and 2017 were as follows (in millions):

	2019	2018	2017
iPhone (1)	\$ 142,381	\$ 164,888	\$ 139,337
Mac (1)	25,740	25,198	25,569
iPad (1)	21,280	18,380	18,802
Wearables, Home and Accessories (1)(2)	24,482	17,381	12,826
Services (3)	46,291	39,748	32,700
Total net sales (4)	<u>\$ 260,174</u>	<u>\$ 265,595</u>	<u>\$ 229,234</u>

- (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, iPod touch and Apple-branded and third-party accessories.
- (3) Services net sales include sales from the Company's digital content stores and streaming services, AppleCare, licensing and other services. Services net sales also include amortization of the deferred value of Maps, Siri and free iCloud services, which are bundled in the sales price of certain products.
- (4) Includes \$5.9 billion of revenue recognized in 2019 that was included in deferred revenue as of September 29, 2018, \$5.8 billion of revenue recognized in 2018 that was included in deferred revenue as of September 30, 2017, and \$6.3 billion of revenue recognized in 2017 that was included in deferred revenue as of September 24, 2016.

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 2019, 2018 and 2017.

Note 3 – Financial Instruments

Cash, Cash Equivalents and Marketable Securities

The following tables show the Company's cash and marketable securities by significant investment category as of September 28, 2019 and September 29, 2018 (in millions):

	2019						
	Adjusted Cost	Unrealized Gains	Unrealized Losses	Fair Value	Cash and Cash Equivalents	Short-Term Marketable Securities	Long-Term Marketable Securities
Cash	\$ 12,204	\$ —	\$ —	\$ 12,204	\$ 12,204	\$ —	\$ —
Level 1 (1):							
Money market funds	15,897	—	—	15,897	15,897	—	—
Subtotal	15,897	—	—	15,897	15,897	—	—
Level 2 (2):							
U.S. Treasury securities	30,293	33	(62)	30,264	6,165	9,817	14,282
U.S. agency securities	9,767	1	(3)	9,765	6,489	2,249	1,027
Non-U.S. government securities	19,821	337	(50)	20,108	749	3,168	16,191
Certificates of deposit and time deposits	4,041	—	—	4,041	2,024	1,922	95
Commercial paper	12,433	—	—	12,433	5,193	7,240	—
Corporate debt securities	85,383	756	(92)	86,047	123	26,127	59,797
Municipal securities	958	8	(1)	965	—	68	897
Mortgage- and asset-backed securities	14,180	67	(73)	14,174	—	1,122	13,052
Subtotal	176,876	1,202	(281)	177,797	20,743	51,713	105,341
Total (3)	\$ 204,977	\$ 1,202	\$ (281)	\$ 205,898	\$ 48,844	\$ 51,713	\$ 105,341
	2018						
	Adjusted Cost	Unrealized Gains	Unrealized Losses	Fair Value	Cash and Cash Equivalents	Short-Term Marketable Securities	Long-Term Marketable Securities
Cash	\$ 11,575	\$ —	\$ —	\$ 11,575	\$ 11,575	\$ —	\$ —
Level 1 (1):							
Money market funds	8,083	—	—	8,083	8,083	—	—
Mutual funds	799	—	(116)	683	—	683	—
Subtotal	8,882	—	(116)	8,766	8,083	683	—
Level 2 (2):							
U.S. Treasury securities	47,296	—	(1,202)	46,094	1,613	7,606	36,875
U.S. agency securities	4,127	—	(48)	4,079	1,732	360	1,987
Non-U.S. government securities	21,601	49	(250)	21,400	—	3,355	18,045
Certificates of deposit and time deposits	3,074	—	—	3,074	1,247	1,330	497
Commercial paper	2,573	—	—	2,573	1,663	910	—
Corporate debt securities	123,001	152	(2,038)	121,115	—	25,162	95,953
Municipal securities	946	—	(12)	934	—	178	756
Mortgage- and asset-backed securities	18,105	8	(623)	17,490	—	804	16,686
Subtotal	220,723	209	(4,173)	216,759	6,255	39,705	170,799
Total (3)	\$ 241,180	\$ 209	\$ (4,289)	\$ 237,100	\$ 25,913	\$ 40,388	\$ 170,799

(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 28, 2019 and September 29, 2018, total cash, cash equivalents and marketable securities included \$18.9 billion and \$20.3 billion, respectively, that was restricted from general use, related to the State Aid Decision (refer to Note 5, "Income Taxes") and other agreements.

The Company may sell certain of its marketable debt securities prior to their stated maturities for reasons including, but not limited to, managing liquidity, credit risk, duration and asset allocation. The maturities of the Company's long-term marketable debt securities generally range from one to five years.

The following tables show information about the Company's marketable securities that had been in a continuous unrealized loss position for less than 12 months and for 12 months or greater as of September 28, 2019 and September 29, 2018 (in millions):

	2019		
	Continuous Unrealized Losses		
	Less than 12 Months	12 Months or Greater	Total
Fair value of marketable debt securities	\$ 28,151	\$ 28,167	\$ 56,318
Unrealized losses	\$ (138)	\$ (143)	\$ (281)

	2018		
	Continuous Unrealized Losses		
	Less than 12 Months	12 Months or Greater	Total
Fair value of marketable securities	\$ 126,238	\$ 60,599	\$ 186,837
Unrealized losses	\$ (2,400)	\$ (1,889)	\$ (4,289)

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. Fair values were determined for each individual security in the investment portfolio. When evaluating a marketable debt security for other-than-temporary impairment, the Company reviews factors such as the duration and extent to which the fair value of the security is less than its cost, the financial condition of the issuer and any changes thereto, and the Company's intent to sell, or whether it will more likely than not be required to sell, the security before recovery of its amortized cost basis. As of September 28, 2019, the Company does not consider any of its marketable debt securities to be other-than-temporarily impaired.

Non-Marketable Securities

The Company holds non-marketable equity securities of certain privately held companies without readily determinable fair values. As of September 28, 2019, the Company's non-marketable equity securities had a carrying value of \$2.9 billion.

Restricted Cash

A reconciliation of the Company's cash and cash equivalents in the Consolidated Balance Sheet to cash, cash equivalents and restricted cash in the Consolidated Statement of Cash Flows as of September 28, 2019 is as follows (in millions):

	2019
Cash and cash equivalents	\$ 48,844
Restricted cash included in other current assets	23
Restricted cash included in other non-current assets	1,357
Cash, cash equivalents and restricted cash	<u>\$ 50,224</u>

The Company's restricted cash primarily consisted of cash required to be on deposit under a contractual agreement with a bank to support the Company's iPhone Upgrade Program.

Derivative Financial Instruments

The Company may use derivatives to partially offset its business exposure to foreign currency and interest rate risk on expected future cash flows, net investments in certain foreign subsidiaries, and certain existing assets and liabilities. However, the Company may choose not to hedge certain exposures for a variety of reasons including, but not limited to, 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 currency exchange or interest rates.

To protect gross margins from fluctuations in foreign currency exchange rates, certain of the Company's subsidiaries whose functional currency is the U.S. dollar may hedge a portion of forecasted foreign currency revenue, and subsidiaries whose functional currency is not the U.S. dollar may hedge a portion of forecasted inventory purchases not denominated in the subsidiaries' functional currencies. The Company may enter into forward contracts, option contracts or other instruments to manage this risk 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 net investment in a foreign operation from fluctuations in foreign currency exchange rates, the Company may enter into foreign currency forward and option contracts to offset a portion of the changes in the carrying amounts of these investments due to fluctuations in foreign currency exchange rates. In addition, the Company may use non-derivative financial instruments, such as its foreign currency-denominated debt, as hedges of its net investments in certain foreign subsidiaries. In both of these cases, the Company designates these instruments as net investment hedges.

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. These instruments may offset a portion of the foreign currency remeasurement gains or losses, or changes in fair value. The Company may designate these instruments as either cash flow or fair value hedges. As of September 28, 2019, the Company's hedged term debt- and marketable securities-related foreign currency transactions are expected to be recognized within 23 years.

The Company may also enter into non-designated foreign currency contracts 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.

To protect the Company's foreign currency-denominated term debt or marketable securities from fluctuations in interest rates, the Company may enter into interest rate swaps, options or other instruments. These instruments may offset a portion of the changes in interest income or expense, or changes in fair value. The Company designates these instruments as either cash flow or fair value hedges. As of September 28, 2019, the Company's hedged interest rate transactions are expected to be recognized within 8 years.

Cash Flow Hedges

The effective portions of cash flow hedges are recorded in accumulated other comprehensive income/(loss) ("AOCI") until the hedged item is recognized in earnings. Deferred gains and losses associated with cash flow hedges of foreign currency revenue are recognized as a component of net sales in the same period as the related revenue is recognized, and deferred gains and losses related to cash flow hedges of inventory purchases are recognized as a component of cost of sales in the same period as the related costs are recognized. Deferred gains and losses associated with cash flow hedges of interest income or expense are recognized in OI&E in the same period as the related income or expense is recognized. For options designated as cash flow hedges, changes in the time value are excluded from the assessment of hedge effectiveness. The ineffective portions and amounts excluded from the effectiveness testing of cash flow hedges are recognized in OI&E.

Derivative instruments designated as cash flow hedges must be de-designated as hedges when it is probable the forecasted hedged transaction will not occur in the initially identified time period or within a subsequent two-month time period. Deferred gains and losses in AOCI associated with such derivative instruments are reclassified into OI&E in the period of de-designation. Any subsequent changes in fair value of such derivative instruments are reflected in OI&E unless they are re-designated as hedges of other transactions.

Net Investment Hedges

The effective portions of net investment hedges are recorded in OCI as a part of the cumulative translation adjustment. The ineffective portions and amounts excluded from the effectiveness testing of net investment hedges are recognized in OI&E. For foreign exchange forward contracts designated as net investment hedges, the Company excludes changes in fair value relating to changes in the forward carry component from its assessment of hedge effectiveness. Accordingly, any gains or losses related to this forward carry component are recognized in earnings in the current period.

Fair Value Hedges

Gains and losses related to changes in fair value hedges are recognized in earnings along with a corresponding loss or gain related to the change in value of the underlying hedged item in the same line in the Consolidated Statements of Operations. For foreign exchange forward contracts designated as fair value hedges, the Company excludes changes in fair value relating to changes in the forward carry component from its assessment of hedge effectiveness. The amount excluded from the effectiveness testing of fair value hedges was a gain of \$777 million for 2019, and was recognized in OI&E.

Non-Designated Derivatives

Derivatives that are not designated as hedging instruments are adjusted to fair value through earnings in the financial statement line item to which the derivative relates.

The Company records all derivatives in the Consolidated Balance Sheets at fair value. The Company's accounting treatment for these derivative instruments is based on its hedge designation. The following tables show the Company's derivative instruments at gross fair value as of September 28, 2019 and September 29, 2018 (in millions):

	2019		
	Fair Value of Derivatives Designated as Hedge Instruments	Fair Value of Derivatives Not Designated as Hedge Instruments	Total Fair Value
Derivative assets (1):			
Foreign exchange contracts	\$ 1,798	\$ 323	\$ 2,121
Interest rate contracts	\$ 685	\$ —	\$ 685
Derivative liabilities (2):			
Foreign exchange contracts	\$ 1,341	\$ 160	\$ 1,501
Interest rate contracts	\$ 105	\$ —	\$ 105
	2018		
	Fair Value of Derivatives Designated as Hedge Instruments	Fair Value of Derivatives Not Designated as Hedge Instruments	Total Fair Value
Derivative assets (1):			
Foreign exchange contracts	\$ 1,015	\$ 259	\$ 1,274
Derivative liabilities (2):			
Foreign exchange contracts	\$ 543	\$ 137	\$ 680
Interest rate contracts	\$ 1,456	\$ —	\$ 1,456

(1) The fair value of derivative assets is measured using Level 2 fair value inputs and is recorded as other current assets and other non-current assets in the Consolidated Balance Sheets.

(2) The fair value of derivative liabilities is measured using Level 2 fair value inputs and is recorded as other current liabilities and other non-current liabilities in the Consolidated Balance Sheets.

The Company classifies cash flows related to derivative financial instruments as operating activities in its Consolidated Statements of Cash Flows.

The following table shows the pre-tax gains and losses of the Company's derivative and non-derivative instruments designated as cash flow, net investment and fair value hedges in OCI and the Consolidated Statements of Operations for 2019, 2018 and 2017 (in millions):

	<u>2019</u>	<u>2018</u>	<u>2017</u>
Gains/(Losses) recognized in OCI – effective portion:			
Cash flow hedges:			
Foreign exchange contracts	\$ (959)	\$ 682	\$ 1,797
Interest rate contracts	—	1	7
Total	<u>\$ (959)</u>	<u>\$ 683</u>	<u>\$ 1,804</u>
Net investment hedges:			
Foreign currency debt	\$ (58)	\$ 4	\$ 67
Gains/(Losses) reclassified from AOCI into net income – effective portion:			
Cash flow hedges:			
Foreign exchange contracts	\$ (116)	\$ (482)	\$ 1,958
Interest rate contracts	(7)	1	(2)
Total	<u>\$ (123)</u>	<u>\$ (481)</u>	<u>\$ 1,956</u>
Gains/(Losses) on derivative instruments:			
Fair value hedges:			
Foreign exchange contracts	\$ 1,020	\$ (168)	\$ —
Interest rate contracts	2,068	(1,363)	(810)
Total	<u>\$ 3,088</u>	<u>\$ (1,531)</u>	<u>\$ (810)</u>
Gains/(Losses) related to hedged items:			
Fair value hedges:			
Marketable securities	\$ (1,018)	\$ 167	\$ —
Fixed-rate debt	(2,068)	1,363	810
Total	<u>\$ (3,086)</u>	<u>\$ 1,530</u>	<u>\$ 810</u>

The following table shows the notional amounts of the Company's outstanding derivative instruments and credit risk amounts associated with outstanding or unsettled derivative instruments as of September 28, 2019 and September 29, 2018 (in millions):

	<u>2019</u>		<u>2018</u>	
	<u>Notional Amount</u>	<u>Credit Risk Amount</u>	<u>Notional Amount</u>	<u>Credit Risk Amount</u>
Instruments designated as accounting hedges:				
Foreign exchange contracts	\$ 61,795	\$ 1,798	\$ 65,368	\$ 1,015
Interest rate contracts	\$ 31,250	\$ 685	\$ 33,250	\$ —
Instruments not designated as accounting hedges:				
Foreign exchange contracts	\$ 76,868	\$ 323	\$ 63,062	\$ 259

The notional amounts for outstanding derivative instruments provide one measure of the transaction volume outstanding and do not represent the amount of the Company's exposure to credit or market loss. The credit risk amounts represent the Company's gross exposure to potential accounting loss on derivative instruments that are outstanding or unsettled if all counterparties failed to perform according to the terms of the contract, based on then-current currency or interest rates at each respective date. The Company's exposure to credit loss and market risk will vary over time as currency and interest rates change. Although the table above reflects the notional and credit risk amounts of the Company's derivative instruments, it does not reflect the gains or losses associated with the exposures and transactions that the instruments are intended to hedge. The amounts ultimately realized upon settlement of these financial instruments, together with the gains and losses on the underlying exposures, will depend on actual market conditions during the remaining life of the instruments.

The Company generally enters into master netting arrangements, which are designed to reduce credit risk by permitting net settlement of transactions with the same counterparty. To further limit credit risk, the Company generally enters into collateral security arrangements that provide for collateral to be received or posted when the net fair value of certain financial instruments fluctuates from contractually established thresholds. The Company presents its derivative assets and derivative liabilities at their gross fair values in its Consolidated Balance Sheets. As of September 28, 2019, the net cash collateral received by the Company related to derivative instruments under its collateral security arrangements was \$1.6 billion, which was recorded as other current liabilities in the Consolidated Balance Sheet. As of September 29, 2018, the net cash collateral posted by the Company related to derivative instruments under its collateral security arrangements was \$1.0 billion, which was recorded as other current assets in the Consolidated Balance Sheet.

Under master netting arrangements with the respective counterparties to the Company's derivative contracts, the Company is allowed to net settle transactions with a single net amount payable by one party to the other. As of September 28, 2019 and September 29, 2018, 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 \$2.7 billion and \$2.1 billion, respectively, resulting in a net derivative liability of \$407 million and a net derivative asset of \$138 million, respectively.

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 28, 2019, the Company had no customers that individually represented 10% or more of total trade receivables. As of September 29, 2018, 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 51% and 59% of total trade receivables as of September 28, 2019 and September 29, 2018, 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 sub-assemblies or assemble final products for the Company. The Company purchases these components directly from suppliers. As of September 28, 2019, the Company had two vendors that individually represented 10% or more of total vendor non-trade receivables, which accounted for 59% and 14%. As of September 29, 2018, the Company had two vendors that individually represented 10% or more of total vendor non-trade receivables, which accounted for 62% and 12%.

Note 4 – Consolidated Financial Statement Details

The following tables show the Company's consolidated financial statement details as of September 28, 2019 and September 29, 2018 (in millions):

Property, Plant and Equipment, Net

	2019	2018
Land and buildings	\$ 17,085	\$ 16,216
Machinery, equipment and internal-use software	69,797	65,982
Leasehold improvements	9,075	8,205
Gross property, plant and equipment	95,957	90,403
Accumulated depreciation and amortization	(58,579)	(49,099)
Total property, plant and equipment, net	<u>\$ 37,378</u>	<u>\$ 41,304</u>

Other Non-Current Liabilities

	2019	2018
Long-term taxes payable	\$ 29,545	\$ 33,589
Other non-current liabilities	20,958	15,325
Total other non-current liabilities	\$ 50,503	\$ 48,914

Other Income/(Expense), Net

The following table shows the detail of OI&E for 2019, 2018 and 2017 (in millions):

	2019	2018	2017
Interest and dividend income	\$ 4,961	\$ 5,686	\$ 5,201
Interest expense	(3,576)	(3,240)	(2,323)
Other income/(expense), net	422	(441)	(133)
Total other income/(expense), net	\$ 1,807	\$ 2,005	\$ 2,745

Note 5 – Income Taxes

U.S. Tax Cuts and Jobs Act

On December 22, 2017, the U.S. enacted the Tax Cuts and Jobs Act (the “Act”), which significantly changed U.S. tax law. The Act lowered the Company’s U.S. statutory federal income tax rate from 35% to 21% effective January 1, 2018, while also imposing a deemed repatriation tax on previously deferred foreign income. The Act also created a new minimum tax on certain foreign earnings, for which the Company has elected to record certain deferred tax assets and liabilities. The Company completed its accounting for the income tax effects of the Act during 2019, in accordance with the U.S. Securities and Exchange Commission Staff Accounting Bulletin No. 118.

Provision for Income Taxes and Effective Tax Rate

The provision for income taxes for 2019, 2018 and 2017, consisted of the following (in millions):

	2019	2018	2017
Federal:			
Current	\$ 6,384	\$ 41,425	\$ 7,842
Deferred	(2,939)	(33,819)	5,980
Total	3,445	7,606	13,822
State:			
Current	475	551	259
Deferred	(67)	48	2
Total	408	599	261
Foreign:			
Current	3,962	3,986	1,671
Deferred	2,666	1,181	(16)
Total	6,628	5,167	1,655
Provision for income taxes	\$ 10,481	\$ 13,372	\$ 15,738

The foreign provision for income taxes is based on foreign pre-tax earnings of \$44.3 billion, \$48.0 billion and \$44.7 billion in 2019, 2018 and 2017, respectively.

A reconciliation of the provision for income taxes, with the amount computed by applying the statutory federal income tax rate (21% in 2019; 24.5% in 2018; 35% in 2017) to income before provision for income taxes for 2019, 2018 and 2017, is as follows (dollars in millions):

	2019	2018	2017
Computed expected tax	\$ 13,805	\$ 17,890	\$ 22,431
State taxes, net of federal effect	423	271	185
Impacts of the Act	—	1,515	—
Earnings of foreign subsidiaries	(2,625)	(5,606)	(6,135)
Research and development credit, net	(548)	(560)	(678)
Excess tax benefits from equity awards	(639)	(675)	—
Other	65	537	(65)
Provision for income taxes	<u>\$ 10,481</u>	<u>\$ 13,372</u>	<u>\$ 15,738</u>
Effective tax rate	15.9%	18.3%	24.6%

The Company's income taxes payable have been reduced by the tax benefits from employee stock plan awards. For restricted stock units ("RSUs"), the Company receives an income tax benefit upon the award's vesting equal to the tax effect of the underlying stock's fair market value. Prior to 2018, the Company reflected net excess tax benefits from equity awards as increases to additional paid-in capital, which amounted to \$620 million in 2017.

Deferred Tax Assets and Liabilities

As of September 28, 2019 and September 29, 2018, the significant components of the Company's deferred tax assets and liabilities were (in millions):

	2019	2018
Deferred tax assets:		
Amortization and depreciation	\$ 11,433	\$ 137
Accrued liabilities and other reserves	5,389	3,151
Deferred revenue	1,372	1,141
Share-based compensation	749	513
Unrealized losses	—	871
Other	697	797
Total deferred tax assets, net	<u>19,640</u>	<u>6,610</u>
Deferred tax liabilities:		
Minimum tax on foreign earnings	10,809	—
Earnings of foreign subsidiaries	330	275
Other	456	501
Total deferred tax liabilities	<u>11,595</u>	<u>776</u>
Net deferred tax assets/(liabilities)	<u>\$ 8,045</u>	<u>\$ 5,834</u>

Deferred tax assets and liabilities reflect the effects of tax credits and the future income tax effects of temporary differences between the consolidated financial statement carrying amounts of existing assets and liabilities and their respective tax bases, and are measured using enacted tax rates that apply to taxable income in the years in which those temporary differences are expected to be recovered or settled.

Uncertain Tax Positions

As of September 28, 2019, the total amount of gross unrecognized tax benefits was \$15.6 billion, of which \$8.6 billion, if recognized, would impact the Company's effective tax rate. As of September 29, 2018, the total amount of gross unrecognized tax benefits was \$9.7 billion, of which \$7.4 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 2019, 2018 and 2017, is as follows (in millions):

	2019	2018	2017
Beginning balances	\$ 9,694	\$ 8,407	\$ 7,724
Increases related to tax positions taken during a prior year	5,845	2,431	333
Decreases related to tax positions taken during a prior year	(686)	(2,212)	(952)
Increases related to tax positions taken during the current year	1,697	1,824	1,880
Decreases related to settlements with taxing authorities	(852)	(756)	(539)
Decreases related to expiration of the statute of limitations	(79)	—	(39)
Ending balances	\$ 15,619	\$ 9,694	\$ 8,407

The Company is subject to taxation and files income tax returns in the U.S. federal jurisdiction and many state and foreign jurisdictions. The U.S. Internal Revenue Service (the "IRS") concluded its review of the years 2013 through 2015 in 2018, and all years before 2016 are closed. Tax years after 2014 remain open in certain major foreign jurisdictions and are subject to examination by the taxing authorities. The Company believes that an adequate provision has been made for any adjustments that may result from tax examinations. However, the outcome of tax audits cannot be predicted with certainty. If any issues addressed in the Company's tax audits are resolved in a manner inconsistent with its expectations, the Company could be required to adjust its provision for income taxes in the period such resolution occurs. Although the timing of resolution and/or closure of audits 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 \$2.0 billion.

Interest and Penalties

The Company includes interest and penalties related to income tax matters within the provision for income taxes. As of September 28, 2019 and September 29, 2018, the total amount of gross interest and penalties accrued was \$1.3 billion and \$1.4 billion, respectively. The Company recognized interest and penalty expense in 2019, 2018 and 2017 of \$73 million, \$489 million and \$238 million, respectively.

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. The recovery amount was calculated to be €13.1 billion, plus interest of €1.2 billion. During the fourth quarter of 2019, the Irish Minister for Finance approved the Company's request to reduce the recovery amount by €190 million due to taxes paid to other countries, resulting in an adjusted recovery amount of €12.9 billion as of September 28, 2019. Irish legislative changes, effective as of January 2015, eliminated the application of the tax opinions from that date forward. The Company believes the State Aid Decision to be without merit and appealed to the General Court of the Court of Justice of the European Union. Ireland has also appealed the State Aid Decision. 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. As of September 28, 2019, the entire adjusted recovery amount plus interest was funded into escrow, where it will remain restricted from general use pending the conclusion of all appeals. Refer to the Cash, Cash Equivalents and Marketable Securities section of Note 3, "Financial Instruments" for more information.

Note 6 – Debt

Commercial Paper

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 28, 2019 and September 29, 2018, the Company had \$6.0 billion and \$12.0 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 2.24% and 2.18% as of September 28, 2019 and September 29, 2018, respectively. The following table provides a summary of cash flows associated with the issuance and maturities of Commercial Paper for 2019, 2018 and 2017 (in millions):

	2019	2018	2017
Maturities 90 days or less:			
Proceeds from/(Repayments of) commercial paper, net	\$ (3,248)	\$ 1,044	\$ (1,782)
Maturities greater than 90 days:			
Proceeds from commercial paper	13,874	14,555	17,932
Repayments of commercial paper	(16,603)	(15,636)	(12,298)
Proceeds from/(Repayments of) commercial paper, net	(2,729)	(1,081)	5,634
Total proceeds from/(repayments of) commercial paper, net	\$ (5,977)	\$ (37)	\$ 3,852

Term Debt

As of September 28, 2019, the Company had outstanding floating- and fixed-rate notes with varying maturities for an aggregate principal amount of \$101.7 billion (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 28, 2019 and September 29, 2018:

	Maturities (calendar year)	2019			2018				
		Amount (in millions)	Effective Interest Rate		Amount (in millions)	Effective Interest Rate			
2013–2018 debt issuances:									
Floating-rate notes	2020 – 2022	\$ 4,250	2.25%	–	3.28%	\$ 7,107	1.87%	–	3.44%
Fixed-rate 0.350% – 4.650% notes	2019 – 2047	90,429	0.28%	–	4.78%	97,086	0.28%	–	4.78%
2019 debt issuance:									
Fixed-rate 1.700% – 2.950% notes	2022 – 2049	7,000	1.71%	–	2.99%	—	—	—	—
Total term debt		101,679				104,193			
Unamortized premium/(discount) and issuance costs, net		(224)				(218)			
Hedge accounting fair value adjustments		612				(1,456)			
Less: Current portion of term debt		(10,260)				(8,784)			
Total non-current portion of term debt		\$ 91,807				\$ 93,735			

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

A portion of the Company’s Japanese yen–denominated notes is designated as a hedge of the foreign currency exposure of the Company’s net investment in a foreign operation. As of September 28, 2019 and September 29, 2018, the carrying value of the debt designated as a net investment hedge was \$1.0 billion and \$811 million, respectively. For further discussion regarding the Company’s use of derivative instruments, refer to the Derivative Financial Instruments section of Note 3, “Financial Instruments.”

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 \$3.2 billion, \$3.0 billion and \$2.2 billion of interest cost on its term debt for 2019, 2018 and 2017, respectively.

The future principal payments for the Company's Notes as of September 28, 2019 are as follows (in millions):

2020	\$	10,270
2021		8,750
2022		9,528
2023		9,290
2024		10,039
Thereafter		53,802
Total term debt	\$	<u>101,679</u>

As of September 28, 2019 and September 29, 2018, the fair value of the Company's Notes, based on Level 2 inputs, was \$107.5 billion and \$103.2 billion, respectively.

Note 7 – Shareholders' Equity

Share Repurchase Program

On April 30, 2019, the Company announced the Board of Directors increased the current share repurchase program authorization from \$100 billion to \$175 billion of the Company's common stock, of which \$96.1 billion had been utilized as of September 28, 2019. During 2019, the Company repurchased 345.2 million shares of its common stock for \$67.1 billion, including 62.0 million shares delivered under a \$12.0 billion accelerated share repurchase arrangement dated February 2019, which settled in August 2019. The Company's share repurchase program does not obligate it to acquire any specific number of shares. Under this 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 (the "Exchange Act").

Shares of Common Stock

The following table shows the changes in shares of common stock for 2019, 2018 and 2017 (in thousands):

	<u>2019</u>	<u>2018</u>	<u>2017</u>
Common stock outstanding, beginning balances	4,754,986	5,126,201	5,336,166
Common stock repurchased	(345,205)	(405,549)	(246,496)
Common stock issued, net of shares withheld for employee taxes	33,455	34,334	36,531
Common stock outstanding, ending balances	<u>4,443,236</u>	<u>4,754,986</u>	<u>5,126,201</u>

Note 8 – Comprehensive Income

The Company's OCI consists of foreign currency translation adjustments from those subsidiaries not using the U.S. dollar as their functional currency, net deferred gains and losses on certain derivative instruments accounted for as cash flow hedges and unrealized gains and losses on marketable debt securities classified as available-for-sale.

The following table shows the pre-tax amounts reclassified from AOCI into the Consolidated Statements of Operations, and the associated financial statement line item, for 2019 and 2018 (in millions):

<u>Comprehensive Income Components</u>	<u>Financial Statement Line Item</u>	<u>2019</u>	<u>2018</u>
Unrealized (gains)/losses on derivative instruments:			
Foreign exchange contracts	Total net sales	\$ (206)	\$ 214
	Total cost of sales	(482)	(70)
	Other income/(expense), net	784	344
Interest rate contracts	Other income/(expense), net	7	(2)
		<u>103</u>	<u>486</u>
Unrealized (gains)/losses on marketable securities	Other income/(expense), net	31	(20)
Total amounts reclassified from AOCI		<u>\$ 134</u>	<u>\$ 466</u>

The following table shows the changes in AOCI by component for 2019 and 2018 (in millions):

	Cumulative Foreign Currency Translation	Unrealized Gains/Losses on Derivative Instruments	Unrealized Gains/Losses on Marketable Securities	Total
Balances as of September 30, 2017	\$ (354)	\$ (124)	\$ 328	\$ (150)
Other comprehensive income/(loss) before reclassifications	(524)	672	(4,563)	(4,415)
Amounts reclassified from AOCI	—	486	(20)	466
Tax effect	(1)	(253)	1,177	923
Other comprehensive income/(loss)	(525)	905	(3,406)	(3,026)
Cumulative effect of change in accounting principle	(176)	29	(131)	(278)
Balances as of September 29, 2018	(1,055)	810	(3,209)	(3,454)
Other comprehensive income/(loss) before reclassifications	(421)	(949)	4,854	3,484
Amounts reclassified from AOCI	—	103	31	134
Tax effect	13	208	(1,058)	(837)
Other comprehensive income/(loss)	(408)	(638)	3,827	2,781
Cumulative effect of change in accounting principle ⁽¹⁾	—	—	89	89
Balances as of September 28, 2019	<u>\$ (1,463)</u>	<u>\$ 172</u>	<u>\$ 707</u>	<u>\$ (584)</u>

(1) Refer to Note 1, "Summary of Significant Accounting Policies" for more information on the Company's adoption of ASU 2016-01 in 2019.

Note 9 – Benefit Plans

2014 Employee Stock Plan

In the second quarter of 2014, shareholders approved the 2014 Employee Stock Plan (the "2014 Plan") and terminated the Company's authority to grant new awards under the 2003 Employee Stock Plan (the "2003 Plan"). The 2014 Plan provides for broad-based equity grants to employees, including executive officers, and permits the granting of RSUs, stock grants, performance-based awards, stock options and stock appreciation rights, as well as cash bonus awards. RSUs granted under the 2014 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 2014 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 2014 Plan utilizing a factor of two times the number of RSUs canceled or shares withheld. Currently, all RSUs granted under the 2014 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 corresponding unvested RSUs. DERs are accumulated and paid when the underlying shares vest. Upon approval of the 2014 Plan, the Company reserved 385 million shares plus the number of shares remaining that were reserved but not issued under the 2003 Plan. Shares subject to outstanding awards under the 2003 Plan that expire, are canceled or otherwise terminate, or are withheld to satisfy tax withholding obligations for RSUs, will also be available for awards under the 2014 Plan. As of September 28, 2019, approximately 246.4 million shares were reserved for future issuance 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. DERs are subject to the same vesting and other terms and conditions as the corresponding unvested RSUs. DERs are accumulated and paid when the underlying shares vest. As of September 28, 2019, approximately 1.1 million shares were reserved for future issuance under the Director Plan.

Rule 10b5-1 Trading Plans

During the three months ended September 28, 2019, Section 16 officers Timothy D. Cook, Chris Kondo, Luca Maestri, Deirdre O'Brien and Jeffrey Williams 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 pre-establishes 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 shares acquired under the Company's employee and director equity plans.

Employee Stock Purchase Plan

The Employee Stock Purchase Plan (the "Purchase Plan") is a shareholder-approved plan under which substantially all employees may 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 compensation and employees may not purchase more than \$25,000 of stock during any calendar year. As of September 28, 2019, approximately 31.1 million shares were reserved for future issuance under the Purchase Plan.

401(k) Plan

The Company's 401(k) Plan is a deferred salary arrangement under Section 401(k) of the Internal Revenue Code. Under the 401(k) Plan, participating U.S. employees may defer a portion of their pre-tax earnings, up to the IRS annual contribution limit (\$19,000 for calendar year 2019). 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 2019, 2018 and 2017, 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 24, 2016	99,089	\$ 97.54	
RSUs granted	50,112	\$ 121.65	
RSUs vested	(45,735)	\$ 95.48	
RSUs canceled	(5,895)	\$ 106.87	
Balance as of September 30, 2017	97,571	\$ 110.33	
RSUs granted	45,351	\$ 162.86	
RSUs vested	(44,718)	\$ 111.24	
RSUs canceled	(6,049)	\$ 127.82	
Balance as of September 29, 2018	92,155	\$ 134.60	
RSUs granted	36,852	\$ 215.95	
RSUs vested	(42,088)	\$ 135.21	
RSUs canceled	(5,402)	\$ 162.85	
Balance as of September 28, 2019	81,517	\$ 169.18	\$ 17,838

The fair value as of the respective vesting dates of RSUs was \$8.6 billion, \$7.6 billion and \$6.1 billion for 2019, 2018 and 2017, respectively. The majority of RSUs that vested in 2019, 2018 and 2017 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 14.8 million, 16.0 million and 15.4 million for 2019, 2018 and 2017, 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 for the employees' tax obligations to taxing authorities were \$3.0 billion, \$2.7 billion and \$2.0 billion in 2019, 2018 and 2017, respectively. These net share settlements had the effect of share repurchases by the Company as they reduced the number of shares that would have otherwise been issued as a result of the vesting and did not represent an expense to the Company.

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 2019, 2018 and 2017 (in millions):

	2019	2018	2017
Share-based compensation expense	\$ 6,068	\$ 5,340	\$ 4,840
Income tax benefit related to share-based compensation expense	\$ (1,967)	\$ (1,893)	\$ (1,632)

As of September 28, 2019, the total unrecognized compensation cost related to outstanding RSUs and stock options was \$10.5 billion, which the Company expects to recognize over a weighted-average period of 2.5 years.

Note 10 – Commitments and Contingencies

Accrued Warranty and Guarantees

The following table shows changes in the Company's accrued warranties and related costs for 2019, 2018 and 2017 (in millions):

	2019	2018	2017
Beginning accrued warranty and related costs	\$ 3,692	\$ 3,834	\$ 3,702
Cost of warranty claims	(3,857)	(4,115)	(4,322)
Accruals for product warranty	3,735	3,973	4,454
Ending accrued warranty and related costs	\$ 3,570	\$ 3,692	\$ 3,834

The Company offers an iPhone Upgrade Program, which is available to customers who purchase a qualifying iPhone in the U.S., the U.K. and mainland China. The iPhone Upgrade Program provides customers the right to trade in that iPhone for a specified amount when purchasing a new iPhone, provided certain conditions are met. The Company accounts for the trade-in right as a guarantee liability and recognizes arrangement revenue net of the fair value of such right, with subsequent changes to the guarantee liability recognized within net sales.

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 and other electronic devices. 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.

Other Off-Balance Sheet Commitments

Operating Leases

The Company leases various equipment and facilities, including retail space, under noncancelable operating lease arrangements. The Company does not currently utilize any other off-balance sheet financing arrangements. As of September 28, 2019, the Company's total future minimum lease payments under noncancelable operating leases were \$10.8 billion. The Company's retail store and other facility leases typically have original terms not exceeding 10 years and generally contain multi-year renewal options.

Rent expense under all operating leases, including both cancelable and noncancelable leases, was \$1.3 billion, \$1.2 billion and \$1.1 billion in 2019, 2018 and 2017, respectively. Future minimum lease payments under noncancelable operating leases having initial or remaining terms in excess of one year as of September 28, 2019, are as follows (in millions):

2020	\$	1,306
2021		1,276
2022		1,137
2023		912
2024		834
Thereafter		5,373
Total	\$	<u>10,838</u>

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 and telecommunication services, intellectual property licenses and content creation. Future payments under noncancelable unconditional purchase obligations having a remaining term in excess of one year as of September 28, 2019, are as follows (in millions):

2020	\$	2,476
2021		2,386
2022		1,859
2023		1,162
2024		218
Thereafter		110
Total	\$	<u>8,211</u>

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. 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. 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, except for the following matters:

VirnetX

VirnetX, Inc. (“VirnetX”) filed two lawsuits in the U.S. District Court for the Eastern District of Texas (the “Eastern Texas District Court”) against the Company alleging that certain Company products infringe four patents (the “VirnetX Patents”) relating to network communications technology (“VirnetX I” and “VirnetX II”). On September 30, 2016, a jury returned a verdict in VirnetX I against the Company and awarded damages of \$302 million, which later increased to \$440 million in post-trial proceedings. The Company appealed the VirnetX I verdict to the U.S. Court of Appeals for the Federal Circuit (the “Federal Circuit”). On April 11, 2018, a jury returned a verdict in VirnetX II against the Company and awarded damages of \$503 million. VirnetX II is currently on appeal. The Company has challenged the validity of the VirnetX Patents at the U.S. Patent and Trademark Office (the “PTO”). In response, the PTO has declared the VirnetX Patents invalid. VirnetX appealed the invalidity decision of the PTO to the Federal Circuit. The Federal Circuit consolidated the Company’s appeal of the Eastern Texas District Court VirnetX I verdict and VirnetX’s appeals from the PTO invalidity proceedings. On January 15, 2019, the Federal Circuit affirmed the VirnetX I verdict, which the Company intends to further appeal. On July 8, 2019, the Federal Circuit remanded one of VirnetX’s two appeals of the PTO’s invalidity decisions back to the PTO for further proceedings. On August 1, 2019, the Federal Circuit affirmed-in-part, vacated-in-part, and remanded back to the PTO portions of VirnetX’s second appeal. The Company has accrued its best estimate for the ultimate resolution of these matters.

Qualcomm

On January 20, 2017, the Company filed a lawsuit against Qualcomm Incorporated and affiliated parties (“Qualcomm”) in the U.S. District Court for the Southern District of California seeking, among other things, to enjoin Qualcomm from requiring the Company to pay royalties at the rate demanded by Qualcomm. No Qualcomm-related royalty payments had been remitted by the Company to its contract manufacturers since the beginning of the second quarter of 2017. Following the Company’s lawsuit, Qualcomm filed patent infringement suits against the Company and its affiliates in the U.S. and various international jurisdictions, some of which sought to enjoin the sale of certain of the Company’s products in particular countries.

On April 16, 2019, the Company and Qualcomm reached a settlement agreement to dismiss all litigation between the two companies worldwide. The companies also reached a multi-year license agreement and a multi-year supply agreement. Under the terms of the settlement agreement, Apple made a payment to Qualcomm to, among other things, resolve disputes over the withheld royalty payments.

iOS Performance Management Cases

Various civil litigation matters have been filed in state and federal courts in the U.S. and in various international jurisdictions alleging violation of consumer protection laws, fraud, computer intrusion and other causes of action related to the Company’s performance management feature used in its iPhone operating systems, introduced to certain iPhones in iOS updates 10.2.1 and 11.2. The claims seek monetary damages and other non-monetary relief. On April 5, 2018, several U.S. federal actions were consolidated through a Multidistrict Litigation process into a single action in the U.S. District Court for the Northern District of California. In addition to civil litigation, the Company is also responding to governmental investigations and requests for information relating to the performance management feature. The Company believes that its iPhones were not defective, that the performance management feature introduced with iOS updates 10.2.1 and 11.2 was intended to, and did, improve customers’ user experience, and that the Company did not make any misleading statements or fail to disclose any material information. The Company has accrued its best estimate for the ultimate resolution of these matters.

French Competition Authority

In June 2019, the French Competition Authority (“FCA”) issued a report alleging that aspects of the Company’s sales and distribution practices in France violate French competition law. The Company vigorously disagrees with the allegations, and a hearing of arguments was held before the FCA on October 15, 2019. The Company is awaiting the decision of the FCA, which may include a fine.

Note 11 – Segment Information and Geographic Data

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, 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 in 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, 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.

The following table shows information by reportable segment for 2019, 2018 and 2017 (in millions):

	<u>2019</u>	<u>2018</u>	<u>2017</u>
Americas:			
Net sales	\$ 116,914	\$ 112,093	\$ 96,600
Operating income	\$ 35,099	\$ 34,864	\$ 30,684
Europe:			
Net sales	\$ 60,288	\$ 62,420	\$ 54,938
Operating income	\$ 19,195	\$ 19,955	\$ 16,514
Greater China:			
Net sales	\$ 43,678	\$ 51,942	\$ 44,764
Operating income	\$ 16,232	\$ 19,742	\$ 17,032
Japan:			
Net sales	\$ 21,506	\$ 21,733	\$ 17,733
Operating income	\$ 9,369	\$ 9,500	\$ 8,097
Rest of Asia Pacific:			
Net sales	\$ 17,788	\$ 17,407	\$ 15,199
Operating income	\$ 6,055	\$ 6,181	\$ 5,304

A reconciliation of the Company's segment operating income to the Consolidated Statements of Operations for 2019, 2018 and 2017 is as follows (in millions):

	<u>2019</u>	<u>2018</u>	<u>2017</u>
Segment operating income	\$ 85,950	\$ 90,242	\$ 77,631
Research and development expense	(16,217)	(14,236)	(11,581)
Other corporate expenses, net	(5,803)	(5,108)	(4,706)
Total operating income	<u>\$ 63,930</u>	<u>\$ 70,898</u>	<u>\$ 61,344</u>

The U.S. and China were the only countries that accounted for more than 10% of the Company's net sales in 2019, 2018 and 2017. There was no single customer that accounted for more than 10% of net sales in 2019, 2018 and 2017. Net sales for 2019, 2018 and 2017 and long-lived assets as of September 28, 2019 and September 29, 2018 were as follows (in millions):

	<u>2019</u>	<u>2018</u>	<u>2017</u>
Net sales:			
U.S.	\$ 102,266	\$ 98,061	\$ 84,339
China (1)	43,678	51,942	44,764
Other countries	114,230	115,592	100,131
Total net sales	<u>\$ 260,174</u>	<u>\$ 265,595</u>	<u>\$ 229,234</u>

	<u>2019</u>	<u>2018</u>
Long-lived assets:		
U.S.	\$ 24,711	\$ 23,963
China (1)	9,064	13,268
Other countries	3,603	4,073
Total long-lived assets	<u>\$ 37,378</u>	<u>\$ 41,304</u>

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

Note 12 – Selected Quarterly Financial Information (Unaudited)

The following tables show a summary of the Company's quarterly financial information for each of the four quarters of 2019 and 2018 (in millions, except per share amounts):

	<u>Fourth Quarter</u>	<u>Third Quarter</u>	<u>Second Quarter</u>	<u>First Quarter</u>
2019:				
Total net sales	\$ 64,040	\$ 53,809	\$ 58,015	\$ 84,310
Gross margin	\$ 24,313	\$ 20,227	\$ 21,821	\$ 32,031
Net income	\$ 13,686	\$ 10,044	\$ 11,561	\$ 19,965

Earnings per share (1):				
Basic	\$ 3.05	\$ 2.20	\$ 2.47	\$ 4.22
Diluted	\$ 3.03	\$ 2.18	\$ 2.46	\$ 4.18

	<u>Fourth Quarter</u>	<u>Third Quarter</u>	<u>Second Quarter</u>	<u>First Quarter</u>
2018:				
Total net sales	\$ 62,900	\$ 53,265	\$ 61,137	\$ 88,293
Gross margin	\$ 24,084	\$ 20,421	\$ 23,422	\$ 33,912
Net income	\$ 14,125	\$ 11,519	\$ 13,822	\$ 20,065

Earnings per share (1):				
Basic	\$ 2.94	\$ 2.36	\$ 2.75	\$ 3.92
Diluted	\$ 2.91	\$ 2.34	\$ 2.73	\$ 3.89

(1) Basic and diluted earnings per share are computed independently for each of the quarters presented. Therefore, the sum of quarterly basic and diluted per share information may not equal annual basic and diluted earnings per share.

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 28, 2019 and September 29, 2018, the related consolidated statements of operations, comprehensive income, shareholders' equity and cash flows for each of the three years in the period ended September 28, 2019, 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 28, 2019 and September 29, 2018, and the results of its operations and its cash flows for each of the three years in the period ended September 28, 2019, 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 28, 2019, 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 30, 2019 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.

European Commission State Aid Matter Uncertain Tax Position

Description of the Matter

As discussed in Note 5 of the financial statements, the European Commission ("EC") has announced its decision that Ireland granted state aid to Apple Inc. by providing tax opinions in 1991 and 2007 concerning the tax allocation of profits of the Irish branches of two subsidiaries of Apple Inc. The decision ordered Ireland to calculate and recover additional taxes from Apple Inc. for the period from June 2003 through December 2014. The adjusted amount indicated by the EC to be recovered is up to €12.9 billion, plus interest.

Auditing management's evaluation of the uncertain tax position stemming from the effects of the EC decision is complex and highly judgmental due to the inherent uncertainty in predicting the ultimate resolution of the matter.

How We Addressed the
Matter in Our Audit

We tested controls over the risk of material misstatement relating to the evaluation of the EC state aid matter, including management's evaluation of the advice of legal counsel, the assessment as to whether Apple Inc.'s position is more likely than not to be sustained and the development of the related disclosure.

To evaluate Apple Inc.'s assessment of whether sustainment of its position is a more likely than not outcome, including underlying assumptions, our audit procedures included, among others, reading the EC August 2016 ruling and available correspondence between Apple Inc. and the EC, and the EC and Ireland. We also requested and received internal and external legal counsel confirmation letters, discussed the allegations with internal and external legal counsel and Apple Inc. tax personnel and obtained a representation letter from Apple Inc. We involved our EC and tax subject matter resources in considering the applicable tax laws, the pending appeal, the current status of legal precedent relevant to that appeal and the proceedings at the court hearing in September 2019. In addition, we evaluated Apple Inc.'s disclosure included in Note 5 in relation to this matter.

/s/ Ernst & Young LLP

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

San Jose, California
October 30, 2019

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 28, 2019, 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 28, 2019, 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 28, 2019 and September 29, 2018, the related consolidated statements of operations, comprehensive income, shareholders' equity and cash flows for each of the three years in the period ended September 28, 2019, and the related notes and our report dated October 30, 2019 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 30, 2019

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 28, 2019 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 28, 2019 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 2019, 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

None.

PART III

Item 10. Directors, Executive Officers and Corporate Governance

The information required by this Item is set forth under the headings “Corporate Governance,” “Directors,” “Executive Officers” and “Other Information—Security Ownership of Certain Beneficial Owners and Management” in the Company’s 2020 Proxy Statement to be filed with the SEC within 120 days after September 28, 2019 in connection with the solicitation of proxies for the Company’s 2020 annual meeting of shareholders, and is incorporated herein by reference.

Item 11. Executive Compensation

The information required by this Item is set forth under the heading “Executive Compensation,” under the subheadings “Board Oversight of Risk Management” and “Compensation Committee Interlocks and Insider Participation” under the heading “Corporate Governance” and under the subheadings “Compensation of Directors” and “Director Compensation—2019” under the heading “Directors” in the Company’s 2020 Proxy Statement to be filed with the SEC within 120 days after September 28, 2019, 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 is set forth under the headings “Other Information—Security Ownership of Certain Beneficial Owners and Management” and “Other Information—Equity Compensation Plan Information” in the Company’s 2020 Proxy Statement to be filed with the SEC within 120 days after September 28, 2019, and is incorporated herein by reference.

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

The information required by this Item is set forth under the subheadings “Board Committees”, “Review, Approval, or Ratification of Transactions with Related Persons” and “Transactions with Related Persons” under the heading “Corporate Governance” in the Company’s 2020 Proxy Statement to be filed with the SEC within 120 days after September 28, 2019, and is incorporated herein by reference.

Item 14. Principal Accounting Fees and Services

The information required by this Item is set forth under the subheadings “Fees Paid to Auditors” and “Policy on Audit Committee Pre-Approval of Audit and Non-Audit Services Performed by the Independent Registered Public Accounting Firm” under the proposal “Ratification of Appointment of Independent Registered Public Accounting Firm” in the Company’s 2020 Proxy Statement to be filed with the SEC within 120 days after September 28, 2019, and is incorporated herein by reference.

PART IV

Item 15. Exhibits, 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 28, 2019, September 29, 2018 and September 30, 2017	29
Consolidated Statements of Comprehensive Income for the years ended September 28, 2019, September 29, 2018 and September 30, 2017	30
Consolidated Balance Sheets as of September 28, 2019 and September 29, 2018	31
Consolidated Statements of Shareholders' Equity for the years ended September 28, 2019, September 29, 2018 and September 30, 2017	32
Consolidated Statements of Cash Flows for the years ended September 28, 2019, September 29, 2018 and September 30, 2017	33
Notes to Consolidated Financial Statements	34
Selected Quarterly Financial Information (Unaudited)	55
Reports of Independent Registered Public Accounting Firm	56

(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)

Exhibit Number	Exhibit Description	Incorporated by Reference		
		Form	Exhibit	Filing Date/ Period End Date
3.1	Restated Articles of Incorporation of the Registrant effective as of June 6, 2014.	8-K	3.1	6/6/14
3.2	Amended and Restated Bylaws of the Registrant effective as of December 13, 2016.	8-K	3.2	12/15/16
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 June 10, 2015, including forms of global notes representing the 0.350% Notes due 2020.	8-K	4.1	6/10/15

Exhibit Number	Exhibit Description	Incorporated by Reference		
		Form	Exhibit	Filing Date/ Period End Date
4.9	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
4.10	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
4.11	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
4.12	Supplement No. 1 to the Officer's Certificate of the Registrant, dated as of March 24, 2016.	8-K	4.1	3/24/16
4.13	Officer's Certificate of the Registrant, dated as of June 22, 2016, including form of global note representing 4.15% Notes due 2046.	8-K	4.1	6/22/16
4.14	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
4.15	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
4.16	Officer's Certificate of the Registrant, dated as of March 3, 2017, including form of global note representing 4.300% Notes due 2047.	8-K	4.1	3/3/17
4.17	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
4.18	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
4.19	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
4.20	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
4.21	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
4.22	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
4.23	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
4.24	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
4.25*	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 and restated as of February 13, 2018.	8-K	10.1	2/14/18
10.4*	2003 Employee Stock Plan, as amended through February 25, 2010.	8-K	10.1	3/1/10
10.5*	Form of Restricted Stock Unit Award Agreement under 2003 Employee Stock Plan effective as of November 16, 2010.	10-Q	10.10	12/25/10
10.6*	2014 Employee Stock Plan, as amended and restated as of October 1, 2017.	10-K	10.8	9/30/17

Exhibit Number	Exhibit Description	Incorporated by Reference		
		Form	Exhibit	Filing Date/ Period End Date
10.7*	Form of Amendment, effective as of August 26, 2014, to Restricted Stock Unit Award Agreements and Performance Award Agreements outstanding as of August 26, 2014.	10-K	10.13	9/27/14
10.8*	Form of Restricted Stock Unit Award Agreement under 2014 Employee Stock Plan effective as of October 5, 2015.	10-Q	10.16	3/26/16
10.9*	Form of Restricted Stock Unit Award Agreement under 2014 Employee Stock Plan effective as of October 14, 2016.	10-K	10.18	9/24/16
10.10*	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
10.11*	Form of Performance Award Agreement under 2014 Employee Stock Plan effective as of September 26, 2017.	10-K	10.21	9/30/17
10.12*	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
10.13*	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
10.14*	Form of Performance Award Agreement under 2014 Employee Stock Plan effective as of August 21, 2018.	10-K	10.18	9/29/18
10.15*, **	Form of Restricted Stock Unit Award Agreement under 2014 Employee Stock Plan effective as of September 29, 2019.			
10.16*, **	Form of Performance Award Agreement under 2014 Employee Stock Plan effective as of September 29, 2019.			
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 30, 2019

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:

<u>Name</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Timothy D. Cook</u> TIMOTHY D. COOK	Chief Executive Officer and Director (Principal Executive Officer)	October 30, 2019
<u>/s/ Luca Maestri</u> LUCA MAESTRI	Senior Vice President, Chief Financial Officer (Principal Financial Officer)	October 30, 2019
<u>/s/ Chris Kondo</u> CHRIS KONDO	Senior Director of Corporate Accounting (Principal Accounting Officer)	October 30, 2019
<u>/s/ James A. Bell</u> JAMES A. BELL	Director	October 30, 2019
<u>/s/ Al Gore</u> AL GORE	Director	October 30, 2019
<u>/s/ Andrea Jung</u> ANDREA JUNG	Director	October 30, 2019
<u>/s/ Arthur D. Levinson</u> ARTHUR D. LEVINSON	Director	October 30, 2019
<u>/s/ Ronald D. Sugar</u> RONALD D. SUGAR	Director	October 30, 2019
<u>/s/ Susan L. Wagner</u> SUSAN L. WAGNER	Director	October 30, 2019

**DESCRIPTION OF THE REGISTRANT'S SECURITIES
REGISTERED PURSUANT TO SECTION 12 OF THE
SECURITIES EXCHANGE ACT OF 1934**

As of September 28, 2019, Apple Inc. ("Apple" or the "Company") had nine classes of securities registered under Section 12 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"): (i) Common Stock, \$0.00001 par value per share ("Common Stock"); (ii) 1.000% Notes due 2022; (iii) 1.375% Notes due 2024; (iv) 0.875% Notes due 2025; (v) 1.625% Notes due 2026; (vi) 2.000% Notes due 2027; (vii) 1.375% Notes due 2029; (viii) 3.050% Notes due 2029; and (ix) 3.600% Notes due 2042. Each of the Company's securities registered under Section 12 of the Exchange Act are listed on The Nasdaq Stock Market LLC.

DESCRIPTION OF COMMON STOCK

The following is a description of the rights of Common Stock and related provisions of the Company's Restated Articles of Incorporation (the "Articles") and Amended and Restated Bylaws (the "Bylaws") and applicable California law. This description is qualified in its entirety by, and should be read in conjunction with, the Articles, Bylaws and applicable California law.

Authorized Capital Stock

The Company's authorized capital stock consists of 12,600,000,000 shares of Common Stock.

Common Stock

Fully Paid and Nonassessable

All of the outstanding shares of the Company's Common Stock are fully paid and nonassessable.

Voting Rights

The holders of shares of Common Stock are entitled to one vote per share on all matters to be voted on by such holders. Holders of shares of Common Stock are not entitled to cumulative voting rights.

Dividends

The holders of shares of Common Stock are entitled to receive such dividends, if any, as may be declared from time to time by the Company's Board of Directors in its discretion from funds legally available therefor.

Right to Receive Liquidation Distributions

Upon liquidation, dissolution or winding-up, the holders of shares of Common Stock are entitled to receive pro rata all assets remaining available for distribution to holders of such shares.

No Preemptive or Similar Rights

Common Stock has no preemptive or other subscription rights, and there are no conversion rights or redemption or sinking fund provisions with respect to such shares of Common Stock.

Anti-Takeover Provisions of the Articles, Bylaws and California Law

Provisions of the Articles and Bylaws may delay or discourage transactions involving an actual or potential change in control of the Company or change in its management, including transactions in which shareholders might otherwise receive a premium for their shares, or transactions that its shareholders might otherwise deem to be in their best interests. Among other things, the Articles and Bylaws:

- provide that, except for a vacancy caused by the removal of a director as provided in the Bylaws, a vacancy on the Company's Board of Directors may be filled by a person selected by a majority of the remaining directors then in office, whether or not less than a quorum, or by a sole remaining director;
-

- provide that shareholders seeking to present proposals before a meeting of shareholders or to nominate candidates for election as directors at a meeting of shareholders must provide notice in writing in a timely manner, and also specify requirements as to the form and content of a shareholder's notice;
- provide that a shareholder, or group of up to 20 shareholders, that has owned continuously for at least three years shares of Common Stock representing an aggregate of at least 3% of the Company's outstanding shares of Common Stock, may nominate and include in the Company's proxy materials director nominees constituting up to 20% of the Company's Board of Directors, provided that the shareholder(s) and nominee(s) satisfy the requirements in the Bylaws; and
- do not provide for cumulative voting rights for the election of directors.

In addition, as a California corporation, the Company is subject to the provisions of Section 1203 of the California General Corporation Law, which requires it to provide a fairness opinion to its shareholders in connection with their consideration of any proposed "interested party" reorganization transaction.

Listing

The Company's Common Stock is listed on The Nasdaq Stock Market LLC under the trading symbol "AAPL."

DESCRIPTION OF DEBT SECURITIES

The following description of the Company's 1.000% Notes due 2022 (the "2022 Notes"), 1.375% Notes due 2024 (the "2024 Notes"), 0.875% Notes due 2025 (the "2025 Notes"), 1.625% Notes due 2026 (the "2026 Notes"), 2.000% Notes due 2027 (the "2027 Notes"), 1.375% Notes due 2029 (the "1.375% 2029 Notes"), 3.050% Notes due 2029 (the "3.050% 2029 Notes"), and 3.600% Notes due 2042 (the "2042 Notes," and together with the 2022 Notes, the 2024 Notes, the 2025 Notes, the 2026 Notes, the 2027 Notes, the 1.375% 2029 Notes and the 3.050% 2029 Notes, the "Notes") is a summary and does not purport to be complete. This description is qualified in its entirety by reference to the Indenture, dated as of April 29, 2013, between Apple Inc. and The Bank of New York Mellon Trust Company, N.A., as trustee (the "Indenture"). References in this section to the "Company," "us," "we" and "our" are solely to Apple Inc. (parent company only) and not to any of its subsidiaries, unless the context requires otherwise.

The Notes

The Notes were issued under the Indenture, which provides that debt securities may be issued under the Indenture from time to time in one or more series. The Indenture and the Notes are governed by, and construed in accordance with, the laws of the State of New York. The Indenture does not limit the amount of debt securities that we may issue under that Indenture. We may, without the consent of the holders of the debt securities of any series, issue additional debt securities ranking equally with, and otherwise similar in all respects to, the debt securities of the series (except for the public offering price and the issue date) so that those additional debt securities will be consolidated and form a single series with the debt securities of the series previously offered and sold.

The 2022 Notes

We issued €1,400,000,000 aggregate principal amount of the 2022 Notes on November 10, 2014. The maturity date of the 2022 Notes is November 10, 2022, and interest at a rate of 1.000% per annum is paid annually on November 10 of each year, beginning on November 10, 2015, and on the maturity date. As of October 18, 2019, €1,400,000,000 aggregate principal amount of the 2022 Notes was outstanding.

The 2024 Notes

We issued €1,000,000,000 aggregate principal amount of 2024 Notes on September 17, 2015. The maturity date of the 2024 Notes is January 17, 2024, and interest at a rate of 1.375% per annum is paid annually on January 17 of each year, beginning on January 17, 2016, and on the maturity date. As of October 18, 2019, €1,000,000,000 aggregate principal amount of the 2024 Notes was outstanding.

The 2025 Notes

We issued €1,250,000,000 aggregate principal amount of the 2025 Notes on May 24, 2017. The maturity date of the 2025 Notes is May 24, 2025, and interest at a rate of 0.875% per annum is paid annually on May 24 of each

year, beginning on May 24, 2018, and on the maturity date. As of October 18, 2019, €1,250,000,000 aggregate principal amount of the 2025 Notes was outstanding.

The 2026 Notes

We issued €1,400,000,000 aggregate principal amount of the 2026 Notes on November 10, 2014. The maturity date of the 2026 Notes is November 10, 2026, and interest at a rate of 1.625% per annum is paid annually on November 10 of each year, beginning on November 10, 2015, and on the maturity date. As of October 18, 2019, €1,400,000,000 aggregate principal amount of the 2026 Notes was outstanding.

The 2027 Notes

We issued €1,000,000,000 aggregate principal amount of the 2027 Notes on September 17, 2015. The maturity date of the 2027 Notes is September 17, 2027, and interest at a rate of 2.000% per annum is paid annually on September 17 of each year, beginning on September 17, 2016, and on the maturity date. As of October 18, 2019, €1,000,000,000 aggregate principal amount of the 2027 Notes was outstanding.

The 1.375% 2029 Notes

We issued €1,250,000,000 aggregate principal amount of 1.375% 2029 Notes on May 24, 2017. The maturity date of the 1.375% 2029 Notes is May 24, 2029, and interest at a rate of 1.375% per annum is paid annually on May 24 of each year, beginning on May 24, 2018, and on the maturity date. As of October 18, 2019, €1,250,000,000 aggregate principal amount of the 1.375% 2029 Notes was outstanding.

The 3.050% 2029 Notes

We issued £750,000,000 aggregate principal amount of the 3.050% 2029 Notes on July 31, 2015. The maturity date of the 3.05% 2029 Notes is July 31, 2029, and interest at a rate of 3.050% per annum is paid semi-annually on January 31 and July 31 of each year, beginning on January 31, 2016, and on the maturity date. As of October 18, 2019, £750,000,000 aggregate principal amount of the 3.050% 2029 Notes was outstanding.

The 2042 Notes

We issued £500,000,000 aggregate principal amount of the 2042 Notes on July 31, 2015. The maturity date of the 2042 Notes is July 31, 2042, and interest at a rate of 3.600% per annum is paid semi-annually on January 31 and July 31 of each year, beginning on January 31, 2016, and on the maturity date. As of October 18, 2019, £500,000,000 aggregate principal amount of the 2042 Notes was outstanding.

Ranking

The Notes are our senior unsecured indebtedness and rank equally with each other and with all of our other senior unsecured and unsubordinated indebtedness from time to time outstanding. However, the Notes are structurally subordinated to any indebtedness and preferred stock, if any, of our subsidiaries and are effectively subordinated to any secured indebtedness to the extent of the value of the assets securing such indebtedness. Claims of the creditors of our subsidiaries generally have priority with respect to the assets and earnings of such subsidiaries over the claims of our creditors, including holders of the Notes. Accordingly, the Notes are effectively subordinated to creditors, including trade creditors and preferred stockholders, if any, of our subsidiaries. The Indenture does not restrict the ability of our subsidiaries to incur indebtedness.

Payment on the Notes

All payments of principal of, the redemption price (if any), and interest and additional amounts (if any) on the 2022 Notes, 2024 Notes, 2025 Notes, 2026 Notes, 2027 Notes and 1.375% 2029 Notes are payable in euro, provided that, if the euro is unavailable to the Company due to the imposition of exchange controls or other circumstances beyond the Company's control, or if the euro is no longer being used by the then member states of the European Monetary Union that have adopted the euro as their currency or for the settlement of transactions by public institutions of or within the international banking community, then all payments in respect of the 2022 Notes, 2024 Notes, 2025 Notes, 2026 Notes, 2027 Notes and 1.375% 2029 Notes will be made in U.S. dollars, until the euro is again available to the Company or so used. The amount payable on any date in euro will be converted into U.S. dollars at the rate mandated by the U.S. Federal Reserve Board as of the close of business on the second Business Day prior to the

relevant payment date or, in the event the U.S. Federal Reserve Board has not mandated a rate of conversion, on the basis of the most recent U.S. dollar/euro exchange rate published in The Wall Street Journal on or prior to the second Business Day prior to the relevant payment date. Any payment in respect of the 2022 Notes, 2024 Notes, 2025 Notes, 2026 Notes, 2027 Notes and 1.375% 2029 Notes so made in U.S. dollars will not constitute an event of default under such Notes or the Indenture.

With respect to the 2022 Notes, 2024 Notes, 2025 Notes, 2026 Notes, 2027 Notes and 1.375% 2029 Notes, "Business Day" means any day, other than a Saturday or Sunday, (1) which is not a day on which banking institutions in The City of New York or London are authorized or required by law, regulation or executive order to close and (2) on which the Trans-European Automated Real-time Gross Settlement Express Transfer system (the TARGET2 system), or any successor thereto, is open.

All payments of principal of, the redemption price (if any), and interest and additional amounts (if any) on the 3.050% 2029 Notes and 2042 Notes are payable in pounds sterling, or, if the United Kingdom adopts euro as its lawful currency, in euro. If pounds sterling or, in the event the Notes are redenominated into euro, euro is unavailable to the Company due to the imposition of exchange controls or other circumstances beyond the Company's control or, in the event the notes are redenominated into euro, the euro is no longer being used by the then member states of the European Monetary Union that have adopted the euro as their currency or for the settlement of transactions by public institutions of or within the international banking community, then all payments in respect of the 3.050% 2029 Notes and 2042 Notes will be made in U.S. dollars until the pound sterling or euro, as the case may be, is again available to the Company or so used. The amount payable on any date in pounds sterling or, in the event such Notes are redenominated into euro, euro will be converted into U.S. dollars at the rate mandated by the U.S. Federal Reserve Board as of the close of business on the second Business Day prior to the relevant payment date or, in the event the U.S. Federal Reserve Board has not mandated a rate of conversion, on the basis of the most recent U.S. dollar/pounds sterling or, in the event the Notes are redenominated into euro, the most recent U.S. dollar/euro exchange rate published in The Wall Street Journal on or prior to the second Business Day prior to the relevant payment date. Any payment in respect of the 3.050% 2029 Notes and 2042 Notes so made in U.S. dollars will not constitute an event of default under such Notes or the Indenture.

With respect to the 3.050% 2029 Notes and 2042 Notes, "Business Day" means any day which is not a day on which banking institutions in The City of New York or London or the relevant place of payment are authorized or required by law, regulation or executive order to close.

Payment of Additional Amounts

All payments of principal and interest in respect of the Notes will be made free and clear of, and without deduction or withholding for or on account of any present or future taxes, duties, assessments or other governmental charges of whatsoever nature required to be deducted or withheld by the United States or any political subdivision or taxing authority of or in the United States, unless such withholding or deduction is required by law.

In the event any withholding or deduction on payments in respect of the Notes for or on account of any present or future tax, assessment or other governmental charge is required to be deducted or withheld by the United States or any taxing authority thereof or therein, we will pay such additional amounts on the Notes as will result in receipt by each beneficial owner of a Note that is not a U.S. Person (as defined below) of such amounts (after all such withholding or deduction, including on any additional amounts) as would have been received by such beneficial owner had no such withholding or deduction been required. We will not be required, however, to make any payment of additional amounts for or on account of:

- a. any tax, assessment or other governmental charge that would not have been imposed but for (1) the existence of any present or former connection (other than a connection arising solely from the ownership of those Notes or the receipt of payments in respect of those Notes) between that holder (or the beneficial owner for whose benefit such holder holds such Note), or between a fiduciary, settlor, beneficiary of, member or shareholder of, or possessor of a power over, that holder or beneficial owner (if that holder or beneficial owner is an estate, trust, partnership or corporation) and the United States, including that holder or beneficial owner, or that fiduciary, settlor, beneficiary, member, shareholder or possessor, being or having been a citizen or resident or treated as a resident of the United States or being or having been engaged in trade or business or present in the United States or having had a permanent establishment in the United States or (2) the presentation of a Note for payment on a date more than 30 days after the later of the date on which that payment becomes due and payable and the date on which payment is duly provided for;

- b. any estate, inheritance, gift, sales, transfer, capital gains, excise, personal property, wealth or similar tax, assessment or other governmental charge;
- c. any tax, assessment or other governmental charge imposed on foreign personal holding company income or by reason of the beneficial owner's past or present status as a passive foreign investment company, a controlled foreign corporation, a foreign tax exempt organization or a personal holding company with respect to the United States or as a corporation that accumulates earnings to avoid U.S. federal income tax;
- d. any tax, assessment or other governmental charge which is payable otherwise than by withholding or deducting from payment of principal or premium, if any, or interest on such Notes;
- e. any tax, assessment or other governmental charge required to be withheld by any paying agent from any payment of principal or premium, if any, or interest on any Note if that payment can be made without withholding by any other paying agent;
- f. any tax, assessment or other governmental charge which would not have been imposed but for the failure of a beneficial owner or any holder of Notes to comply with our request or a request of our agent to satisfy certification, information, documentation or other reporting requirements concerning the nationality, residence, identity or connections with the United States of the beneficial owner or any holder of the Notes that such beneficial owner or holder is legally able to deliver (including, but not limited to, the requirement to provide Internal Revenue Service Forms W-8BEN, W-8BEN-E, Forms W-8ECI, or any subsequent versions thereof or successor thereto, and including, without limitation, any documentation requirement under an applicable income tax treaty);
- g. any tax, assessment or other governmental charge imposed on interest received by (1) a 10% shareholder (as defined in Section 871(h)(3)(B) of the U.S. Internal Revenue Code of 1986, as amended (the "Code"), and the regulations that may be promulgated thereunder) of the Company or (2) a controlled foreign corporation that is related to us within the meaning of Section 864(d)(4) of the Code, or (3) a bank receiving interest described in Section 881(c)(3)(A) of the Code, to the extent such tax, assessment or other governmental charge would not have been imposed but for the beneficial owner's status as described in clauses (1) through (3) of this paragraph (g);
- h. any withholding or deduction (and in the case of the 2022 Notes and the 2026 Notes, that is imposed on a payment to an individual) that is required to be made pursuant to any law implementing or complying with, or introduced in order to conform to, any European Union Directive on the taxation of savings, other than in the case of the 2025 Notes and the 1.375% 2029 Notes;
- i. any tax, assessment or other governmental charge required to be withheld or deducted under Sections 1471 through 1474 of the Code (or any amended or successor version of such Sections) ("FATCA"), any regulations or other guidance thereunder, or any agreement (including any intergovernmental agreement) entered into in connection therewith; or any law, regulation or other official guidance enacted in any jurisdiction implementing FATCA or an intergovernmental agreement in respect of FATCA; or
- j. any combination of items (a), (b), (c), (d), (e), (f), (g), (h) and (i);

nor will we pay any additional amounts to any beneficial owner or holder of Notes who is a fiduciary or partnership to the extent that a beneficiary or settlor with respect to that fiduciary or a member of that partnership or a beneficial owner thereof would not have been entitled to the payment of those additional amounts had that beneficiary, settlor, member or beneficial owner been the beneficial owner of those Notes.

As used in the preceding paragraph, "U.S. Person" means any individual who is a citizen or resident of the United States for U.S. federal income tax purposes, a corporation, partnership or other entity created or organized in or under the laws of the United States, any state of the United States or the District of Columbia (other than a partnership that is not treated as a United States person under any applicable U.S. Treasury regulations), or any estate or trust the income of which is subject to United States federal income taxation regardless of its source.

Redemption for Tax Reasons

If, as a result of any change in, or amendment to, the laws (or any regulations or rulings promulgated under the laws) of the United States (or any political subdivision or taxing authority of or in the United States), or any change in, or amendments to, an official position regarding the application or interpretation of such laws, regulations or rulings, we become, or based upon a written opinion of independent counsel selected by us, will become obligated to pay additional amounts as described above under the heading "Payments of Additional Amounts" with respect to a series of the Notes, then we may at our option redeem, in whole, but not in part, the Notes of such series on not less than 30 nor more than 60 days' prior notice, at a redemption price equal to 100% of their principal amount, together with interest accrued but unpaid on those Notes to the date fixed for redemption.

Optional Redemption

We may redeem the 2022 Notes, 2024 Notes, 2026 Notes, 2027 Notes, 3.050% 2029 Notes and 2042 Notes at our option, at any time in whole or from time to time in part, at a redemption price equal to the greater of:

- 100% of the principal amount of the Notes to be redeemed; or
- the sum of the present values of the remaining scheduled payments of principal and interest thereon (not including any portion of such payments of interest accrued as of the date of redemption), discounted to the date of redemption on an annual basis (ACTUAL/ACTUAL (ICMA)) at the applicable Comparable Government Bond Rate (as defined below), plus 5 basis points in the case of the 2022 Notes, plus 10 basis points in the case of the 2026 Notes, plus 15 basis points in the case of the 2024 Notes, the 3.050% 2029 Notes and the 2042 Notes and plus 20 basis points in the case of the 2027 Notes.

We may redeem the 2025 Notes and 1.375% 2029 Notes at our option, at any time in whole or from time to time in part, prior to the applicable Par Call Date at a redemption price equal to the greater of:

- 100% of the principal amount of the Notes to be redeemed; or
- the sum of the present values of the remaining scheduled payments of principal and interest thereon assuming that the Notes matured on the applicable Par Call Date (not including any portion of such payments of interest accrued as of the date of redemption), discounted to the date of redemption on an annual basis (ACTUAL/ACTUAL (ICMA)) at the applicable Comparable Government Bond Rate (as defined below), plus 15 basis points in the case of the 2025 Notes and 20 basis points in the case of the 2029 Notes.

"Par Call Date" means (i) with respect to the 2025 Notes, February 24, 2025 (three months prior to the maturity date of the 2025 Notes), and (ii) with respect to the 1.375% 2029 Notes, February 24, 2029 (three months prior to the maturity date of 1.375% 2029 Notes).

If the 2025 Notes or the 1.375% 2029 Notes are redeemed on or after the applicable Par Call Date, the redemption price for the Notes will equal 100% of the principal amount of the Notes being redeemed.

In each case upon redemption of the Notes, we will pay accrued and unpaid interest on the principal amount being redeemed to the date of redemption.

Installments of interest on Notes being redeemed that are due and payable on interest payment dates falling on or prior to a redemption date shall be payable on the interest payment date to the holders as of the close of business on the relevant regular record date according to the Notes and the Indenture.

"Comparable Government Bond" means, in relation to any Comparable Government Bond Rate calculation for the 2022 Notes, 2024 Notes, 2026 Notes and 2027 Notes, at the discretion of an independent investment bank selected by us, a German government bond whose maturity is closest to the maturity of the Notes being redeemed, or if such independent investment bank in its discretion determines that such similar bond is not in issue, such other German government bond as such independent investment bank may, with the advice of three brokers of, and/or market makers in, German government bonds selected by us, determine to be appropriate for determining the Comparable Government Bond Rate.

“Comparable Government Bond” means, in relation to any Comparable Government Bond Rate calculation for the 3.050% 2029 Notes and 2042 Notes, at the discretion of an independent investment bank selected by us, a United Kingdom government bond whose maturity is closest to the maturity of the Notes being redeemed, or if such independent investment bank in its discretion determines that such similar bond is not in issue, such other United Kingdom government bond as such independent investment bank may, with the advice of three brokers of, and/or market makers in, United Kingdom government bonds selected by us, determine to be appropriate for determining the Comparable Government Bond Rate.

“Comparable Government Bond” means, in relation to any Comparable Government Bond Rate calculation for the 2025 Notes and 1.375% 2029 Notes, at the discretion of an independent investment bank selected by us, a German government bond whose maturity is closest to the applicable Par Call Date of the Notes being redeemed, or if such independent investment bank in its discretion determines that such similar bond is not in issue, such other German government bond as such independent investment bank may, with the advice of three brokers of, and/or market makers in, German government bonds selected by us, determine to be appropriate for determining the Comparable Government Bond Rate.

“Comparable Government Bond Rate” means the price, expressed as a percentage (rounded to three decimal places, with 0.0005 being rounded upwards), at which the gross redemption yield on the Notes, if they were to be purchased at such price on the third business day prior to the date fixed for redemption, would be equal to the gross redemption yield on such business day of the Comparable Government Bond on the basis of the middle market price of the Comparable Government Bond prevailing at 11:00 a.m. (London time) on such business day as determined by an independent investment bank selected by us.

Covenants

The Indenture sets forth limited covenants that apply to the Notes. However, these covenants do not, among other things:

- limit the amount of indebtedness or lease obligations that may be incurred by us and our subsidiaries;
- limit our ability or that of our subsidiaries to issue, assume or guarantee debt secured by liens; or
- restrict us from paying dividends or making distributions on our capital stock or purchasing or redeeming our capital stock.

Consolidation, Merger and Sale of Assets

The Indenture provides that we may consolidate with or merge with or into any other person, and may sell, transfer, or lease or convey all or substantially all of our properties and assets to another person; provided that the following conditions are satisfied:

- we are the continuing entity, or the resulting, surviving or transferee person (the “Successor”) is a person (if such person is not a corporation, then the Successor will include a corporate co-issuer of the debt securities) organized and existing under the laws of the United States of America, any state thereof or the District of Columbia and the Successor (if not us) will expressly assume, by supplemental indenture, all of our obligations under the debt securities and the Indenture and, for each security that by its terms provides for conversion, provide for the right to convert such security in accordance with its terms;
- immediately after giving effect to such transaction, no default or event of default under the Indenture has occurred and is continuing; and
- the trustee receives from us an officers’ certificate and an opinion of counsel that the transaction and such supplemental indenture, as the case may be, complies with the applicable provisions of the Indenture.

If we consolidate or merge with or into any other person or sell, transfer, lease or convey all or substantially all of our properties and assets in accordance with the Indenture, the Successor will be substituted for us in the Indenture, with the same effect as if it had been an original party to the Indenture. As a result, the Successor may

exercise our rights and powers under the Indenture, and we will be released from all our liabilities and obligations under the Indenture and under the debt securities.

For purposes of this covenant, "person" means any individual, corporation, partnership, limited liability company, joint venture, association, joint-stock company, trust, unincorporated organization or government or any agency or political subdivision thereof or any other entity.

Events of Default

Each of the following events are defined in the Indenture as an "event of default" (whatever the reason for such event of default and whether or not it will be voluntary or involuntary or be effected by operation of law or pursuant to any judgment, decree or order of any court or any order, rule or regulation of any administrative or governmental body) with respect to the debt securities of any series:

- (1) default in the payment of any installment of interest on any debt securities of such series for 30 days after becoming due;
- (2) default in the payment of principal of or premium, if any, on any debt securities of such series when it becomes due and payable at its stated maturity, upon optional redemption, upon declaration or otherwise;
- (3) default in the performance, or breach, of any covenant or agreement of ours in the Indenture with respect to the debt securities of such series (other than a covenant or agreement, a default in the performance of which or a breach of which is elsewhere in the Indenture specifically dealt with or that has expressly been included in the Indenture solely for the benefit of a series of debt securities other than such series), which continues for a period of 90 days after written notice to us by the trustee or to us and the trustee by the holders of at least 25% in aggregate principal amount of the outstanding debt securities of that series;
- (4) we, pursuant to or within the meaning of the Bankruptcy Law:
 - commence a voluntary case or proceeding;
 - consent to the entry of an order for relief against us in an involuntary case or proceeding;
 - consent to the appointment of a custodian of us or for all or substantially all of our property;
 - make a general assignment for the benefit of our creditors;
 - file a petition in bankruptcy or answer or consent seeking reorganization or relief;
 - consent to the filing of such petition or the appointment of or taking possession by a custodian; or
 - take any comparable action under any foreign laws relating to insolvency;
- (5) a court of competent jurisdiction enters an order or decree under any Bankruptcy Law that:
 - is for relief against us in an involuntary case, or adjudicates us insolvent or bankrupt;
 - appoints a custodian of us or for all or substantially all of our property; or
 - orders the winding-up or liquidation of us (or any similar relief is granted under any foreign laws);and the order or decree remains unstayed and in effect for 90 days; or
- (6) any other event of default provided with respect to debt securities of such series occurs.

“Bankruptcy Law” means Title 11, United States Code or any similar federal or state or foreign law for the relief of debtors. “Custodian” means any custodian, receiver, trustee, assignee, liquidator or other similar official under any Bankruptcy Law.

If an event of default with respect to debt securities of any series (other than an event of default relating to certain events of bankruptcy, insolvency, or reorganization of us) occurs and is continuing, the trustee by notice to us, or the holders of at least 25% in aggregate principal amount of the outstanding debt securities of such series by notice to us and the trustee, may, and the trustee at the request of these holders will, declare the principal of and premium, if any, and accrued and unpaid interest on all the debt securities of such series to be due and payable. Upon such a declaration, such principal, premium and accrued and unpaid interest will be due and payable immediately. If an event of default relating to certain events of bankruptcy, insolvency, or reorganization of us occurs and is continuing, the principal of and premium, if any, and accrued and unpaid interest on the debt securities of such series will become and be immediately due and payable without any declaration or other act on the part of the trustee or any holders.

The holders of not less than a majority in aggregate principal amount of the outstanding debt securities of any series may rescind a declaration of acceleration and its consequences, if we have deposited certain sums with the trustee and all events of default with respect to the debt securities of such series, other than the non-payment of the principal or interest which have become due solely by such acceleration, have been cured or waived, as provided in the Indenture.

An event of default for a particular series of debt securities does not necessarily constitute an event of default for any other series of debt securities issued under the Indenture.

We are required to furnish the trustee annually within 120 days after the end of our fiscal year a statement by one of our officers to the effect that, to the best knowledge of such officer, we are not in default in the fulfillment of any of our obligations under the Indenture or, if there has been a default in the fulfillment of any such obligation, specifying each such default and the nature and status thereof.

No holder of any debt securities of any series will have any right to institute any judicial or other proceeding with respect to the Indenture, or for the appointment of a receiver or trustee, or for any other remedy unless:

- (1) an event of default has occurred and is continuing and such holder has given the trustee prior written notice of such continuing event of default with respect to the debt securities of such series;
- (2) the holders of not less than 25% of the aggregate principal amount of the outstanding debt securities of such series have requested the trustee to institute proceedings in respect of such event of default;
- (3) the trustee has been offered indemnity reasonably satisfactory to it against its costs, expenses and liabilities in complying with such request;
- (4) the trustee has failed to institute proceedings 60 days after the receipt of such notice, request and offer of indemnity; and
- (5) no direction inconsistent with such written request has been given for 60 days by the holders of a majority in aggregate principal amount of the outstanding debt securities of such series.

The holders of a majority in aggregate principal amount of outstanding debt securities of a series will have the right, subject to certain limitations, to direct the time, method and place of conducting any proceeding for any remedy available to the trustee with respect to the debt securities of that series or exercising any trust or power conferred to the trustee, and to waive certain defaults. The Indenture provides that if an event of default occurs and is continuing, the trustee will exercise such of its rights and powers under the Indenture, and use the same degree of care and skill in their exercise, as a prudent person would exercise or use under the circumstances in the conduct of such person’s own affairs. Subject to such provisions, the trustee will be under no obligation to exercise any of its rights or powers under the Indenture at the request of any of the holders of the debt securities of a series unless they will have offered to the trustee security or indemnity satisfactory to the trustee against the costs, expenses and liabilities which might be incurred by it in compliance with such request.

Notwithstanding the foregoing, the holder of any debt security will have an absolute and unconditional right to receive payment of the principal of and premium, if any, and interest on that debt security on or after the due dates expressed in that debt security and to institute suit for the enforcement of payment.

Modification and Waivers

Modification and amendments of the Indenture and the Notes may be made by us and the trustee with the consent of the holders of not less than a majority in aggregate principal amount of the outstanding series of Notes affected thereby; provided, however, that no such modification or amendment may, without the consent of the holder of each outstanding Note of that series affected thereby:

- change the stated maturity of the principal of, or installment of interest on, any Note;
- reduce the principal amount of any Note or reduce the amount of the principal of any Note which would be due and payable upon a declaration of acceleration of the maturity thereof or reduce the rate of interest on any Note;
- reduce any premium payable on the redemption of any Note or change the date on which any Note may or must be redeemed;
- change the coin or currency in which the principal of, premium, if any, or interest on any Note is payable;
- impair the right of any holder to institute suit for the enforcement of any payment on or after the stated maturity of any Note (or, in the case of redemption, on or after the redemption date);
- reduce the percentage in principal amount of the outstanding Notes, the consent of whose holders is required in order to take certain actions;
- reduce the requirements for quorum or voting by holders of Notes in the Indenture or the Note;
- modify any of the provisions in the Indenture regarding the waiver of past defaults and the waiver of certain covenants by the holders of Notes except to increase any percentage vote required or to provide that certain other provisions of the Indenture cannot be modified or waived without the consent of the holder of each Notes affected thereby;
- make any change that adversely affects the right to convert or exchange any debt security or decreases the conversion or exchange rate or increases the conversion price of any convertible or exchangeable debt security, unless such decrease or increase is permitted by the terms of the debt securities; or
- modify any of the above provisions.

We and the trustee may, without the consent of any holders, modify or amend the terms of the Indenture and any series of Notes with respect to the following:

- to add to our covenants for the benefit of holders of all or any series of the Notes or to surrender any right or power conferred upon us;
- to evidence the succession of another person to, and the assumption by the successor of our covenants, agreements and obligations under, the Indenture pursuant to the covenant described above under the caption "Covenants—Consolidation, Merger and Sale of Assets";
- to add any additional events of default for the benefit of holders of all or any series of the Notes;
- to add one or more guarantees for the benefit of holders of the Notes;
- to secure the Notes pursuant to the covenants of the Indenture;

- to add or appoint a successor or separate trustee or other agent;
- to provide for the issuance of additional debt securities of any series;
- to establish the form or terms of the debt securities of any series as permitted by the Indenture;
- to comply with the rules of any applicable securities depository;
- to provide for uncertificated Notes in addition to or in place of certificated Notes;
- to add to, change or eliminate any of the provisions of the Indenture in respect of one or more series of debt securities; provided that any such addition, change or elimination (a) shall neither (1) apply to any debt security of any series created prior to the execution of such supplemental indenture and entitled to the benefit of such provision nor (2) modify the rights of the holder of any such debt security with respect to such provision or (b) shall become effective only when there is no debt security described in clause (a)(1) outstanding;
- to cure any ambiguity, omission, defect or inconsistency;
- to change any other provision; provided that the change does not adversely affect the interests of the holders of debt securities of any series in any material respect;
- to supplement any of the provisions of the Indenture to such extent as shall be necessary to permit or facilitate the defeasance and discharge of any series of Notes pursuant to the Indenture; provided that any such action shall not adversely affect the interests of the holders of Notes of such series or any other series of debt securities in any material respect;
- to comply with the rules or regulations of any securities exchange or automated quotation system on which any of the Notes may be listed or traded; and
- to add to, change or eliminate any of the provisions of the Indenture as shall be necessary or desirable in accordance with any amendments to the Trust Indenture Act of 1939, as amended, provided that such action does not adversely affect the rights or interests of any holder of debt securities in any material respect.

The holders of at least a majority in aggregate principal amount of the outstanding Notes of any series may, on behalf of the holders of all Notes of that series, waive compliance by us with certain restrictive provisions of the Indenture. The holders of not less than a majority in aggregate principal amount of the outstanding Notes of a series may, on behalf of the holders of all Notes of that series, waive any past default and its consequences under the Indenture with respect to the Notes of that series, except a default (1) in the payment of principal or premium, if any, or interest on Notes of that series or (2) in respect of a covenant or provision of the Indenture that cannot be modified or amended without the consent of the holder of each Note of that series. Upon any such waiver, such default will cease to exist, and any event of default arising therefrom will be deemed to have been cured, for every purpose of the Indenture; however, no such waiver will extend to any subsequent or other default or event of default or impair any rights consequent thereon.

Discharge, Defeasance and Covenant Defeasance

We may discharge certain obligations to holders of the Notes of a series that have not already been delivered to the trustee for cancellation and that either have become due and payable or will become due and payable within one year (or scheduled for redemption within one year) by depositing with the trustee, in trust, funds in U.S. dollars in an amount sufficient to pay the entire indebtedness including, but not limited to, the principal and premium, if any, and interest to the date of such deposit (if due and payable) or to the maturity thereof or the redemption date of the Notes of that series, as the case may be. We may direct the trustee to invest such funds in U.S. Treasury securities with a maturity of one year or less or in a money market fund that invests solely in short-term U.S. Treasury securities.

The Indenture provides that we may elect either (1) to defease and be discharged from any and all obligations with respect to the Notes of a series (except for, among other things, obligations to register the transfer or

exchange of the Notes, to replace temporary or mutilated, destroyed, lost or stolen Notes, to maintain an office or agency with respect to the Notes and to hold moneys for payment in trust) ("legal defeasance") or (2) to be released from our obligations to comply with the restrictive covenants under the Indenture, and any omission to comply with such obligations will not constitute a default or an event of default with respect to the Notes of a series and clauses (3) and (6) under the caption "Events of Default" above will no longer be applied ("covenant defeasance"). Legal defeasance or covenant defeasance, as the case may be, will be conditioned upon, among other things, the irrevocable deposit by us with the trustee, in trust, of an amount in U.S. dollars, or U.S. government obligations (as such term is modified below), or both, applicable to the Notes of that series which through the scheduled payment of principal and interest in accordance with their terms will provide money in an amount sufficient to pay the principal or premium, if any, and interest on the Notes on the scheduled due dates therefor.

If we effect covenant defeasance with respect to the Notes of any series, the amount in U.S. dollars, or U.S. government obligations (as such term is modified below), or both, on deposit with the trustee will be sufficient, in the opinion of a nationally recognized firm of independent accountants, to pay amounts due on the Notes of that series at the time of the stated maturity but may not be sufficient to pay amounts due on the Notes of that series at the time of the acceleration resulting from such event of default. However, we would remain liable to make payment of such amounts due at the time of acceleration.

With respect to the 2022 Notes, 2024 Notes, 2025 Notes, 2026 Notes, 2027 Notes and 1.375% 2029 Notes, the term "U.S. government obligations" shall instead mean (x) any security that is (i) a direct obligation of the German government or (ii) an obligation of a person controlled or supervised by and acting as an agency or instrumentality of the German government the payment of which is fully and unconditionally guaranteed by the German government or the central bank of the German government, which, in either case (x)(i) or (ii), is not callable or redeemable at the option of the issuer thereof, and (y) certificates, depositary receipts or other instruments which evidence a direct ownership interest in obligations described in clause (x)(i) or (x)(ii) above or in any specific principal or interest payments due in respect thereof.

With respect to the 3.050% 2029 Notes and 2042 Notes, the term "U.S. government obligations" shall instead mean (x) any security that is (i) a direct obligation of the United Kingdom government or (ii) an obligation of a person controlled or supervised by and acting as an agency or instrumentality of the United Kingdom government the payment of which is fully and unconditionally guaranteed by the United Kingdom government or the central bank of the United Kingdom government, which, in either case (x)(i) or (ii), is not callable or redeemable at the option of the issuer thereof, and (y) certificates, depositary receipts or other instruments which evidence a direct ownership interest in obligations described in clause (x)(i) or (x)(ii) above or in any specific principal or interest payments due in respect thereof.

We will be required to deliver to the trustee an opinion of counsel that the deposit and related defeasance will not cause the holders and beneficial owners of the Notes of that series to recognize income, gain or loss for federal income tax purposes. If we elect legal defeasance, that opinion of counsel must be based upon a ruling from the U.S. Internal Revenue Service or a change in law to that effect.

We may exercise our legal defeasance option notwithstanding our prior exercise of our covenant defeasance option.

Book-Entry and Settlement

The Notes were issued in book-entry form and are represented by global notes deposited with, or on behalf of, a common depositary on behalf of Euroclear and Clearstream, and are registered in the name of the common depositary or its nominee. Except as described herein, certificated notes will not be issued in exchange for beneficial interests in the global notes.

Certificated Notes

Subject to certain conditions, the Notes represented by the global notes are exchangeable for certificated notes in definitive form of like tenor, in minimum denominations of €100,000 principal amount and integral multiples of €1,000 in excess thereof in the case of the 2022 Notes, 2024 Notes, 2025 Notes, 2026 Notes, 2027 Notes and 1.375% 2029 Notes, and in minimum denominations of £100,000 principal amount and integral multiples of £1,000 in excess thereof in the case of the 3.050% 2029 Notes and 2042 Notes, if:

1. the common depository notifies us that it is unwilling or unable to continue as depository or if the common depository ceases to be eligible under the Indenture and we do not appoint a successor depository within 90 days;
2. we determine that the Notes will no longer be represented by global securities and execute and deliver to the trustee an order to that effect; or
3. an event of default with respect to the Notes will have occurred and be continuing.

Any Note that is exchangeable as above is exchangeable for certificated notes issuable in authorized denominations and registered in such names as the common depository shall direct. Subject to the foregoing, a global note is not exchangeable, except for a global note of the same aggregate denomination to be registered in the name of the common depository or its nominee.

The Trustee for the Notes

The Bank of New York Mellon Trust Company, N.A. is the trustee under the Indenture. We have commercial deposits and custodial arrangements with The Bank of New York Mellon Trust Company, N.A. and its affiliates ("BNYM"). We may enter into similar or other banking relationships with BNYM in the future in the normal course of business. In addition, BNYM acts as trustee and as paying agent with respect to other debt securities issued by us, and may do so for future issuances of debt securities by us as well.

**APPLE INC.
2014 EMPLOYEE STOCK PLAN
RESTRICTED STOCK UNIT AWARD AGREEMENT**

NOTICE OF GRANT

Name: (the "Participant")

Employee ID:

Grant Number:

No. of Units Subject to Award:

Award Date: (the "Award Date")

Vesting Commencement Date: (the "Vesting Commencement Date")

Vesting Schedule:

This restricted stock unit award (the "Award") is granted under and governed by the terms and conditions of the Apple Inc. 2014 Employee Stock Plan and the Terms and Conditions of Restricted Stock Unit Award, which are incorporated herein by reference.

You do not have to accept the Award. If you wish to decline your Award, you should promptly notify Apple Inc.'s Stock Plan Group of your decision at stock@apple.com. If you do not provide such notification by the last day of the calendar month prior to the first Vesting Date, you will be deemed to have accepted your Award on the terms and conditions set forth herein.

**APPLE INC.
2014 EMPLOYEE STOCK PLAN
RESTRICTED STOCK UNIT AWARD AGREEMENT**

TERMS AND CONDITIONS OF RESTRICTED STOCK UNIT AWARD

1. **General.** These Terms and Conditions of Restricted Stock Unit Award (these “**Terms**”) apply to a particular restricted stock unit award (the “**Award**”) granted by Apple Inc., a California corporation (the “**Company**”), and are incorporated by reference in the Notice of Grant (the “**Grant Notice**”) corresponding to that particular grant. The recipient of the Award identified in the Grant Notice is referred to as the “**Participant**.” The effective date of grant of the Award as set forth in the Grant Notice is referred to as the “**Award Date**.” The Award was granted under and is subject to the provisions of the Apple Inc. 2014 Employee Stock Plan (the “**Plan**”). Capitalized terms are defined in the Plan if not defined herein. The Award has been granted to the Participant in addition to, and not in lieu of, any other form of compensation otherwise payable or to be paid to the Participant. The Grant Notice and these Terms are collectively referred to as the “**Award Agreement**” applicable to the Award.

2. **Stock Units.** As used herein, the term “**Stock Unit**” shall mean a non-voting unit of measurement which is deemed for bookkeeping purposes to be equivalent to one outstanding share of the Company’s Common Stock (“**Share**”) solely for purposes of the Plan and this Award Agreement. The Stock Units shall be used solely as a device for the determination of the payment to eventually be made to the Participant if such Stock Units vest pursuant to this Award Agreement. The Stock Units shall not be treated as property or as a trust fund of any kind.

3. **Vesting.** Subject to Sections 4 and 8 below, the Award shall vest and become nonforfeitable as set forth in the Grant Notice. (Each vesting date set forth in the Grant Notice is referred to herein as a “**Vesting Date**.”)

4. **Continuance of Employment.** Except as provided in this Section 4 and in Section 8 below, vesting of the Award requires continued active employment or service through each applicable Vesting Date as a condition to the vesting of the applicable installment of the Award and the rights and benefits under this Award Agreement. Employment or service for only a portion of the period between the Vesting Commencement Date and the first Vesting Date or between subsequent Vesting Dates, even if a substantial portion, will not entitle the Participant to any proportionate vesting of the Award. For purposes of this Award Agreement, active service shall include (a) the duration of an approved leave of absence (other than a personal leave of absence) and (b) the first thirty (30) days of an approved personal leave of absence, in each case as approved by the Company, in its sole discretion. The vesting of the Award shall be tolled beginning on the thirty-first (31st) day of a personal leave of absence.

Nothing contained in this Award Agreement or the Plan constitutes an employment or service commitment by the Company, affects the Participant’s status as an employee at will who is subject to termination with or without cause, confers upon the Participant any right to remain employed by or in service to the Company or any Subsidiary, interferes in any way with the right of the Company or any Subsidiary at any time to terminate such employment or service, or affects the right of the Company or any Subsidiary to increase or decrease the Participant’s other compensation or benefits. Nothing in this Section 4, however, is intended to adversely affect any independent contractual right of the Participant without his or her consent thereto.

5. **Dividend and Voting Rights.**

(a) **Limitations on Rights Associated with Stock Units.** The Participant shall have no rights as a shareholder of the Company, no dividend rights (except as expressly provided in Section 5(b) with respect to Dividend Equivalent Rights) and no voting rights, with respect to the Stock Units or any Shares

underlying or issuable in respect of such Stock Units until such Shares are actually issued to and held of record by the Participant. No adjustments will be made for dividends or other rights of a holder for which the record date is prior to the date of issuance of the stock certificate or book entry evidencing such Shares.

(b) **Dividend Equivalent Rights Distributions.** As of any date that the Company pays an ordinary cash dividend on its Common Stock, the Company shall credit the Participant with a dollar amount equal to (i) the per share cash dividend paid by the Company on its Common Stock on such date, multiplied by (ii) the total number of Stock Units (with such total number adjusted pursuant to Section 11 of the Plan) subject to the Award that are outstanding immediately prior to the record date for that dividend (a “**Dividend Equivalent Right**”). Any Dividend Equivalent Rights credited pursuant to the foregoing provisions of this Section 5(b) shall be subject to the same vesting, payment and other terms, conditions and restrictions as the original Stock Units to which they relate, including the obligation to satisfy the Tax-Related Items; provided, however, that the amount of any vested Dividend Equivalent Rights shall be paid in cash. No crediting of Dividend Equivalent Rights shall be made pursuant to this Section 5(b) with respect to any Stock Units which, immediately prior to the record date for that dividend, have either been paid pursuant to Section 7 or terminated pursuant to Section 8.

6. **Restrictions on Transfer.** Except as provided in Section 4(c) of the Plan, the Award, the Dividend Equivalent Rights and any interest therein or amount or Shares payable in respect thereof shall not be sold, assigned, transferred, pledged or otherwise disposed of, alienated or encumbered, either voluntarily or involuntarily.

7. **Timing and Manner of Payment of Stock Units.** On or as soon as administratively practical following each vesting event pursuant to Section 3 or Section 8 (and in all events not later than two and one-half (2 ½) months after such vesting event), the Company shall deliver to the Participant a number of Shares (either by delivering one or more certificates for such Shares or by entering such Shares in book entry form, as determined by the Company in its discretion) equal to the number of Stock Units subject to the Award that vest on the applicable Vesting Date, less Tax-Related Items (as defined in Section 11 below), unless such Stock Units terminate prior to the given Vesting Date pursuant to Section 8. The Company’s obligation to deliver Shares or otherwise make payment with respect to vested Stock Units is subject to the condition precedent that the Participant or other person entitled under the Plan to receive any Shares with respect to the vested Stock Units deliver to the Company any representations or other documents or assurances required pursuant to Section 13(c) of the Plan. The Participant shall have no further rights with respect to any Stock Units that are paid or that terminate pursuant to Section 8.

8. **Effect of Termination of Service.** Except as expressly provided in Section 4 or this Section 8, the Participant’s Stock Units (as well as the related Dividend Equivalent Rights) shall terminate to the extent such Stock Units have not become vested prior to the Participant’s Termination of Service, meaning the first date the Participant is no longer employed by or providing services to the Company or one of its Subsidiaries (the “**Severance Date**”), regardless of the reason for the Participant’s Termination of Service, whether with or without cause, voluntarily or involuntarily, or whether the Participant was employed or provided services for a portion of the vesting period prior to a Vesting Date. Notwithstanding the foregoing, in the event the Participant’s Termination of Service is due to the Participant’s Disability at a time when Stock Units remain outstanding and unvested under the Award, (a) the Award shall immediately vest as of the Severance Date with respect to the number of Stock Units determined by multiplying (i) the number of then-outstanding and unvested Stock Units subject to the Award as well as the related Dividend Equivalent Rights credited to the Participant as of the Severance Date that would have otherwise vested pursuant to Section 3 on the next Vesting Date following the Severance Date but for such Termination of Service, by (ii) a fraction, the numerator of which shall be the number of days that have elapsed between the Vesting Date that immediately preceded the Severance Date (or, in the case of a Termination of Service prior to the initial Vesting Date, the Vesting Commencement Date) and the Severance Date, and the denominator of which shall be the number of days between the Vesting Date that immediately preceded the Severance Date (or, in the case of a Termination of Service prior to the initial Vesting Date, the Vesting Commencement Date) and the next Vesting Date following the Severance Date that would have occurred but for such Termination of Service; and (b) any Stock

Units (as well as the related Dividend Equivalent Rights) that are not vested after giving effect to the foregoing clause (a) shall terminate on the Severance Date. Further, in the event the Participant's Termination of Service is due to the Participant's death, any then-outstanding and unvested Stock Units subject to the Award shall be fully vested as of the Severance Date, and any Dividend Equivalent Rights credited to the Participant shall be paid. If any unvested Stock Units are terminated hereunder, such Stock Units (as well as the related Dividend Equivalent Rights) shall automatically terminate and be cancelled as of the applicable Severance Date without payment of any consideration by the Company and without any other action by the Participant or the Participant's personal representative, as the case may be.

9. Recoupment. Notwithstanding any other provision herein, the Award and any Shares or other amount or property that may be issued, delivered, or paid in respect of the Award, as well as any consideration that may be received in respect of a sale or other disposition of any such Shares or property, shall be subject to any recoupment, clawback, or similar provisions of Applicable Laws relevant to the Company's Shares and the terms of any Company recoupment, clawback, or similar policy in effect at the time of grant of the Award. For purposes of the foregoing, the Participant expressly and explicitly authorizes the Company to issue instructions, on the Participant's behalf, to any brokerage firm or third party administrator holding the Participant's Shares and other amounts acquired under the Plan to re-convey, transfer, or otherwise return such Shares and other amounts to the Company.

10. Adjustments Upon Specified Events. Upon the occurrence of certain events relating to the Company's stock contemplated by Section 11 of the Plan (including, without limitation, an extraordinary cash dividend on such stock), the Committee shall make adjustments in accordance with such section in the number of Stock Units then outstanding and the number and kind of securities that may be issued in respect of the Award. No such adjustment shall be made with respect to any ordinary cash dividend for which Dividend Equivalent Rights are credited pursuant to Section 5(b).

11. Responsibility for Taxes. The Participant acknowledges that, regardless of any action the Company or the Participant's employer (the "**Employer**") take with respect to any or all income tax (including U.S. federal, state and local tax or non-U.S. tax), social insurance, payroll tax, payment on account or other tax-related items related to the Participant's participation in the Plan and legally applicable to the Participant or deemed by the Company or the Employer to be an appropriate charge to the Participant even if technically due by the Company or the Employer ("**Tax-Related Items**"), the ultimate liability for all Tax-Related Items is and remains the Participant's responsibility and may exceed the amount, if any, actually withheld by the Company or the Employer. The Participant further acknowledges that the Company and the Employer (i) make no representations or undertakings regarding the treatment of any Tax-Related Items in connection with any aspect of the Award, including the grant of the Stock Units, the vesting of the Stock Units, the delivery of Shares, the subsequent sale of any Shares acquired at vesting, and the receipt of any dividends or Dividend Equivalent Rights; and (ii) do not commit to and are under no obligation to structure the terms of the grant or any aspect of the Award to reduce or eliminate the Participant's liability for Tax-Related Items or achieve any particular tax result. Further, if the Participant is or becomes subject to tax in more than one jurisdiction, the Participant acknowledges that the Company or the Employer (or former employer, as applicable) may be required to withhold or account for Tax-Related Items in more than one jurisdiction.

Prior to the relevant taxable or tax withholding event, as applicable, the Participant shall pay or make arrangements satisfactory to the Company or the Employer to satisfy all Tax-Related Items. In this regard, the Participant authorizes the Company or the Employer, or their respective agents, at their discretion and pursuant to such procedures as they may specify from time to time, to satisfy any applicable withholding obligations with regard to all Tax-Related Items by one or a combination of the following:

- (a) withholding from any wages or other cash compensation payable to the Participant by the Company or the Employer;
- (b) withholding otherwise deliverable Shares and from otherwise payable Dividend Equivalent Rights to be issued or paid upon vesting/settlement of the Award;

(c) arranging for the sale of Shares otherwise deliverable to the Participant (on the Participant's behalf and at the Participant's direction pursuant to this authorization), including selling Shares as part of a block trade with other Participants in the Plan; or

(d) withholding from the proceeds of the sale of Shares acquired upon vesting/settlement of the Award.

Notwithstanding the foregoing, if the Participant is an officer of the Company who is subject to Section 16 of the Exchange Act, then the Company must satisfy any withholding obligations arising upon the occurrence of a taxable or tax withholding event, as applicable, by withholding Shares otherwise deliverable or an amount otherwise payable upon settlement of Dividend Equivalent Rights pursuant to method (b), unless the Board or the Committee determines in its discretion to satisfy the obligation for Tax-Related Items by one or a combination of methods (a), (b), (c), and (d) above.

Depending on the withholding method, the Company may withhold or account for Tax-Related Items by considering applicable minimum statutory withholding amounts or other applicable withholding rates, including maximum applicable rates in the Participant's jurisdiction(s). If the maximum rate is used, any over-withheld amount may be refunded to the Participant in cash by the Company or Employer (with no entitlement to the equivalent in Common Stock) or if not refunded, the Participant may seek a refund from the local tax authorities. If the obligation for Tax-Related Items is satisfied by withholding a number of Shares as described herein, for tax purposes, the Participant is deemed to have been issued the full number of Shares subject to the vested Stock Units, notwithstanding that a number of the Shares are held back solely for the purpose of paying the Tax-Related Items. The Participant shall pay to the Company or the Employer any amount of Tax-Related Items that the Company or the Employer may be required to withhold or account for as a result of the Participant's participation in the Plan that cannot be satisfied by the means previously described. The Company may refuse to issue or deliver to the Participant any Shares or the proceeds of the sale of Shares if the Participant fails to comply with the Participant's obligations in connection with the Tax-Related Items.

12. Electronic Delivery and Acceptance. The Company may, in its sole discretion, deliver any documents related to the Award by electronic means or request the Participant's consent to participate in the Plan by electronic means. The Participant hereby consents to receive all applicable documentation by electronic delivery and to participate in the Plan through an on-line or voice activated system established and maintained by the Company or a third party vendor designated by the Company.

13. Data Privacy. By participating in the Plan, the Participant acknowledges and consents to the collection, use, processing and transfer of personal data as described in this Section 13. The Company, its related entities, and the Employer hold certain personal information about the Participant, including the Participant's name, home address and telephone number, email address, date of birth, social security number or other employee identification number, salary, nationality, job title, any Shares or directorships held in the Company, details of all Stock Units or any other entitlement to Shares or equivalent benefits awarded, canceled, purchased, vested, unvested or outstanding in the Participant's favor, for the purpose of managing and administering the Plan ("**Data**"). The Company and its related entities may transfer Data amongst themselves as necessary for the purpose of implementation, administration, and management of the Participant's participation in the Plan, and the Company and its related entities may each further transfer Data to any third parties assisting the Company or any such related entity in the implementation, administration, and management of the Plan. The Participant acknowledges that the transferors and transferees of such Data may be located anywhere in the world and hereby authorizes each of them to receive, possess, use, retain and transfer the Data, in electronic or other form, for the purposes of implementing, administering, and managing the Participant's participation in the Plan, including any transfer of such Data as may be required for the administration of the Plan and the subsequent holding of Shares on the Participant's behalf to a broker or to other third party with whom the Participant may elect to deposit any Shares acquired under the Plan (whether pursuant to the Award or otherwise).

14. Notices. Any notice to be given under the terms of this Award Agreement shall be in writing and addressed to the Company at its principal office to the attention of the Secretary, and to the Participant at the Participant's last address reflected on the Company's records, or at such other address as either party may hereafter designate in writing to the other. Any such notice shall be given only when received, but if the Participant is no longer an employee of the Company, shall be deemed to have been duly given by the Company when enclosed in a properly sealed envelope addressed as aforesaid, registered or certified, and deposited (postage and registry or certification fee prepaid) in a post office or branch post office regularly maintained by the United States Government.

15. Plan. The Award and all rights of the Participant under this Award Agreement are subject to the terms and conditions of the provisions of the Plan, incorporated herein by reference. The Participant agrees to be bound by the terms of the Plan and this Award Agreement. The Participant acknowledges having read and understood the Plan, the Prospectus for the Plan, and this Award Agreement. Unless otherwise expressly provided in other sections of this Award Agreement, provisions of the Plan that confer discretionary authority on the Board or the Committee do not (and shall not be deemed to) create any rights in the Participant unless such rights are expressly set forth herein or are otherwise in the sole discretion of the Board or the Committee so conferred by appropriate action of the Board or the Committee under the Plan after the date hereof.

16. Entire Agreement. This Award Agreement and the Plan together constitute the entire agreement and supersede all prior understandings and agreements, written or oral, of the parties hereto with respect to the subject matter hereof. The Plan and this Award Agreement may be amended pursuant to Section 15 of the Plan. Such amendment must be in writing and signed by the Company. The Company may, however, unilaterally waive any provision hereof in writing to the extent such waiver does not adversely affect the interests of the Participant hereunder, but no such waiver shall operate as or be construed to be a subsequent waiver of the same provision or a waiver of any other provision hereof.

17. Limitation on the Participant's Rights. Participation in the Plan confers no rights or interests other than as herein provided. This Award Agreement creates only a contractual obligation on the part of the Company as to amounts payable and shall not be construed as creating a trust. Neither the Plan nor any underlying program, in and of itself, has any assets. The Participant shall have only the rights of a general unsecured creditor of the Company with respect to amounts credited and benefits payable, if any, with respect to the Stock Units, and rights no greater than the right to receive the Common Stock as a general unsecured creditor with respect to Stock Units, as and when payable hereunder.

18. Section Headings. The section headings of this Award Agreement are for convenience of reference only and shall not be deemed to alter or affect any provision hereof.

19. Governing Law. This Award Agreement shall be governed by and construed and enforced in accordance with the laws of the State of California without regard to conflict of law principles thereunder.

20. Choice of Venue. For purposes of litigating any dispute that arises directly or indirectly from the relationship of the parties evidenced by this grant or this Award Agreement, the parties hereby submit to the exclusive jurisdiction of the State of California and agree that such litigation shall be conducted only in the courts of Santa Clara County, California, or the federal courts for the Northern District of California, and no other courts, where this grant is made or to be performed.

21. Construction. It is intended that the terms of the Award will not result in the imposition of any tax liability pursuant to Section 409A of the Code. This Award Agreement shall be construed and interpreted consistent with that intent.

22. Severability. The provisions of this Award Agreement are severable and if any one of more provisions are determined to be illegal or otherwise unenforceable, in whole or in part, the remaining provisions shall nevertheless be binding and enforceable.

23. Imposition of Other Requirements. The Company reserves the right to impose other requirements on the Participant's participation in the Plan, on the Stock Units and on any Shares acquired under the Plan, to the extent the Company determines it is necessary or advisable for legal or administrative reasons, and to require the Participant to sign any additional agreements or undertakings that may be necessary to accomplish the foregoing.

**APPLE INC.
2014 EMPLOYEE STOCK PLAN
RESTRICTED STOCK UNIT AWARD AGREEMENT**

PERFORMANCE AWARD

NOTICE OF GRANT

Name: (the "Participant")

Employee ID:

Grant Number:

Target No. of Units
Subject to Award:

Award Date: (the "Award Date")

Vesting Schedule:

Performance Period:

This restricted stock unit award (the "Award") is granted under and governed by the terms and conditions of the Apple Inc. 2014 Employee Stock Plan and the Terms and Conditions of Restricted Stock Unit Award - Performance Award (including Exhibit A thereto), which are incorporated herein by reference.

You do not have to accept the Award. If you wish to decline your Award, you should promptly notify Apple Inc.'s Stock Plan Group of your decision at stock@apple.com. If you do not provide such notification by the last day of the calendar month prior to the first Vesting Date, you will be deemed to have accepted your Award on the terms and conditions set forth herein.

APPLE INC.
2014 EMPLOYEE STOCK PLAN
RESTRICTED STOCK UNIT AWARD AGREEMENT

TERMS AND CONDITIONS OF RESTRICTED STOCK UNIT AWARD

PERFORMANCE AWARD

1. **General.** These Terms and Conditions of Restricted Stock Unit Award - Performance Award (these “**Terms**”) apply to a particular restricted stock unit award (the “**Award**”) granted by Apple Inc., a California corporation (the “**Company**”), and are incorporated by reference in the Notice of Grant (the “**Grant Notice**”) corresponding to that particular grant. The recipient of the Award identified in the Grant Notice is referred to as the “**Participant**.” The effective date of grant of the Award as set forth in the Grant Notice is referred to as the “**Award Date**.” The Award was granted under and is subject to the provisions of the Apple Inc. 2014 Employee Stock Plan (the “**Plan**”). Capitalized terms are defined in the Plan if not defined herein. The Award has been granted to the Participant in addition to, and not in lieu of, any other form of compensation otherwise payable or to be paid to the Participant. The Grant Notice and these Terms (including Exhibit A hereto, incorporated herein by this reference) are collectively referred to as the “**Award Agreement**” applicable to the Award.

2. **Stock Units.** As used herein, the term “**Stock Unit**” shall mean a non-voting unit of measurement which is deemed for bookkeeping purposes to be equivalent to one outstanding share of the Company’s Common Stock (“**Share**”) solely for purposes of the Plan and this Award Agreement. The Stock Units shall be used solely as a device for the determination of the payment to eventually be made to the Participant if such Stock Units vest pursuant to this Award Agreement. The Stock Units shall not be treated as property or as a trust fund of any kind.

3. **Vesting.** Subject to Sections 4 and 8 below, the Award shall vest and become nonforfeitable as set forth in the Grant Notice and Exhibit A hereto. (The vesting date set forth in the Grant Notice is referred to herein as a “**Vesting Date**”).

4. **Continuance of Employment.** Except as provided in this Section 4 and in Section 8 below, vesting of the Award requires continued active employment or service through the Vesting Date as a condition to the vesting of the Award and the rights and benefits under this Award Agreement. Employment or service for only a portion of the vesting period, even if a substantial portion, will not entitle the Participant to any proportionate vesting of the Award. For purposes of this Award Agreement, active service shall include (a) the duration of an approved leave of absence (other than a personal leave of absence) and (b) the first thirty (30) days of an approved personal leave of absence, in each case as approved by the Company, in its sole discretion. The vesting of the Award shall be tolled beginning on the thirty-first (31st) day of a personal leave of absence.

Nothing contained in this Award Agreement or the Plan constitutes an employment or service commitment by the Company, affects the Participant’s status as an employee at will who is subject to termination with or without cause, confers upon the Participant any right to remain employed by or in service to the Company or any Subsidiary, interferes in any way with the right of the Company or any Subsidiary at any time to terminate such employment or service, or affects the right of the Company or any Subsidiary to increase or decrease the Participant’s other compensation or benefits. Nothing in this Section 4, however, is intended to adversely affect any independent contractual right of the Participant without his or her consent thereto.

5. Dividend and Voting Rights.

(a) **Limitations on Rights Associated with Stock Units.** The Participant shall have no rights as a shareholder of the Company, no dividend rights (except as expressly provided in Section 5(b) with respect to Dividend Equivalent Rights) and no voting rights, with respect to the Stock Units or any Shares underlying or issuable in respect of such Stock Units until such Shares are actually issued to and held of record by the Participant. No adjustments will be made for dividends or other rights of a holder for which the record date is prior to the date of issuance of the stock certificate or book entry evidencing such Shares.

(b) **Dividend Equivalent Rights Distributions.** As of any date that the Company pays an ordinary cash dividend on its Common Stock, the Company shall credit the Participant with a dollar amount equal to (i) the per share cash dividend paid by the Company on its Common Stock on such date, multiplied by (ii) the total target number of Stock Units (with such total number adjusted pursuant to Section 11 of the Plan) subject to the Award that are outstanding immediately prior to the record date for that dividend (a “**Dividend Equivalent Right**”). Any Dividend Equivalent Rights credited pursuant to the foregoing provisions of this Section 5(b) shall be subject to the same vesting, payment and other terms, conditions and restrictions as the original Stock Units to which they relate, including the obligation to satisfy the Tax-Related Items; provided, however, that the amount of any vested Dividend Equivalent Rights shall be paid in cash. For purposes of clarity, the percentage of the Dividend Equivalent Rights that are paid will correspond to the percentage of the total target number of Stock Units that vest on the Vesting Date, after giving effect to Exhibit A. No crediting of Dividend Equivalent Rights shall be made pursuant to this Section 5(b) with respect to any Stock Units which, immediately prior to the record date for that dividend, have either been paid pursuant to Section 7 or terminated pursuant to Section 8 or Exhibit A.

6. **Restrictions on Transfer.** Except as provided in Section 4(c) of the Plan, the Award, the Dividend Equivalent Rights and any interest therein or amount or Shares payable in respect thereof shall not be sold, assigned, transferred, pledged or otherwise disposed of, alienated or encumbered, either voluntarily or involuntarily.

7. **Timing and Manner of Payment of Stock Units.** On or as soon as administratively practical following the vesting event pursuant to Section 3 or Section 8 (and in all events not later than two and one-half (2 ½) months after such vesting event), the Company shall deliver to the Participant a number of Shares (either by delivering one or more certificates for such Shares or by entering such Shares in book entry form, as determined by the Company in its discretion) equal to the number of Stock Units subject to the Award that vest on the Vesting Date, less Tax-Related Items (as defined in Section 11 below), unless such Stock Units terminate prior to the Vesting Date pursuant to Section 8. The Company's obligation to deliver Shares or otherwise make payment with respect to vested Stock Units is subject to the condition precedent that the Participant or other person entitled under the Plan to receive any Shares with respect to the vested Stock Units deliver to the Company any representations or other documents or assurances required pursuant to Section 13(c) of the Plan. The Participant shall have no further rights with respect to any Stock Units that are paid or that terminate pursuant to Section 8.

8. **Effect of Termination of Service.** Except as provided in Section 4 or this Section 8, the Participant's Stock Units (as well as the related Dividend Equivalent Rights) shall terminate to the extent such Stock Units have not become vested prior to the Participant's Termination of Service, meaning the first date the Participant is no longer employed by or providing services to the Company or one of its Subsidiaries (the “**Severance Date**”), regardless of the reason for the Participant's Termination of Service, whether with or without cause, voluntarily or involuntarily, or whether the Participant was employed or provided services for a portion of the vesting period prior to a Vesting Date. In the event the Participant's Severance Date is the result of the Participant's Termination of Service due to the Participant's death or Disability, and the Severance Date occurs prior to the Vesting Date, on the Vesting Date the Award shall vest with respect to a number of Stock Units determined by multiplying (i) the Stock Units as well as the related Dividend Equivalent Rights subject to the Award that would have otherwise vested pursuant to the Award on such Vesting Date but for the Termination of Service and to the extent the applicable performance-based vesting requirement

is satisfied, by (ii) the Severance Fraction (determined as set forth below). Any Stock Units (as well as the related Dividend Equivalent Rights) that are invested on the Severance Date and that are not eligible to vest on the Vesting Date following the Severance Date pursuant to the preceding sentence shall terminate as of the Severance Date, and any Stock Units that remain outstanding and unvested after giving effect to the preceding sentence shall terminate as of the Vesting Date. The “**Severance Fraction**” means a fraction, the numerator of which shall be determined by subtracting the number of days remaining in the Performance Period on the Severance Date from the total number of days in the Performance Period, and the denominator of which shall be the total number of days in the Performance Period. If any unvested Stock Units are terminated pursuant to this Award Agreement, such Stock Units (as well as the related Dividend Equivalent Rights) shall automatically terminate and be cancelled as of the applicable Severance Date (or, to the extent the applicable performance-based vesting conditions are not satisfied, the Vesting Date, as provided in Exhibit A) without payment of any consideration by the Company and without any other action by the Participant, or the Participant’s beneficiary or personal representative, as the case may be.

9. Recoupment. Notwithstanding any other provision herein, the Award and any Shares or other amount or property that may be issued, delivered, or paid in respect of the Award, as well as any consideration that may be received in respect of a sale or other disposition of any such Shares or property, shall be subject to any recoupment, clawback, or similar provisions of Applicable Laws relevant to the Company’s Shares and the terms of any Company recoupment, clawback, or similar policy in effect at the time of grant of the Award. For purposes of the foregoing, the Participant expressly and explicitly authorizes the Company to issue instructions, on the Participant’s behalf, to any brokerage firm or third party administrator holding the Participant’s Shares and other amounts acquired under the Plan to re-convey, transfer, or otherwise return such Shares and other amounts to the Company.

10. Adjustments Upon Specified Events. Upon the occurrence of certain events relating to the Company’s stock contemplated by Section 11 of the Plan (including, without limitation, an extraordinary cash dividend on such stock), the Committee shall make adjustments in accordance with such section in the number of Stock Units then outstanding and the number and kind of securities that may be issued in respect of the Award. No such adjustment shall be made with respect to any ordinary cash dividend for which Dividend Equivalent Rights are credited pursuant to Section 5(b).

11. Responsibility for Taxes. The Participant acknowledges that, regardless of any action the Company or the Participant’s employer (the “**Employer**”) take with respect to any or all income tax (including U.S. federal, state and local tax or non-U.S. tax), social insurance, payroll tax, payment on account or other tax-related items related to the Participant’s participation in the Plan and legally applicable to the Participant or deemed by the Company or the Employer to be an appropriate charge to the Participant even if technically due by the Company or the Employer (“**Tax-Related Items**”), the ultimate liability for all Tax-Related Items is and remains the Participant’s responsibility and may exceed the amount, if any, actually withheld by the Company or the Employer. The Participant further acknowledges that the Company and the Employer (i) make no representations or undertakings regarding the treatment of any Tax-Related Items in connection with any aspect of the Award, including the grant of the Stock Units, the vesting of the Stock Units, the delivery of Shares, the subsequent sale of any Shares acquired at vesting, and the receipt of any dividends or Dividend Equivalent Rights; and (ii) do not commit to and are under no obligation to structure the terms of the grant or any aspect of the Award to reduce or eliminate the Participant’s liability for Tax-Related Items or achieve any particular tax result. Further, if the Participant is or becomes subject to tax in more than one jurisdiction, the Participant acknowledges that the Company or the Employer (or former employer, as applicable) may be required to withhold or account for Tax-Related Items in more than one jurisdiction.

Prior to the relevant taxable or tax withholding event, as applicable, the Participant shall pay or make arrangements satisfactory to the Company or the Employer to satisfy all Tax-Related Items. In this regard, the Participant authorizes the Company or the Employer, or their respective agents, at their discretion and pursuant to such procedures as they may specify from time to time, to satisfy any applicable withholding obligations with regard to all Tax-Related Items by one or a combination of the following:

- (a) withholding from any wages or other cash compensation payable to the Participant by the Company or the Employer;
- (b) withholding otherwise deliverable Shares and from otherwise payable Dividend Equivalent Rights to be issued or paid upon vesting/settlement of the Award;
- (c) arranging for the sale of Shares otherwise deliverable to the Participant (on the Participant's behalf and at the Participant's direction pursuant to this authorization), including selling Shares as part of a block trade with other Participants in the Plan; or
- (d) withholding from the proceeds of the sale of Shares acquired upon vesting/settlement of the Award.

Notwithstanding the foregoing, if the Participant is an officer of the Company who is subject to Section 16 of the Exchange Act, then the Company must satisfy any withholding obligations arising upon the occurrence of a taxable or tax withholding event, as applicable, by withholding Shares otherwise deliverable or an amount otherwise payable upon settlement of Dividend Equivalent Rights pursuant to method (b), unless the Board or the Committee determines in its discretion to satisfy the obligation for Tax-Related Items by one or a combination of methods (a), (b), (c), and (d) above.

Depending on the withholding method, the Company may withhold or account for Tax-Related Items by considering applicable minimum statutory withholding amounts or other applicable withholding rates, including maximum applicable rates in the Participant's jurisdiction(s). If the maximum rate is used, any over-withheld amount may be refunded to the Participant in cash by the Company or Employer (with no entitlement to the equivalent in Common Stock) or if not refunded, the Participant may seek a refund from the local tax authorities. If the obligation for Tax-Related Items is satisfied by withholding a number of Shares as described herein, for tax purposes, the Participant is deemed to have been issued the full number of Shares subject to the vested Stock Units, notwithstanding that a number of the Shares are held back solely for the purpose of paying the Tax-Related Items. The Participant shall pay to the Company or the Employer any amount of Tax-Related Items that the Company or the Employer may be required to withhold or account for as a result of the Participant's participation in the Plan that cannot be satisfied by the means previously described. The Company may refuse to issue or deliver to the Participant any Shares or the proceeds of the sale of Shares if the Participant fails to comply with the Participant's obligations in connection with the Tax-Related Items.

12. Electronic Delivery and Acceptance. The Company may, in its sole discretion, deliver any documents related to the Award by electronic means or request the Participant's consent to participate in the Plan by electronic means. The Participant hereby consents to receive all applicable documentation by electronic delivery and to participate in the Plan through an on-line or voice activated system established and maintained by the Company or a third party vendor designated by the Company.

13. Data Privacy. By participating in the Plan, the Participant acknowledges and consents to the collection, use, processing, and transfer of personal data as described in this Section 13. The Company, its related entities, and the Employer hold certain personal information about the Participant, including the Participant's name, home address and telephone number, email address, date of birth, social security number or other employee identification number, salary, nationality, job title, any Shares or directorships held in the Company, details of all Stock Units or any other entitlement to Shares or equivalent benefits awarded, canceled, purchased, vested, unvested or outstanding in the Participant's favor, for the purpose of managing and administering the Plan ("**Data**"). The Company and its related entities may transfer Data amongst themselves as necessary for the purpose of implementation, administration, and management of the Participant's participation in the Plan, and the Company and its related entities may each further transfer Data to any third parties assisting the Company or any such related entity in the implementation, administration, and management of the Plan. The Participant acknowledges that the transferors and transferees of such Data may be located anywhere in the world and hereby authorizes each of them to receive, possess, use, retain and transfer the Data, in electronic or other form, for the purposes of

implementing, administering, and managing the Participant's participation in the Plan, including any transfer of such Data as may be required for the administration of the Plan and the subsequent holding of Shares on the Participant's behalf to a broker or to other third party with whom the Participant may elect to deposit any Shares acquired under the Plan (whether pursuant to the Award or otherwise).

14. Notices. Any notice to be given under the terms of this Award Agreement shall be in writing and addressed to the Company at its principal office to the attention of the Secretary, and to the Participant at the Participant's last address reflected on the Company's records, or at such other address as either party may hereafter designate in writing to the other. Any such notice shall be given only when received, but if the Participant is no longer an employee of the Company, shall be deemed to have been duly given by the Company when enclosed in a properly sealed envelope addressed as aforesaid, registered or certified, and deposited (postage and registry or certification fee prepaid) in a post office or branch post office regularly maintained by the United States Government.

15. Plan. The Award and all rights of the Participant under this Award Agreement are subject to the terms and conditions of the provisions of the Plan, incorporated herein by reference. The Participant agrees to be bound by the terms of the Plan and this Award Agreement. The Participant acknowledges having read and understood the Plan, the Prospectus for the Plan, and this Award Agreement. Unless otherwise expressly provided in other sections of this Award Agreement, provisions of the Plan that confer discretionary authority on the Board or the Committee do not (and shall not be deemed to) create any rights in the Participant unless such rights are expressly set forth herein or are otherwise in the sole discretion of the Board or the Committee so conferred by appropriate action of the Board or the Committee under the Plan after the date hereof.

16. Entire Agreement. This Award Agreement and the Plan together constitute the entire agreement and supersede all prior understandings and agreements, written or oral, of the parties hereto with respect to the subject matter hereof. The Plan and this Award Agreement may be amended pursuant to Section 15 of the Plan. Such amendment must be in writing and signed by the Company. The Company may, however, unilaterally waive any provision hereof in writing to the extent such waiver does not adversely affect the interests of the Participant hereunder, but no such waiver shall operate as or be construed to be a subsequent waiver of the same provision or a waiver of any other provision hereof.

17. Limitation on the Participant's Rights. Participation in the Plan confers no rights or interests other than as herein provided. This Award Agreement creates only a contractual obligation on the part of the Company as to amounts payable and shall not be construed as creating a trust. Neither the Plan nor any underlying program, in and of itself, has any assets. The Participant shall have only the rights of a general unsecured creditor of the Company with respect to amounts credited and benefits payable, if any, with respect to the Stock Units, and rights no greater than the right to receive the Common Stock as a general unsecured creditor with respect to Stock Units, as and when payable hereunder.

18. Section Headings. The section headings of this Award Agreement are for convenience of reference only and shall not be deemed to alter or affect any provision hereof.

19. Governing Law. This Award Agreement shall be governed by and construed and enforced in accordance with the laws of the State of California without regard to conflict of law principles thereunder.

20. Choice of Venue. For purposes of litigating any dispute that arises directly or indirectly from the relationship of the parties evidenced by this grant or this Award Agreement, the parties hereby submit to the exclusive jurisdiction of the State of California and agree that such litigation shall be conducted only in the courts of Santa Clara County, California, or the federal courts for the Northern District of California, and no other courts, where this grant is made or to be performed.

21. Construction. It is intended that the terms of the Award will not result in the imposition of any tax liability pursuant to Section 409A of the Code. This Award Agreement shall be construed and interpreted consistent with that intent.

22. Severability. The provisions of this Award Agreement are severable and if any one of more provisions are determined to be illegal or otherwise unenforceable, in whole or in part, the remaining provisions shall nevertheless be binding and enforceable.

23. Imposition of Other Requirements. The Company reserves the right to impose other requirements on the Participant's participation in the Plan, on the Stock Units and on any Shares acquired under the Plan, to the extent the Company determines it is necessary or advisable for legal or administrative reasons, and to require the Participant to sign any additional agreements or undertakings that may be necessary to accomplish the foregoing.

* * * * *

PERFORMANCE AWARD

EXHIBIT A

PERFORMANCE VESTING REQUIREMENTS

The Stock Units (and related Dividend Equivalent Rights) subject to the Award that will vest on the Vesting Date will be determined based on the Company's relative total shareholder return ("TSR") Percentile for the Performance Period.

The percentage of the Stock Units (and related Dividend Equivalent Rights) that vest on the Vesting Date will be determined as follows:

- If the Company's TSR Percentile for the Performance Period is at the [] ([]) percentile or greater, [] ([]%) of the target Stock Units will vest on the Vesting Date.
- If the Company's TSR Percentile for the Performance Period is at the [] ([]) percentile, [] ([]%) of the target Stock Units will vest on the Vesting Date.
- If the Company's TSR Percentile for the Performance Period is at the [] ([]) percentile, [] ([]%) of the target Stock Units will vest on the Vesting Date.
- If the Company's TSR Percentile for the Performance Period is below the [] ([]) percentile, [] ([]%) of the Stock Units will vest on the Vesting Date.

For TSR Percentile performance for the Performance Period between the levels indicated above, the portion of the Stock Units that will vest on the Vesting Date will be determined on a straight-line basis (*i.e.*, linearly interpolated) between the two nearest vesting percentages indicated above.

Notwithstanding the foregoing, if the Company's TSR for the Performance Period is negative, in no event shall more than one hundred percent (100%) of the target Stock Units vest.

The number of Stock Units that vest on the Vesting Date will be rounded to the nearest whole unit, and the balance of the Stock Units will not vest and will terminate on that Vesting Date.

For purposes of the Award, the following definitions will apply:

- "**TSR Percentile**" means the percentile ranking of the Company's TSR among the TSRs for the Comparison Group members for the Performance Period. In determining the Company's TSR Percentile for the Performance Period, in the event that the Company's TSR for the Performance Period is equal to the TSR(s) of one or more other Comparison Group members for that same period, the Company's TSR Percentile ranking will be determined by ranking the Company's TSR for that period as being greater than such other Comparison Group members.
- "**Comparison Group**" means the Company and each other company included in the Standard & Poor's 500 index on the first day of the Performance Period and, except as provided below, the common stock (or similar equity security) of which continues to be listed or traded on a national securities exchange through the last trading day of the Performance Period. In the event a member of the Comparison Group files for bankruptcy or liquidates due to an insolvency, such company shall continue to be treated as a Comparison Group member, and such company's Ending Price will be treated as \$0 if the common stock (or similar equity security) of such company is no longer listed or traded on a national securities

exchange on the last trading day of the Performance Period. In the event of a formation of a new parent company by a Comparison Group member, substantially all of the assets and liabilities of which consist immediately after the transaction of the equity interests in the original Comparison Group member or the assets and liabilities of such Comparison Group member immediately prior to the transaction, such new parent company shall be substituted for the Comparison Group member to the extent (and for such period of time) as its common stock (or similar equity securities) are listed or traded on a national securities exchange but the common stock (or similar equity securities) of the original Comparison Group member are not. In the event of a merger or other business combination of two Comparison Group members (including, without limitation, the acquisition of one Comparison Group member, or all or substantially all of its assets, by another Comparison Group member), the surviving, resulting or successor entity, as the case may be, shall continue to be treated as a member of the Comparison Group, provided that the common stock (or similar equity security) of such entity is listed or traded on a national securities exchange through the last trading day of the Performance Period. With respect to the preceding two sentences, the applicable stock prices shall be equitably and proportionately adjusted to the extent (if any) necessary to preserve the intended incentives of the awards and mitigate the impact of the transaction.

- **“TSR”** shall be determined with respect to the Company and any other Comparison Group member by dividing: (a) the sum of (i) the difference obtained by subtracting the applicable Beginning Price from the applicable Ending Price plus (ii) all dividends and other distributions during the Performance Period by (b) the applicable Beginning Price. Any non-cash distributions shall be valued at fair market value. For the purpose of determining TSR, the value of dividends and other distributions shall be determined by treating them as reinvested in additional shares of stock at the closing market price on the date of distribution.
- **“Beginning Price”** means, with respect to the Company and any other Comparison Group member, the average of the closing market prices of such company’s common stock on the principal exchange on which such stock is traded for the twenty (20) consecutive trading days beginning with the first trading day of the Performance Period. For the purpose of determining Beginning Price, the value of dividends and other distributions shall be determined by treating them as reinvested in additional shares of stock at the closing market price on the date of distribution.
- **“Ending Price”** means, with respect to the Company and any other Comparison Group member, the average of the closing market prices of such company’s common stock on the principal exchange on which such stock is traded for the twenty (20) consecutive trading days ending on the last trading day of the Performance Period. For the purpose of determining Ending Price, the value of dividends and other distributions shall be determined by treating them as reinvested in additional shares of stock at the closing market price on the date of distribution.

With respect to the computation of TSR, Beginning Price, and Ending Price, there shall also be an equitable and proportionate adjustment to the extent (if any) necessary to preserve the intended incentives of the awards and mitigate the impact of any stock split, stock dividend or reverse stock split occurring during the Performance Period (or during the applicable 20-day period in determining Beginning Price or Ending Price, as the case may be).

In the event of any ambiguity or discrepancy, the determination of the Committee shall be final and binding.

* * * * *

**Subsidiaries of
Apple Inc.***

	<u>Jurisdiction of Incorporation</u>
Apple Canada Inc.	Canada
Apple Computer Trading (Shanghai) Co., Ltd.	China
Apple Distribution International	Ireland
Apple Europe Limited	United Kingdom
Apple France	France
Apple GmbH	Germany
Apple Japan, Inc.	Japan
Apple Operations	Ireland
Apple Operations Europe	Ireland
Apple Operations International Limited	Ireland
Apple Pty Limited	Australia
Apple Sales International	Ireland
Apple Value Services, LLC	Virginia, U.S.
Braeburn Capital, Inc.	Nevada, U.S.

* Pursuant to Item 601(b)(21)(ii) of Regulation S-K, the names of other subsidiaries of Apple Inc. are omitted because, considered in the aggregate, they would not constitute a significant subsidiary as of the end of the year covered by this report.

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the following Registration Statements:

- (1) Registration Statement (Form S-3 ASR No. 333-228159) of Apple Inc.,
- (2) Registration Statement (Form S-8 No. 333-226986) pertaining to Apple Inc. Deferred Compensation Plan,
- (3) Registration Statement (Form S-8 No. 333-203698) pertaining to Apple Inc. Employee Stock Purchase Plan,
- (4) Registration Statement (Form S-8 No. 333-195509) pertaining to Apple Inc. 2014 Employee Stock Plan,
- (5) Registration Statement (Form S-8 No. 333-193709) pertaining to Topsy Labs, Inc. 2007 Stock Plan,
- (6) Registration Statement (Form S-8 No. 333-184706) pertaining to AuthenTec, Inc. 2007 Stock Incentive Plan and AuthenTec, Inc. 2010 Incentive Plan, as amended,
- (7) Registration Statement (Form S-8 No. 333-179189) pertaining to Anobit Technologies Ltd. Global Share Incentive Plan (2006), and
- (8) Registration Statement (Form S-8 No. 333-60455) pertaining to Apple Inc. Non-Employee Director Stock Plan;

of our reports dated October 30, 2019 with respect to the consolidated financial statements of Apple Inc., and the effectiveness of internal control over financial reporting of Apple Inc., included in this Annual Report on Form 10-K for the year ended September 28, 2019.

/s/ Ernst & Young LLP

San Jose, California
October 30, 2019

CERTIFICATION

I, Timothy D. Cook, certify that:

1. I have reviewed this annual report on Form 10-K of Apple Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the Registrant as of, and for, the periods presented in this report;
4. The Registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the Registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the Registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the Registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the Registrant's internal control over financial reporting that occurred during the Registrant's most recent fiscal quarter (the Registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the Registrant's internal control over financial reporting; and
5. The Registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the Registrant's auditors and the audit committee of the Registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the Registrant's ability to record, process, summarize, and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the Registrant's internal control over financial reporting.

Date: October 30, 2019

By: /s/ Timothy D. Cook

Timothy D. Cook
Chief Executive Officer

CERTIFICATION

I, Luca Maestri, certify that:

1. I have reviewed this annual report on Form 10-K of Apple Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the Registrant as of, and for, the periods presented in this report;
4. The Registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the Registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the Registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the Registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the Registrant's internal control over financial reporting that occurred during the Registrant's most recent fiscal quarter (the Registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the Registrant's internal control over financial reporting; and
5. The Registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the Registrant's auditors and the audit committee of the Registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the Registrant's ability to record, process, summarize, and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the Registrant's internal control over financial reporting.

Date: October 30, 2019

By: /s/ Luca Maestri

Luca Maestri
Senior Vice President,
Chief Financial Officer

**CERTIFICATIONS OF CHIEF EXECUTIVE OFFICER AND CHIEF FINANCIAL OFFICER
PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

I, Timothy D. Cook, certify, as of the date hereof, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that the Annual Report of Apple Inc. on Form 10-K for the fiscal year ended September 28, 2019 fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 and that information contained in such Form 10-K fairly presents in all material respects the financial condition and results of operations of Apple Inc. at the dates and for the periods indicated.

Date: October 30, 2019

By: /s/ Timothy D. Cook

Timothy D. Cook
Chief Executive Officer

I, Luca Maestri, certify, as of the date hereof, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that the Annual Report of Apple Inc. on Form 10-K for the fiscal year ended September 28, 2019 fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 and that information contained in such Form 10-K fairly presents in all material respects the financial condition and results of operations of Apple Inc. at the dates and for the periods indicated.

Date: October 30, 2019

By: /s/ Luca Maestri

Luca Maestri
Senior Vice President,
Chief Financial Officer

A signed original of this written statement required by Section 906 has been provided to Apple Inc. and will be retained by Apple Inc. and furnished to the Securities and Exchange Commission or its staff upon request.