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

FORM 10-K

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

For the fiscal year ended December 31, 2017

Commission File Number 001-00395



NCR CORPORATION
(Exact name of registrant as specified in its charter)

Maryland
(State or other jurisdiction of
incorporation or organization)

31-0387920
(I.R.S. Employer
Identification No.)

864 Spring Street NW
Atlanta, GA 30308
(Address of principal executive offices) (Zip Code)

Registrant's telephone number, including area code: (937) 445-5000

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

Title of each class	Name of each exchange on which registered
Common Stock, par value \$0.01 per share	New York Stock Exchange

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

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

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the 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 and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§229.405) is not contained herein, and will not be contained, to the best of the registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

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

Large accelerated filer

Accelerated filer

Non-accelerated filer (Do not check if a smaller reporting company)

Smaller reporting company

Emerging growth company

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

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

The aggregate market value of voting stock held by non-affiliates of the registrant as of June 30, 2017, was approximately \$5.0 billion. As of February 14, 2018, there were approximately 118.4 million shares of common stock issued and outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Part III: Portions of the Registrant's Definitive Proxy Statement for its Annual Meeting of Stockholders to be filed pursuant to Regulation 14A within 120 days after the Registrant's fiscal year end of December 31, 2017 are incorporated by reference into Part III of this Report.

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This Report contains trademarks, service marks and registered marks of NCR Corporation and its subsidiaries, and of other companies, as indicated. Unless otherwise indicated, the terms "NCR," the "Company," "we," "us," and "our" refer to NCR Corporation and its subsidiaries.

FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Forward-looking statements use words such as “expect,” “anticipate,” “outlook,” “intend,” “plan,” “believe,” “will,” “should,” “would,” “could,” “provisional” and words of similar meaning. Statements that describe or relate to our plans, goals, intentions, strategies or financial outlook, and statements that do not relate to historical or current fact, are examples of forward-looking statements. Forward-looking statements are based on our current beliefs, expectations and assumptions, which may not prove to be accurate, and involve a number of known and unknown risks and uncertainties, many of which are out of our control. Forward-looking statements are not guarantees of future performance, and there are a number of important factors that could cause actual outcomes and results to differ materially from the results contemplated by such forward-looking statements, including those factors listed in Item 1A “Risk Factors,” and Item 7, “Management’s Discussion and Analysis of Financial Condition and Results of Operations,” of this Annual Report on Form 10-K. Any forward-looking statement speaks only as of the date on which it is made. We do not undertake any obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events or otherwise.

PART I

Item 1. BUSINESS

General

Businesses

NCR is a leading global provider of omni-channel technology solutions that enrich the interactions of businesses with their customers. Our solutions are designed to allow businesses in the financial services, retail, hospitality, travel and telecommunications and technology industries to deliver a rich, integrated and personalized experience to consumers across physical and digital commerce channels. Our offerings include a portfolio of omni-channel platform software and other software applications, industry-focused hardware and smart-edge devices including automated teller machines (ATMs), point of sale (POS) terminals and devices and self-service kiosks, and a complete suite of consulting, implementation, maintenance, support and managed services. We also resell third-party networking products and provide related service offerings in the telecommunications and technology sectors. Our solutions create value for our customers by increasing productivity and allowing them to address consumer demand for convenience, value and individual service across different commerce channels.

Industries Served

NCR provides specific solutions for customers of varying sizes in a range of industries such as financial services, retail, hospitality, travel and telecommunications and technology. NCR's solutions are built on a foundation of long-established industry knowledge and expertise, omni-channel platform and other software, industry-focused hardware and smart-edge devices, and global implementation, consulting, maintenance, support and managed services.

Company History

NCR was originally incorporated in 1884 and was a publicly traded company on the New York Stock Exchange prior to its merger with a wholly-owned subsidiary of AT&T Corp. (AT&T) on September 19, 1991. On December 31, 1996, AT&T distributed all of its interest in NCR to its stockholders. NCR common stock is listed on the New York Stock Exchange and trades under the symbol "NCR".

On September 30, 2007, NCR completed the spin-off of its Teradata Data Warehousing business through the distribution of a tax-free stock dividend to NCR stockholders. NCR distributed one share of common stock of Teradata Corporation for each share of NCR common stock to NCR stockholders of record as of the close of business on September 14, 2007.

On August 24, 2011, NCR completed the acquisition of Radiant Systems, Inc. (Radiant). The acquisition was completed through a tender offer and subsequent merger. Radiant was a leading provider of technology solutions for managing site operations in the hospitality and specialty retail industries.

On February 6, 2013, NCR completed the acquisition of Retailix Ltd. (Retailix). Retailix was a leading global provider of innovative retail software and was subsequently integrated into NCR's omni-channel solution offerings for the retail industry.

On January 10, 2014, NCR completed its acquisition of Digital Insight Corporation (Digital Insight). The Digital Insight acquisition and subsequent integration extended NCR's existing capabilities in the financial services industry to form a complete enterprise software platform across both physical and digital channels.

Operating Segments

We categorize our operations into three reportable segments: Software, Services and Hardware.

The information required by Item 1 with respect to our reportable segments and financial information regarding our geographic areas and those reportable segments can be found in Item 7 of Part II of this Report under "Revenue and Operating Income by Segment" as well as in Item 8 of Part II of this Report as part of Note 12, "Segment Information and Concentrations" of the Notes to Consolidated Financial Statements and in Item 1A of this Report under "Multinational Operations," and is incorporated herein by reference.

Products and Services

We sell a portfolio of software, services, and hardware that combine to provide businesses with solutions to connect, interact and transact with their customers. Our offerings fall into the following categories:

Software Solutions

Our software offerings include industry-based software platforms such as our Cx Banking self-service ATM software application suite (providing ATM management systems) for financial services, our Retail ONE and Aloha Enterprise software application suites for the retail and hospitality industries, and NCR Silver, a cloud-based POS system for small businesses. We also provide a portfolio of other industry-oriented software applications, which include cash management software, video banking software, fraud and loss prevention applications, check and document imaging, remote-deposit capture, and customer-facing mobile and digital banking applications, such as web-enablement and bill payment (including mobile bill payment), for the financial services industry; and secure electronic and mobile payment solutions, sector-specific point of sale software applications for quick-service restaurants, gas stations and other businesses, and back-office inventory and store and restaurant management applications, for the retail and hospitality industries. We also provide in-depth industry and solution based consulting and professional services focused on solution implementation, integration, customization and optimization, and cloud hosting services. Our software platforms and applications, which are delivered on software as a service (SaaS), enterprise license and other bases, are designed to work seamlessly together, with our hardware products, or as stand-alone solutions. Our software solutions deliver a consistent and rich consumer experience across channels, while enabling businesses to digitize and automate labor-intensive processes, reduce costs and increase productivity.

Services

Services are an essential and integrated component of NCR's complete solution offerings to help companies increase availability and security of consumer touchpoints, improve operational efficiency and enhance the customer experience. We provide global end-to-end services from assessment and preparation, to staging, installation and implementation, and maintenance and support. We also provide systems management and complete managed services for our product offerings. We also provide Predictive Services, a managed services offering, which is designed to predict and address information technology issues quickly before they happen. In addition, we provide installation, maintenance and managed services for third party networking products to a broad base of customers in the telecommunications and technology sectors, and we service third party computer hardware from select manufacturers who value and leverage our global service capability.

Hardware Products

We provide financial institutions, retailers and independent deployers with a suite of financial-oriented self-service hardware products. Our financial services hardware products include multi-function ATMs, interactive teller machines (ITMs), thin-client ATMs, cash dispensers, cash recycling ATMs and hardware for check and image processing. Our financial services hardware products are designed to quickly, reliably and securely process consumer banking transactions while providing low cost of ownership, efficiency and a modernized consumer experience. We also provide retail- and hospitality-oriented hardware products such as point of sale terminals, self-checkout kiosks, order and payment kiosks, bar code scanners, printers and peripherals, to retailers, restaurants, food service companies and entertainment and sports venues worldwide. Our retail and hospitality hardware products are designed to improve operational efficiency, increase customer satisfaction, streamline order and transaction processing and reduce operating costs. We also provide other self-service kiosks, such as self-check in/out kiosk solutions for airlines, hotels and casinos that allow guests to check in/out without assistance, wayfinding solutions (locating products or navigating through large, complex buildings and campuses), digital signage, bill payment kiosks and gift registries. These solutions create pleasant and convenient experiences for consumers and enable our customers to reduce costs. In addition, we resell third party networking products to a broad base of customers in the telecommunications and technology sectors.

Target Markets and Distribution Channels

NCR provides its software, services and hardware solutions to customers of varying sizes in the financial services, retail, hospitality, travel and telecommunications and technology industries.

Our financial solutions primarily serve the financial services industry with particular focus on retail banking, which includes traditional providers of consumer banking and financial services. These solutions also serve the retail markets through convenience banking products for retailers designed to complement their core businesses. Our financial solutions customers are located throughout the world in both developed and emerging markets. We have historically sold most of our financial solutions through a direct sales channel, although a portion of revenue is derived through distributors and value-added resellers.

We provide POS and self-service kiosk solutions to the retail and hospitality industries. Retail customers include department stores, specialty retailers, mass merchandisers, catalog stores, supermarkets, hypermarkets, grocery stores, drug stores, wholesalers, convenience stores, petroleum outlets and small businesses. Hospitality customers include retailers, restaurants and food service providers, and sports and entertainment venues (including stadiums, arenas and cinemas) and small businesses. We also provide our self-service solutions to customers in the travel industry, including airlines, airports, car rental companies, and hotel/lodging operators. POS and self-service kiosk solutions are sold through a direct sales force and through relationships with value-added resellers, distributors, dealers and other indirect sales channels.

We provide service and support for our products and solutions through services contracts with our customers. We have also established managed services contracts with key customers and continue to pursue additional managed services relationships. Longer term managed services arrangements can help improve the efficiency and performance of a customer's business, and also increase the strategic and financial importance of its relationship with NCR. We also service competing technologies—for example, ToshibaTec retail technologies and Diebold Nixdorf ATMs. The primary sales channel for our services is our direct sales teams, which exist across all geographies where we operate around the world. Our services professionals provide these services directly to end customers.

Competition

We face a diverse group of competitors in the industries in which we sell our software, services, and hardware solutions. The primary factors of competition can vary by geographic area where we operate around the world, but typically include: value and quality of the solutions or products; total cost of ownership; industry knowledge of the vendor; the vendor's ability to provide and support a total end-to-end solution; the vendor's ability to integrate new and existing systems; fit of the vendor's strategic vision with the customer's strategic direction; and quality of the vendor's consulting, deployment and support services.

In the financial services industry, we face a variety of competitors, including ATM manufacturers such as Diebold Nixdorf Incorporated and Nautilus Hyosung, and ATM network operators such as Cardtronics plc, as well as many other regional firms, across all geographies where we operate around the world. Other competitors vary by product, service offering and geographic area, and include, among others, Fidelity National Information Services, First Data Corporation, Euronet Worldwide, Inc., Q2 Holdings and ACI Worldwide.

We also face a variety of competitors in the retail and hospitality industries across all geographies where we operate around the world. Our competitors vary by market segment, product, service offering and geographic area, and include ToshibaTec, Diebold Nixdorf, Fujitsu, Hewlett-Packard Inc., Honeywell, Oracle, Manhattan Associates and Datalogic, among others.

We face a diverse group of competitors in the travel industry. Competitors in the travel industry include Embross, SITA and IER, among others.

We face competition for services from other technology and service providers, as well as from independent service operators, in all geographies where we operate around the world. The primary services competitors are the companies identified above, as global technology providers continue to focus on services as a core business strategy. We also compete with a range of regional and local independent service operators across our various geographies.

Research and Development

We remain focused on designing and developing solutions that anticipate our customers' changing technological needs as well as consumer preferences. Our expenses for research and development were \$256 million in 2017, \$242 million in 2016, and \$230 million in 2015. We anticipate that we will continue to have significant research and development expenditures in the future in order to provide a continuing flow of innovative, high-quality products and services and to help maintain and enhance our competitive position. Information regarding the accounting and costs included in research and development activities is included in Note 1, "Basis of Presentation and Significant Accounting Policies" of the Notes to Consolidated Financial Statements in Item 8 of Part II of this Report under "Research and Development Costs," and is incorporated herein by reference.

Patents and Trademarks

NCR seeks patent protection for its innovations, including improvements, associated with its software, hardware, services, solutions, and developments, where such protection is likely to provide value to NCR. NCR owns approximately 1,275 patents in the U.S. and numerous other patents in foreign countries. The foreign patents are generally counterparts of NCR's U.S. patents. Many of the patents owned by NCR are licensed to others, and NCR is licensed under certain patents owned by others. NCR looks to monetize its patents to drive additional value from its patent portfolio. NCR also has numerous patent applications pending in the U.S. and in foreign countries. NCR's portfolio of patents and patent applications is of significant value to NCR.

NCR has registered certain trademarks and service marks in the U.S. and in a number of foreign countries. NCR considers the "NCR" and NCR logo marks and many of its other trademarks and service marks to have significant value to NCR.

Seasonality

Our sales are historically seasonal, with lower revenue in the first quarter and higher revenue in the fourth quarter of each year. Such seasonality also causes our working capital cash flow requirements to vary from quarter to quarter depending on variability in the volume, timing and mix of sales. In addition, revenue in the third month of each quarter is typically higher than in the first and second months. Information regarding seasonality and its potential impact on our business is included in Item 1A of this Report under the caption, "Operating Results Fluctuations," and is incorporated herein by reference.

Manufacturing and Raw Materials

In most cases, there are a number of vendors providing the services and producing the parts and components that we utilize. However, there are some services and components that are purchased from single sources due to price, quality, technology or other reasons. For example, we depend on computer chips and microprocessors from Intel and operating systems from Microsoft. Certain parts and components used in the manufacturing of our ATMs and the delivery of many of our retail solutions are also supplied by single sources. In addition, there are a number of key suppliers for our businesses who provide us with critical products for our solutions.

At December 31, 2017, we manufactured our ATMs in facilities located in Columbus, Georgia, USA; Manaus, Brazil; Budapest, Hungary; Beijing, China; and Chengalpattu, India. Our self-checkout solutions are manufactured in facilities located in Columbus, Georgia, USA and Budapest, Hungary. Our financial kiosk solutions are manufactured in facilities located in Beijing, China; Budapest, Hungary; Manaus, Brazil; and Chengalpattu, India. Our POS/Display terminals are manufactured in facilities located in Columbus, Georgia, USA; and Budapest, Hungary, and certain hand-held solutions are manufactured in Salzburg, Austria. NCR outsources the manufacturing in all geographic regions of its payment solutions, some POS/Display terminals, printers, bar code scanners and various other kiosks.

Further information regarding the potential impact of these relationships on our business operations, and regarding sources and availability of raw materials, is also included in Item 1A of this Report under the caption "Reliance on Third Parties," and is incorporated herein by reference.

Product Backlog

Our backlog was approximately \$1.37 billion and \$1.38 billion at December 31, 2017 and 2016, respectively. The backlog includes orders confirmed for products scheduled to be shipped as well as certain professional and transaction services to be provided. Although we believe that the orders included in the backlog are firm, some orders may be canceled by the customer without penalty. Even when penalties for cancellation are provided for in a customer contract, we may elect to permit cancellation of orders without penalty where management believes it is in our best interests to do so. Further, we have a significant portion of revenue derived from our growing service-based business (including our cloud and hosted businesses), for which backlog information has not historically been measured. Therefore, we do not believe that our backlog, as of any particular date, is necessarily indicative of revenue for any future period.

Employees

On December 31, 2017, NCR had approximately 34,000 employees and contractors worldwide.

Environmental Matters

Compliance with federal, state, and local environmental regulations relating to the protection of the environment could have a material adverse impact on our capital expenditures, earnings or competitive position. While NCR does not currently expect to incur material capital expenditures related to compliance with such laws and regulations, and while we believe the amounts provided in our Consolidated Financial Statements are adequate in light of the probable and estimable liabilities in this area, there can be no assurances that environmental matters will not lead to a material adverse impact on our capital expenditures, earnings or competitive position. A detailed discussion of the current estimated impacts of compliance issues relating to environmental regulations, particularly the Fox River and Kalamazoo River matters, is reported in Item 8 of Part II of this Report as part of Note 9, "Commitments and Contingencies" of the Notes to Consolidated Financial Statements and is incorporated herein by reference. Further information regarding the potential impact of compliance with federal, state, and local environmental regulations is also included in Item 1A of this Report under the caption "Environmental," and is incorporated herein by reference.

Executive Officers of the Registrant

The Executive Officers of NCR (as of February 26, 2018) are as follows:

Name	Age	Position and Offices Held
William R. Nuti	54	Chairman of the Board and Chief Executive Officer
Mark D. Benjamin	47	President and Chief Operating Officer
Adrian Button	45	Senior Vice President, Global Hardware Product Operations
Daniel W. Campbell	57	Executive Vice President, Global Sales
J. Robert Ciminera	60	Executive Vice President, Global Customer Services
Robert P. Fishman	54	Executive Vice President and Chief Financial Officer
Edward R. Gallagher	64	Senior Vice President, General Counsel and Corporate Secretary
Paul Langenbahn	49	Executive Vice President, Global Software
Andrea L. Ledford	52	Executive Vice President, Chief Administration Office, and Chief Human Resources Officer

Set forth below is a description of the background of each of the Executive Officers.

William R. Nuti is NCR's Chairman of the Board and Chief Executive Officer, and prior to October 2016 Mr. Nuti also served as NCR's President. Mr. Nuti became a director of NCR on August 7, 2005 and became Chairman of the Board on October 1, 2007. Before joining NCR in August 2005, Mr. Nuti served as President and Chief Executive Officer of Symbol Technologies, Inc., an information technology company. Prior to that, he was Chief Operating Officer of Symbol Technologies. Mr. Nuti joined Symbol Technologies in 2002 following a 10 plus year career at Cisco Systems, Inc. where he advanced to the dual role of Senior Vice President of the company's Worldwide Service Provider Operations and U.S. Theater Operations. Prior to his Cisco experience, Mr. Nuti held sales and management positions at IBM, Netrix Corporation and Network Equipment Technologies. Mr. Nuti is also a director of Coach, Inc., where he is a member of its Human Resources Committee, and United Continental Holdings, Inc. where he is a member of its Finance, Compensation and Public Responsibility Committees. Mr. Nuti previously served as a director of Sprint Nextel Corporation. He is also a member of the Georgia Institute of Technology advisory board and a trustee of Long Island University.

Mark D. Benjamin joined NCR as its President and Chief Operating Officer in October 2016. Prior to joining NCR, Mr. Benjamin spent 24 years in a series of global assignments with Automatic Data Processing, Inc. (ADP), which he joined in 1992. At ADP, Mr. Benjamin served from July 2013 to September 2016 as President of ADP's Global Enterprise Solutions division, leading a team of 20,000 employees, and managing a multi-billion dollar portfolio of businesses serving clients in over 100 countries. Before that, Mr. Benjamin served as President, Employer Services International, from July 2011 to July 2013, as Senior Vice President, Services and Operations - Small Business Services and Total Source, from April 2008 to June 2011, and in various other operations-focused roles. Mr. Benjamin holds a bachelor's degree in international finance and marketing from the University of Miami.

Adrian Button became NCR's Senior Vice President, Global Hardware Product Operations, in February 2018, and from July 2017, when he joined NCR, to February 2018, Mr. Button acted as Senior Vice President Global Operations. Before he joined NCR, Mr. Button spent 19 years in various management roles with different divisions of the General Electric Company (GE). Most recently, Mr. Button served from January 2016 to July 2017 as Vice President, Supply Chain, for GE Industrial Solutions, with oversight of the division's supply chain and service operations across 41 global factories. Prior to that, Mr. Button served as Vice President, Turbomachinery, for GE's Oil & Gas division from January 2014 to December 2016, as General Manager of Global Operations Leader for GE's Oil & Gas division from March 2011 to December 2013, and in other operations and supply chain roles with GE Aviation. Mr. Button holds a bachelor's degree in engineering from the University of Glamorgan, Wales, United Kingdom.

Daniel W. Campbell became NCR's Executive Vice President, Global Sales, in February 2018. Previously, from July 2015 to February 2018, Mr. Campbell served as a Senior Vice President and General Manager at Virtustream, Inc., which he joined after it was acquired by EMC Corporation (EMC) in July 2015. With Virtustream, Mr. Campbell led the global sales integration with EMC's sales organization, built a global strategic alliances and channels organization, and co-launched the Virtustream Storage Cloud, an enterprise-class cloud storage platform. Before joining Virtustream, from April 1998 through July 2015, Mr. Campbell served in a series of sales and management roles of increasing responsibility at EMC, including most recently as Senior Vice President, Global Specialty Sales from October 2013 to July 2015, and Chief Operating Officer and Senior Vice President, World Wide Sales, Backup Recovery Systems Division from January 2011 to December 2013. Before joining EMC, Mr. Campbell served in various sales and management roles with Sperry, Unisys, Motorola and Wang.

J. Robert Ciminera became NCR's Executive Vice President, Global Customer Services in February 2018. Previously, Mr. Ciminera served as NCR's Executive Vice President, Hardware Product Operations, from January 2017 to February 2018, where he was responsible for NCR's hardware product portfolio. Before that, Mr. Ciminera served as NCR's Senior Vice President, Hardware Solutions and Global Operations from October 2015 to January 2017, as NCR's Senior Vice President, Integrated Supply Chain Operations from May 2014 to October 2015, and as NCR's Vice President, Strategic Sourcing and Chief Procurement Officer from February 2009, when he joined NCR, through May 2014. Before joining NCR, Mr. Ciminera served in various sourcing, supply chain and product management roles with Avaya, Motorola, Symbol Technologies and other technology companies.

Robert P. Fishman became Executive Vice President and Chief Financial Officer in April 2016, and served as Senior Vice President and Chief Financial Officer from March 2010 to April 2016. Prior to becoming Chief Financial Officer, he was Interim Chief Financial Officer from October 2009 to March 2010, and Vice President and Corporate Controller from January 2007 to October 2009. From September 2005 to January 2007, Mr. Fishman was Assistant Controller and from January 2005 to September 2005, he was Director, Corporate Planning. Mr. Fishman joined NCR in 1993.

Edward R. Gallagher was named Senior Vice President, General Counsel and Secretary of NCR in October 2015, having served as Acting General Counsel since October 2014. His prior position with NCR was Law Vice President, Litigation & Employment Law, commencing in 2003; he has also served in other positions within the NCR Law Department, including Chief Counsel of the former Systemedia Division. Mr. Gallagher joined NCR in 1992. Prior to that, Mr. Gallagher was an attorney in private practice in San Francisco and in Boston. Mr. Gallagher holds a law degree from Yale Law School, as well as a master's degree from Yale University in political science and international relations. He has an undergraduate degree from the University of South Dakota.

Paul Langenbahn became NCR's Executive Vice President, Global Software, in January 2017. From April 2014 to December 2016, Mr. Langenbahn served as Senior Vice President and President, Hospitality, and before that, following NCR's acquisition of Radiant Systems, Inc. in 2011, he served as Vice President, Global Sales, Marketing and Services for NCR's Hospitality division. Prior to joining NCR in 2011, Mr. Langenbahn was President of Radiant Systems' Hospitality division, and he held various other leadership roles in sales, professional services, solution management and general management at Radiant Systems, where he was instrumental in the company's development and growth.

Andrea L. Ledford became Executive Vice President, Chief Administration Office, and Chief Human Resources Officer in February 2016. Previously, Ms. Ledford was Senior Vice President, Corporate Services and Chief Human Resources Officer from November 2013 to January 2016, Senior Vice President and Chief Human Resources Officer, from June 2012 to November 2013, Senior Vice President, Human Resources, from June 2007 to June 2012, and Interim Senior Vice President, Human Resources from February 2007 to June 2007. Prior to assuming this position, she was Vice President, Human Resources, Asia/Pacific, and Europe, Middle East and Africa, from February 2006 to February 2007. Before joining NCR in February 2006, Ms. Ledford was EMEA Leader, Human Resources, at Symbol Technologies, Inc. from 2002 to February 2006 and held a variety of leadership roles at Cisco Systems, Inc. in EMEA, Asia/Pacific and Latin America.

Available Information

NCR makes available through its website at <http://investor.ncr.com>, free of charge, its Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, definitive proxy statements on Schedule 14A and Current Reports on Form 8-K, and all amendments to such reports and schedules, as soon as reasonably practicable after these reports are electronically filed or furnished to the U.S. Securities and Exchange Commission (SEC) pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934 (the Exchange Act). The SEC website (www.sec.gov) contains the reports, proxy statements and information statements, and other information regarding issuers that file or furnish electronically with the SEC. Also, the public may read and copy any materials that NCR files or furnishes with the SEC at the SEC's Public Reference Room at 100 F Street, NE, Washington, DC 20549. Information on the operation of the Public Reference Room may be obtained by calling the SEC at 1-800-SEC-0330. NCR will furnish, without charge to a security holder upon written request, the Notice of Meeting and Proxy Statement for the 2018 Annual Meeting of Stockholders (the 2018 Proxy Statement), portions of which are incorporated herein by reference. NCR also will furnish its Code of Conduct at no cost and any other exhibit at cost. Document requests are available by calling or writing to:

NCR—Investor Relations
864 Spring Street NW
Atlanta, GA 30308
Phone: 800-255-5627
E-Mail: investor.relations@ncr.com
Website: <http://investor.ncr.com>

NCR's website, www.ncr.com, contains a significant amount of information about NCR, including financial and other information for investors. NCR encourages investors to visit its website regularly, as information may be updated and new information may be posted at any time. The contents of NCR's website are not incorporated by reference into this Form 10-K and shall not be deemed "filed" under the Exchange Act.

Item 1A. RISK FACTORS

The risks and uncertainties described below could materially and adversely affect our business, financial condition, results of operations, could cause actual results to differ materially from our expectations and projections, and could cause the market value of our stock to decline. You should consider these risk factors when reading the rest of this Annual Report on Form 10-K, including “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and our financial statements and related notes included elsewhere in this document. These risk factors may not include all of the important factors that could affect our business or our industry or that could cause our future financial results to differ materially from historic or expected results or cause the market price of our common stock to fluctuate or decline.

Economic Pressures. *Our business may be negatively affected by domestic and global economic and credit conditions.* Our business is sensitive to the strength of domestic and global economic and credit conditions, particularly as they affect, either directly or indirectly, the financial services, retail and hospitality sectors of the economy. Economic and credit conditions are influenced by a number of factors, including political conditions, consumer confidence, unemployment levels, interest rates, tax rates, commodity prices and government actions to stimulate economic growth. The imposition or threat of protectionist trade policies or import or export tariffs, global and regional market conditions and spending trends in the financial services and retail industries, new comprehensive U.S. tax legislation, modified or new global or regional trade agreements, the determination by the United Kingdom to exit the European Union

(EU), uncertainty over further potential changes in Eurozone participation and fluctuations in oil and commodity prices, among other things, have created a challenging and unpredictable environment in which to market the products and services of our various businesses across our different geographies and industries. A negative or unpredictable economic climate could create uncertainty or financial pressures that impact the ability or willingness of our customers to make capital expenditures, thereby affecting their decision to purchase or roll out our products or services or, especially with respect to smaller customers, to pay accounts receivable owed to NCR. Additionally, if customers respond to a negative or unpredictable economic climate by consolidation, it could reduce our base of potential customers. Negative or unpredictable global economic conditions also may have a material effect on our customers’ ability to obtain financing for the purchase of our products and services from third party financing companies, which could adversely affect our operating results.

Business Model. *If we are unsuccessful in transforming our business model, our operating results could be negatively impacted.* In recent years, we have shifted our business model to become a global technology solutions company that uses software and value-added endpoints, coupled with higher-margin services and a focus on cloud and mobile, to help our customers deliver a rich, integrated and personalized experience to consumers across commerce channels. Our success depends heavily on our ability to continue to grow our higher-margin software and services businesses. Our ability to grow these businesses depends on a number of different factors including, among others, developing, deploying and supporting the next generation of integrated, platform-based software solutions for the industries we serve; market acceptance of our new and existing software and cloud solutions; enabling our sales force to use a consultative selling model that better incorporates our comprehensive and new solutions; transforming our services performance, capabilities and coverage to improve efficiency, incorporate remote diagnostic and other technologies and align with and support our new solutions; managing professional services and other costs associated with large solution roll-outs; and integrating, developing and supporting software gained through acquisitions. In addition, development of these businesses may require increased capital and research and development expenses and resource allocation, and while we will seek to have the right level of investment and the right level of resources focused on these opportunities, these costs may reduce our gross margins and the return on these investments may be lower, or may develop more slowly, than we expect. In addition, we continue to pursue initiatives to expand our customer base by increasing our use of indirect sales channels, and by developing, marketing and selling solutions aimed at the small- to medium-business market. It is not yet certain whether these initiatives will yield the anticipated benefits, or whether our solutions will be compelling and attractive to small- and medium-sized businesses. If we are not successful in growing our higher-margin software and services businesses and expanding our customer base at the rate that we anticipate, we may not meet our growth and gross margin projections or expectations, and operating results could be negatively impacted.

Competition. *If we do not compete effectively within the technology industry, we will not be successful.* We operate in the intensely competitive information technology industry. This industry is characterized by rapidly changing technology, disruptive technological innovation, evolving industry standards, frequent new product introductions, price and cost reductions, and increasingly greater commoditization of products making differentiation difficult. Our traditional competitors include other large companies in the information technology industry, such as: Hewlett-Packard Inc., Diebold Nixdorf, Nautilus Hyosung, ToshibaTec, Micros (Oracle), Fujitsu, Q2 Holdings and ACI Worldwide, some of which have more financial and technical resources, or more widespread distribution and market penetration for their platforms and service offerings, than we do. We also compete with companies in specific industry segments, such as entry-level ATMs, point-of-sale solutions and imaging solutions. In addition, as consumers and customers in the financial services, retail and hospitality industry adopt new alternative technologies such as cashless and other streamlined payment services and automated shopping solutions, we may face competition from other technology companies.

Our future competitive performance and market position depend on a number of factors, including our ability to:

- react to competitive product and pricing pressures;
- penetrate and meet the changing competitive requirements and deliverables in developing and emerging markets;
- exploit opportunities in emerging vertical markets, such as travel and telecommunications and technology;
- cross-sell additional products and services to our existing customer base;
- rapidly and continually design, develop and market, or otherwise maintain and introduce innovative solutions and related products and services for our customers that are competitive in the marketplace;
- react on a timely basis to shifts in market demands and technological innovations, including shifts toward the desire of banks and retailers to provide an omni-channel experience to their customers and the use of mobile devices in transactions and payments;
- compete in reverse auctions for new and continuing business;
- reduce costs without creating operating inefficiencies or impairing product or service quality;
- maintain competitive operating margins;
- improve product and service delivery quality; and
- effectively market and sell all of our diverse solutions.

Our business and operating performance also could be impacted by external competitive pressures, such as consolidation, increasing price erosion and the entry of new competitors and technologies into our existing product and geographic markets. In addition, our customers sometimes finance our product sales through third party financing companies, and in the case of customer default, these financing companies may be forced to resell this equipment at discounted prices, competing with us and impacting our ability to sell incremental units. The impact of these product and pricing pressures could include lower customer satisfaction, decreased demand for our solutions, loss of market share and reduction of operating profits.

Introduction of New Solutions. *If we do not swiftly and successfully develop and introduce new solutions in the competitive, rapidly changing environment in which we do business, our business results will be impacted.* The development process for our solutions requires high levels of innovation from our product development teams and suppliers of the components embedded or incorporated in our solutions. In addition, certain of our solutions, including our cloud solutions, may require us to build, lease or expand, and maintain, infrastructure (such as hosting centers) to support them. The development process also can be lengthy and costly, and requires us to commit a significant amount of resources to bring our business solutions to market. We may not be able to anticipate our customers' needs and technological and industry trends accurately, or to complete development of new solutions efficiently. In addition, contract terms, market conditions or customer preferences may affect our ability to limit, sunset or end-of-life our older products in a timely or cost-effective fashion. If any of these risks materialize, we may be unable to introduce new solutions into the market on a timely basis, if at all, and our business and operating results could be impacted. Likewise, we sometimes make assurances to customers regarding the operability and specifications of new technologies, and our results could be impacted if we are unable to deliver such technologies, or if such technologies do not perform as planned. Once we have developed new solutions, if we cannot successfully market and sell those solutions, our business and operating results could be impacted.

Data Privacy and Cybersecurity. *Cybersecurity and data privacy issues could negatively impact our business.* Our products and services, including our cloud and hosted solutions, facilitate financial and other transactions for the customers in the industries we serve. As a result, we collect, use, transmit and store certain of the transaction and personal information of our customers and the end-users of our solutions. We also may have access to transaction and personal information of our customers and their customers through or in the course of servicing our products or third party products. Additionally, we collect, use and store personal information of our employees and the personnel of our business partners, such as resellers, suppliers and contractors, in the ordinary course of business. While we have programs and measures in place designed to safeguard this data, and while we have implemented access controls designed to limit the risk of unauthorized use or disclosure by employees and contractors, the techniques used to obtain unauthorized access to this data are complex and changing, and may be difficult to detect for long periods of time. An attack, disruption, intrusion, denial of service, theft or other breach, or an inadvertent act by an employee or contractor, could result in unauthorized access to, or

disclosure of, this data, resulting in claims, costs and reputational harm that could materially and adversely affect our operating results. We may also detect, or may receive notice from third parties (including governmental agencies) regarding potential vulnerabilities in our information technology systems, our products, or third party products used in conjunction with our products. Even if these potential vulnerabilities do not result in a data breach, their existence can adversely affect customer confidence and our reputation in the marketplace. To the extent such vulnerabilities require remediation, such remedial measures could require significant resources and may not be implemented before such vulnerabilities are exploited. As the cybersecurity landscape evolves, we may also find it necessary to make significant further investments to protect data and infrastructure.

The personal information and data that we process and store also is increasingly subject to the data security and data privacy laws of many jurisdictions, including the United States and the EU and its member states. These laws may conflict with one another, and many of them are subject to frequent modification and differing interpretations. The laws include the EU's General Data Protection Regulation (GDPR), which goes into effect in May 2018. The GDPR is expected to impose a significant compliance burden on many companies with operations in the EU, and it includes fines of up to 20 million Euros or up to 4% of the annual global revenues of the infringer for failures to comply. The laws also cover the transfer of personal information, including transfers of employee information between us and our subsidiaries, across international borders, including with respect to the EU, Australia and Japan. Complying with these evolving and varying requirements could require significant expense and effort, and could require us to change our business practices or the functionality of our products and services in a manner adverse to our customers and our business. In addition, violations of these laws can result in significant penalties, claims by regulators or other third parties, and damage to our brand and business.

Defects, Errors and Disruptions. *Defects, errors, installation difficulties or development delays could expose us to potential liability, harm our reputation and negatively impact our business.* Many of our products are sophisticated and complex, and may incorporate third-party hardware and software. Despite testing and quality control, we cannot be certain that defects or errors will not be found in our products. If our products contain undetected defects or errors, or otherwise fail to meet our customers' expectations, we could face the loss of customers, liability exposure and additional development costs. If defects or errors delay product installation or make it more difficult, we could experience delays in customer acceptance, or if our products require significant amounts of customer support, it could result in incremental costs to us. In addition, our customers who license and deploy our software may do so in both standard and non-standard configurations in different environments with different computer platforms, system management software and equipment and networking configurations, which may increase the likelihood of technical difficulties. Our products may be integrated with other components or software, and, in the event that there are defects or errors, it may be difficult to determine the origin of such defects or errors. Additionally, damage to, or failure or unavailability of, any significant aspect of our cloud hosting facilities could interrupt the availability of our cloud offerings, which could cause disruption for our customers, and, in turn, their customers, and expose us to liability. If any of these risks materialize, they could result in additional costs and expenses, exposure to liability claims, diversion of technical and other resources to engage in remediation efforts, loss of customers or negative publicity, each of which could impact our business and operating results.

Disruptions in our data center hosting facilities could adversely affect our business. Our software products are increasingly being offered and provided on a cloud or other hosted basis through data centers operated by the Company or third parties in the United States and other countries. In addition, certain of the applications and data that we use in our services offerings and our operations may be hosted or stored at such facilities. These facilities may be vulnerable to natural disasters, telecommunications failures and similar events, or to intentional acts of misconduct, such as security breaches or attacks. The occurrence of any of these events or acts, or any other unanticipated problems, at these facilities could result in damage to or the unavailability of these cloud hosting facilities. Such damage or unavailability could, despite existing disaster recovery and business continuity arrangements, interrupt the availability of our cloud offerings for our customers. We have from time to time experienced such interruptions and they may occur in the future. In addition, any such damage or unavailability could interrupt the availability of applications or data necessary to provide services or conduct critical operations. Interruptions in the availability of our cloud offerings or our ability to service our customers could result in the failure to meet contracted up-time or service levels, which could cause us to issue credits or pay penalties, or cause customers to terminate or not renew subscriptions. Interruptions could also expose us to liability claims, negative publicity and the need to engage in costly remediation efforts, any of which could impact our business and reduce our revenue.

Indebtedness and Repurchase Obligations. *Our level of indebtedness could limit our financial and operating activities and adversely affect our ability to incur additional debt to fund future needs.* At December 31, 2017, we had approximately \$3.01 billion of total indebtedness outstanding. Additionally, at December 31, 2017, we had approximately \$1.10 billion of secured debt available for borrowing under our senior secured credit facility, and approximately \$200 million of secured debt available for borrowing under our trade receivables securitization facility. This level of indebtedness could:

- require us to dedicate a substantial portion of our cash flow to the payment of principal and interest, thereby reducing the funds available for operations and future business opportunities;

- make it more difficult for us to satisfy our obligations with respect to our outstanding senior unsecured notes, including our change in control repurchase obligations;
- limit our ability to borrow additional money if needed for other purposes, including working capital, capital expenditures, debt service requirements, acquisitions and general corporate or other purposes, on satisfactory terms or at all;
- limit our ability to adjust to changing economic, business and competitive conditions;
- place us at a competitive disadvantage with competitors who may have less indebtedness or greater access to financing;
- make us more vulnerable to an increase in interest rates, a downturn in our operating performance or a decline in general economic conditions; and
- make us more susceptible to adverse changes in credit ratings, which could impact our ability to obtain financing in the future and increase the cost of such financing.

If compliance with our debt obligations materially limits our financial or operating activities, or hinders our ability to adapt to changing industry conditions, we may lose market share, our revenue may decline and our operating results may be negatively affected.

The terms of the documents governing our indebtedness include financial and other covenants that could restrict or limit our financial and business operations. Our senior secured credit facility and the indentures for our senior unsecured notes include restrictive covenants that, subject to certain exceptions and qualifications, restrict or limit our ability and the ability of our subsidiaries to, among other things:

- incur additional indebtedness;
- create liens on, sell or otherwise dispose of, our assets;
- engage in certain fundamental corporate changes or changes to our business activities;
- make certain investments or material acquisitions;
- engage in sale-leaseback or hedging transactions;
- repurchase our common stock, pay dividends or make similar distributions on our capital stock;
- repay certain indebtedness;
- engage in certain affiliate transactions; and
- enter into agreements that restrict our ability to create liens, pay dividends or make loan repayments.

The senior secured credit facility and the indentures also contain certain affirmative covenants, and the senior secured credit facility requires us to comply with financial coverage ratios regarding both our interest expense and our debt relative to our Consolidated EBITDA (as defined in the senior secured credit facility).

These covenants and restrictions could affect our ability to operate our business, and may limit our ability to react to market conditions or take advantage of potential business opportunities as they arise. Additionally, our ability to comply with these covenants may be affected by events beyond our control, including general economic and credit conditions and industry downturns.

In addition, under our trade receivables securitization facility, we are required, among other things, to maintain certain financial tests relating to the three month rolling average ratio of defaults, delinquencies, dilution and days sales outstanding of the receivables pool (as such ratios and tests are described in the agreement governing our trade receivables securitization facility).

If we fail to comply with these covenants and are unable to obtain a waiver or amendment from the applicable lenders, an event of default would result under these agreements and under other agreements containing related cross-default provisions.

- Upon an event of default under the senior secured credit facility, the lenders could, among other things, declare outstanding amounts due and payable, refuse to lend additional amounts to us, or require us to deposit cash collateral in respect of outstanding letters of credit. If we were unable to repay or pay the amounts due, the lenders could, among other things, proceed against the collateral granted to them to secure such indebtedness, which includes certain of our domestic assets and the equity interests of certain of our domestic and foreign subsidiaries.

- Upon an event of default under the indentures, the trustee or holders of our senior unsecured notes could declare all outstanding amounts immediately due and payable.
- Upon an event of default under our trade receivables securitization facility, the lenders could, among other things, terminate the facility, declare all capital and other obligations to be immediately due and payable, replace us as servicer, take over receivables lock-box accounts and redirect the collections of domestic accounts receivable from those accounts, and exercise available rights against the domestic accounts receivable pledged by NCR Receivables, LLC.

Despite our current levels of debt, we may still incur substantially more debt, including secured debt, and similar liabilities, which would increase the risks described in these risk factors relating to indebtedness and repurchase obligations. The agreements relating to our debt limit, but do not prohibit, our ability to incur additional debt, and the amount of debt that we could incur could be substantial. In addition, certain types of liabilities are not considered “Indebtedness” under our senior secured credit facility or the indentures governing our senior unsecured notes, and the senior secured credit facility and indentures do not impose any limitation on the amount of liabilities incurred by the subsidiaries, if any, that might be designated as “unrestricted subsidiaries” (as defined in the indentures). Accordingly, we could incur significant additional debt or similar liabilities in the future, including additional debt under our senior secured credit facility, some of which could constitute secured debt. In addition, if we form or acquire any subsidiaries in the future, those subsidiaries also could incur debt or similar liabilities. If new debt or similar liabilities are added to our current debt levels, the related risks that we now face could increase.

Our cash flows may not be sufficient to service our indebtedness, and if we are unable to satisfy our obligations under our indebtedness, we may be required to seek other financing alternatives, which may not be successful. Our ability to make timely payments of principal and interest on our debt obligations depends on our ability to generate positive cash flows from operations, which is subject to general economic conditions, competitive pressures and certain financial, business and other factors beyond our control. If our cash flows and capital resources are insufficient to make these payments, we may be required to seek additional financing sources, reduce or delay capital expenditures, sell assets or operations or refinance our indebtedness. These actions could have a material adverse effect on our business, financial condition and results of operations. In addition, we may not be able to take any of these actions, and, even if successful, these actions may not permit us to meet our scheduled debt service obligations. Our ability to restructure or refinance our outstanding indebtedness will depend on, among other things, the condition of the capital markets and our financial condition at such time. There can be no assurance that we will be able to restructure or refinance any of our indebtedness on commercially reasonable terms or at all. If we cannot make scheduled payments on our debt, we will be in default and the outstanding principal and interest on our debt could be declared to be due and payable, in which case we could be forced into bankruptcy or liquidation or required to substantially restructure or alter our business operations or debt obligations.

Borrowings under our senior secured credit facility and trade receivables securitization facility bear interest at a variable rate, which subjects us to interest rate risk, which could cause our debt service obligations to increase significantly. All of our borrowings under our senior secured credit facility and trade receivables securitization facility are at variable rates of interest and expose us to interest rate risk. If interest rates increase, our debt service obligations on this variable rate indebtedness would increase even though the amount borrowed remained the same. Although we may enter into interest rate swaps or similar instruments to reduce interest rate volatility in connection with our variable rate borrowings, we cannot provide assurances that we will be able to do so or that such swaps or instruments will be effective.

We may not be able to raise the funds necessary to finance a required repurchase of our senior unsecured notes or our Series A Convertible Preferred Stock. Upon the occurrence of a change in control under the applicable indenture governing the applicable senior unsecured notes, holders of those notes may require us to repurchase their notes. On any date during the three months commencing on and immediately following March 16, 2024 and the three months commencing on and immediately following every third anniversary of such date, holders of our Series A Convertible Preferred Stock will have the right to require us to repurchase any or all of our outstanding Series A Convertible Preferred Stock. In addition, upon certain change of control events involving the Company, holders of Series A Convertible Preferred Stock can require us, subject to certain exceptions, to repurchase any or all of their Series A Convertible Preferred Stock.

It is possible that we would not have sufficient funds at the time that we are required to make any such purchase of notes or Series A Convertible Preferred Stock (or both). We cannot assure the holders of the senior unsecured notes and Series A Convertible Preferred Stock that we will have sufficient financial resources, or will be able to arrange financing, to pay the repurchase price in cash with respect to any such notes or Series A Convertible Preferred Stock that holders have requested to be repurchased upon a change in control or scheduled redemption. Our failure to repurchase the senior unsecured notes of a series when required would result in an event of default with respect to such notes which could, in turn, constitute a default under the terms of our other indebtedness, if any. If we are unable to repurchase all shares of Series A Convertible Preferred Stock that holders have requested to be purchased, then we are required to pay dividends on the shares not repurchased at a rate equal to 8.0% per annum, accruing daily from such date until the full purchase price, plus all accrued dividends, are paid in full in respect of such shares of Series A Convertible Preferred Stock.

In addition, a change in control may constitute an event of default under our senior secured credit facility and our trade receivables securitization facility that would permit the lenders to accelerate the maturity of the borrowings thereunder and would require us to make a similar change in control offer to holders of our existing senior unsecured notes.

Certain important corporate events, such as leveraged recapitalizations that would increase the level of our indebtedness, may not constitute a change in control under the indentures governing our secured notes or the terms of our Series A Convertible Preferred Stock.

A lowering or withdrawal of the ratings assigned to our debt securities by rating agencies may increase our future borrowing costs and reduce our access to capital. Any rating assigned to our debt could be lowered or withdrawn entirely by a rating agency if, in that rating agency's judgment, future circumstances relating to the basis of the rating, such as adverse changes, so warrant. Any future lowering of our ratings likely would make it more difficult or more expensive for us to obtain additional debt financing.

Operating Results Fluctuations. *Our revenue, operating results, and margins could fluctuate for a number of reasons, including those described below:*

Seasonality. Our sales are historically seasonal, with lower revenue in the first quarter and higher revenue in the fourth quarter of each year. Such seasonality also causes our working capital cash flow requirements to vary from quarter to quarter depending on the variability in the volume, timing and mix of product sales. In addition, revenue in the third month of each quarter is typically higher than in the first and second months, particularly as our business model shifts to include more software and cloud solutions. These factors, among other things, may adversely affect our ability to manage working capital, make our forecasting process more difficult and impact our ability to predict financial results accurately.

Income Taxes. We are a United States based multinational company subject to income taxes in the United States and a number of foreign jurisdictions. Our domestic and international tax liabilities are dependent on the distribution of our earnings among these different jurisdictions, and our provision for income taxes and cash tax liability could be adversely affected if the distribution of earnings is higher than expected in jurisdictions with higher statutory tax rates.

On December 22, 2017, the U.S. President signed into law new legislation, referred to as the Tax Cuts and Jobs Act of 2017 ("U.S. Tax Reform"), that significantly revises the Internal Revenue Code of 1986, as amended. Among other things, the new legislation reduces the U.S. corporate income tax rate, subjects interest deductions to potential limitations, alters the expensing of capital expenditures, adopts elements of a territorial tax system, includes a one-time mandatory deemed repatriation tax on accumulated non-U.S. earnings of U.S. entities, and introduces certain anti-base erosion provisions. The legislation will affect our tax position and the cash taxes of our U.S. entities and will have a corresponding impact on our consolidated financial results starting in the fourth quarter of our fiscal year 2017. Notwithstanding the reduction in the corporate income tax rate, we continue to assess the overall impact of the legislation, and there can be no assurances that it will have an overall favorable impact on our business, financial condition or effective tax rate. In addition, the legislation requires interpretations and implementing regulations by the Internal Revenue Service (IRS), as well as state tax authorities, and could be subject to potential amendments and technical corrections, any of which could lessen or increase certain adverse impacts of the legislation. If we are unable to manage the adverse impacts of the legislation, they could have a material effect on our financial condition, results of operations and cash flows.

We recognize deferred tax assets and liabilities based on the differences between the financial statement carrying amounts and the tax basis of assets and liabilities. Our deferred tax assets, net of valuation allowances, totaled approximately \$608 million and \$840 million at December 31, 2017 and 2016, respectively, which, for 2017, reflects the remeasurement of our net U.S. deferred tax assets as a result of U.S. Tax Reform. We regularly review our deferred tax assets for recoverability and establish a valuation allowance if it is more likely than not that some portion or all of a deferred tax asset will not be realized. If we are unable to generate sufficient future taxable income, if there is a material change in the actual effective tax rates or if there is a change to the time period within which the underlying temporary differences become taxable or deductible, then we could be required to increase our valuation allowance against our deferred tax assets, which could result in a material increase in our effective tax rate.

In addition, changes in foreign tax laws or tax rulings could affect our financial position and results of operations. For example, in light of continuing global fiscal challenges, various levels of government and international organizations such as the Organization for Economic Co-operation and Development (OECD) and European Union (EU) are increasingly focused on tax reform and other legislative or regulatory action to increase tax revenue. These tax reform efforts, such as the OECD-led Based Erosion and Profit Sharing project (BEPS), are designed to ensure that corporate entities are taxed on a larger percentage of their earnings. Although some countries have passed tax laws based on findings from the BEPS project, the final nature, timing and extent of any such tax reforms

or other legislative or regulatory actions is unpredictable, and it is difficult to assess their overall effect. But, these changes could increase our effective tax rate and adversely impact our financial results.

We are also subject to ongoing audits of our income tax returns in various jurisdictions both in the U.S. and internationally. While we believe that our tax positions will be sustained, the outcomes of such audits could result in the assessment of additional taxes, which could adversely impact our cash flows and financial results.

Foreign Currency. Our revenue and operating income are subject to variability due to the effects of foreign currency fluctuations against the U.S. Dollar. Overall, we have exposure to approximately 50 functional currencies. We pay the majority of expenses attributable to our foreign operations in the functional currency of the country in which such operations are conducted, and in 2017 a significant portion of our revenue was generated in currencies other than the U.S. Dollar. As a result, significant currency fluctuations could adversely affect our results of operations, including sales and gross margins. For example, an increase in the value of the U.S. Dollar relative to foreign currencies could result in lower revenue and increased losses from currency exchange rates. We endeavor to mitigate some of the effects of currency fluctuations with our hedging strategies; however, the volatility of foreign currency exchange rates is dependent on many factors that cannot be forecasted with reliable accuracy and our derivative instruments may not prove effective in reducing our exposures.

Cost/Expense Reductions. Our success in achieving targeted cost and expense reductions through formal restructuring programs, our continuous improvement programs, our performance improvement programs and other similar programs depends on a number of factors, including our ability to achieve infrastructure rationalizations, drive lower component and product development costs, improve supply chain efficiencies, utilize next-generation technologies, simplify and rationalize product portfolios, and optimize the efficiency of our customer services and professional services consulting resources. If we do not successfully execute on these initiatives or if we experience delays in completing the implementation of these initiatives, our results of operations or financial condition could be adversely affected.

Manufacturing. At December 31, 2017, we manufactured our ATMs in facilities located in Columbus, Georgia, USA; Manaus, Brazil; Budapest, Hungary; Beijing, China; and Chengalpattu, India. Our self-checkout solutions are manufactured in facilities located in Columbus, Georgia, USA and Budapest, Hungary. Our financial kiosk solutions are manufactured in facilities located in Beijing, China; Budapest, Hungary; Manaus, Brazil; and Chengalpattu, India. Our POS/Display terminals are manufactured in facilities located in Columbus, Georgia, USA; and Budapest, Hungary, and certain hand-held solutions are manufactured in Salzburg, Austria. NCR outsources the manufacturing in all geographic regions of its payment solutions, some POS terminals, printers, bar code scanners and various other kiosks. If we develop or experience problems relating to product quality or on-time delivery to customers that we are unable to quickly manage and resolve, whether due to the geographical diversity of our manufacturing base or otherwise, we could experience business interruption that could negatively impact our business and operating results.

Contractual Obligations for Professional Services. Our contracts for professional services consulting work may contemplate that services will be performed over multiple periods, especially in connection with large solution roll-outs. Our profitability under those contracts is largely a function of performing our contractual obligations within the estimated costs and time periods specified. If we exceed these estimated costs or cannot otherwise complete the contracted services within the specified periods, our profitability related to these contracts could be negatively impacted. In addition, if we are unable to maintain appropriate utilization rates for our consultants, we may not be able to sustain profitability on these contracts.

Acquisitions, Divestitures and Alliances. As we selectively acquire and divest technologies, products and businesses and we begin to include or exclude, as the case may be, the financial results related to these transactions, our operating results could fluctuate materially, depending on the size, nature, structure and timing of the transactions.

Underfunded Pension Obligation. At December 31, 2017, our obligation for benefits under our pension plans was \$3,223 million and our pension plan assets totaled \$2,530 million, which resulted in an underfunded pension obligation of \$693 million. While we rebalanced our U.S. and international plan assets in order to reduce volatility and made several discretionary contributions to our pension plans, our remaining underfunded pension obligation continues to require ongoing cash contributions. Our underfunded pension obligation also may be affected by future transfers and settlements relating to our international pension plans. For example, in 2015 we completed the transfer of our U.K. London pension plan to an insurer. The pension plan was overfunded, and the transfer resulted in a settlement loss of \$427 million in the second quarter of 2015, and an offsetting decrease to prepaid pension costs in our consolidated balance sheet.

In addition, certain of the plan assets remain subject to financial market risk, and our actuarial and other assumptions underlying our expected future benefit payments, long-term expected rate of return and future funding expectations for our plans depend on, among other things, interest rate levels and trends and capital market expectations. Further volatility in the performance of financial markets,

changes in any of these actuarial assumptions (including those described in our “Critical Accounting Policies and Estimates” section of the “Management’s Discussion and Analysis of Financial Condition and Results of Operations” included in Item 7 of Part II of this Report) or changes in regulations regarding funding requirements could require material increases to our expected cash contributions to our pension plans in future years.

See the “Effects of Pension, Postemployment and Postretirement Benefit Plans” and “Financial Condition, Liquidity And Capital Resources” sections of the “Management’s Discussion and Analysis of Financial Condition and Results of Operations” included in Item 7 of Part II of this Report and Note 8, “Employee Benefit Plans” in the Notes to the Consolidated Financial Statements included in Item 8 of Part II of this Report for further information regarding the funded status of our pension plans and potential future cash contributions.

Stock-based Compensation. Similar to other companies, we use stock awards as a form of compensation for certain employees and non-employee directors. All stock-based awards are required to be recognized in our financial statements based on their fair values. The amount recognized for stock compensation expense could vary depending on a number of assumptions or changes that may occur. For example, assumptions such as the risk-free rate, expected holding period and expected volatility that drive our valuation model could change. Other examples that could have an impact include changes in the mix and type of awards, changes in our compensation plans, changes in our tax rate, changes in our forfeiture rate, differences in actual results compared to management’s estimates for performance-based awards or an unusually high amount of expirations of stock awards.

Changes in Accounting Principles. We prepare our consolidated financial statements in accordance with accounting principles generally accepted in the United States. These principles are subject to interpretation by the SEC and various bodies formed to create and interpret appropriate accounting principles and guidance. Changes in accounting principles may have an adverse effect on our financial results, as well as our processes and related controls, and may retroactively affect previously reported results. For additional information regarding updated accounting principles and standards, including the new revenue recognition standard, see Item 7 of Part II of this Report and Note 1, “Basis of Presentation and Significant Accounting Policies” in the Notes to the Consolidated Financial Statements included in Item 8 of Part II of this Report.

Activist Stockholders. While we seek to actively engage with stockholders and consider their views on business and strategy, we could be subject to actions or proposals from stockholders or others that do not align with our business strategies or the interests of our other stockholders. Responding to these stockholders could be costly and time-consuming, disrupt our business and operations, and divert the attention of our Board of Directors and senior management. Uncertainties associated with such activities could interfere with our ability to effectively execute our strategic plan, impact customer retention and long-term growth, and limit our ability to hire and retain personnel. In addition, actions of these stockholders may cause periods of fluctuation in our stock price based on temporary or speculative market perceptions or other factors that do not necessarily reflect the underlying fundamentals and prospects of our business.

Series A Convertible Preferred Stock. *The issuance of shares of our Series A Convertible Preferred Stock reduces the relative voting power of holders of our common stock, and the conversion and sale of those shares would dilute the ownership of such holders and may adversely affect the market price of our common stock.* As of December 31, 2017, 0.8 million shares of our Series A Convertible Preferred Stock were outstanding, representing approximately 18% of our outstanding common stock, including the Series A Convertible Preferred Stock on an as-converted basis. Holders of Series A Convertible Preferred Stock are entitled to a cumulative dividend at the rate of 5.5% per annum, payable quarterly in arrears. The dividends are to be paid in-kind, through the issuance of additional shares of Series A Convertible Preferred Stock, for the first sixteen dividend payment dates, and thereafter in cash or in-kind at our option. If we fail to timely declare and pay a dividend, the dividend rate will increase to 8.0% per annum until such time as all accrued but unpaid dividends have been paid in full.

As holders of our Series A Convertible Preferred Stock are entitled to vote, on an as-converted basis, together with holders of our common stock on all matters submitted to a vote of the holders of our common stock, the Series A Convertible Preferred Stock, and the subsequent issuance of additional shares of Series A Convertible Preferred Stock through the payment of in-kind dividends, effectively reduces the relative voting power of the holders of our common stock.

In addition, the conversion of the Series A Convertible Preferred Stock to common stock would dilute the ownership interest of existing holders of our common stock, and any sales in the public market of the common stock issuable upon conversion of the Series A Convertible Preferred Stock would increase the number of shares of our common stock available for public trading, and could adversely affect prevailing market prices of our common stock. Under a customary registration rights agreement, in March 2016 we registered for resale the shares of Series A Convertible Preferred Stock, and the shares of common stock issuable upon conversion of the Series A Convertible Preferred Stock, and in March 2017, entities affiliated with The Blackstone Group L.P. (which we refer to as the Blackstone Purchasers) offered for sale 342,000 shares of Series A Convertible Preferred Stock in an underwritten public offering. Further sales by Blackstone of shares of our Series A Convertible Preferred Stock, or common stock issuable upon conversion of the Series A

Convertible Preferred Stock, in the public market, or the perception that such sales might occur, could have a material adverse effect on the price of our common stock.

The Blackstone Purchasers and the other holders of our Series A Convertible Preferred Stock may exercise influence over us. As of December 31, 2017, the outstanding shares of our Series A Convertible Preferred Stock represented approximately 18% of our outstanding common stock, including the Series A Convertible Preferred Stock on an as-converted basis. The terms of the Series A Convertible Preferred Stock require the approval of a majority of our Series A Convertible Preferred Stock by a separate class vote for us to:

- amend our organizational documents in a manner that would have an adverse effect on the Series A Convertible Preferred Stock; or
- issue securities that are senior to, or equal in priority with, the Series A Convertible Preferred Stock.

In addition, our November 2015 Investment Agreement with Blackstone (the Investment Agreement), and the terms of the Series A Convertible Preferred Stock, grant the Blackstone Purchasers certain rights to designate directors to serve on our Board, which directors are elected by a separate class vote of the holders of the Series A Convertible Preferred Stock. For so long as the Blackstone Purchasers beneficially own shares of Series A Convertible Preferred Stock (and/or shares of common stock issued upon conversion of Series A Convertible Preferred Stock) that represent, on an as-converted basis, at least 50% of the Blackstone Purchasers' initial shares of Series A Convertible Preferred Stock on an as-converted basis, the Blackstone Purchasers have the right to designate two directors for election to our Board. For so long as the Blackstone Purchasers beneficially own shares of Series A Convertible Preferred Stock (and/or shares of common stock issued upon conversion of Series A Convertible Preferred Stock) that represent, on an as-converted basis, at least 25% but less than 50% of Blackstone's initial shares of Series A Convertible Preferred Stock on an as-converted basis, the Blackstone Purchasers will have the right to designate one director for election to our Board.

The directors designated by the Blackstone Purchasers also are entitled to serve on committees of our Board, subject to applicable law and stock exchange rules. Notwithstanding the fact that all directors will be subject to fiduciary duties to us and to applicable law, the interests of the directors designated by the Blackstone Purchasers and elected by the holders of our Series A Convertible Preferred Stock may differ from the interests of our security holders as a whole or of our other directors.

The Investment Agreement also imposes a number of affirmative and negative covenants on us, and gives the Blackstone Purchasers a consent right with respect to certain actions taken by us, including:

- entering into material transactions with related parties, or repurchasing or redeeming shares of common stock from related parties, subject to certain exceptions; and
- increasing or decreasing the maximum number of directors on our Board to more than eleven persons or to such number as would require the resignation of one of the directors nominated by Blackstone.

As a result, the holders of our Series A Convertible Preferred Stock, and in particular, the Blackstone Purchasers, have the ability to influence the outcome of any matter submitted for the vote of the holders of our common stock. Blackstone and its affiliates are in the business of making or advising on investments in companies, including businesses that may directly or indirectly compete with certain portions of our business, and they may have interests that diverge from, or even conflict with, those of our other stockholders. They may also pursue acquisition opportunities that may be complementary to our business, and, as a result, those acquisition opportunities may not be available to us.

Our Series A Convertible Preferred Stock has rights, preferences and privileges that are not held by, and are preferential to, the rights of our common stockholders, which could adversely affect our liquidity and financial condition, and may result in the interests of the holders of our Series A Convertible Preferred Stock, including the Blackstone Purchasers, differing from those of our common stockholders. The holders of our Series A Convertible Preferred Stock have the right to receive a liquidation preference entitling them to be paid out of our assets available for distribution to stockholders before any payment may be made to holders of any other class or series of capital stock, an amount equal to the greater of (a) 100% of the liquidation preference thereof plus all accrued dividends or (b) the amount that such holder would have been entitled to receive upon our liquidation, dissolution and winding up if all outstanding shares of Series A Convertible Preferred Stock had been converted into common stock immediately prior to such liquidation, dissolution or winding up.

In addition, dividends on the Series A Convertible Preferred Stock accrue and are cumulative at the rate of 5.5% per annum, payable quarterly in arrears. If we fail to timely declare and pay a dividend, the dividend rate will increase to 8.0% per annum until such time

as all accrued but unpaid dividends have been paid in full. The dividends are to be paid in kind, through the issuance of additional shares of Series A Convertible Preferred Stock, for the first sixteen dividend payment dates, and thereafter in cash or in-kind at our option.

The holders of our Series A Convertible Preferred Stock also have certain redemption rights or put rights, including the right to require us to repurchase all or any portion of the Series A Convertible Preferred Stock on any date during the three months commencing on and immediately following March 16, 2024 and the three months commencing on and immediately following every third anniversary of such date, at 100% of the liquidation preference thereof plus all accrued but unpaid dividends, and the right, subject to certain exceptions, to require us to repurchase all or any portion of the Series A Convertible Preferred Stock upon certain change of control events at the greater of (a) 100% of the liquidation preference thereof plus all accrued but unpaid dividends and (b) the consideration the holders would have received if they had converted their shares of Series A Convertible Preferred Stock into common stock immediately prior to the change of control event.

These dividend and share repurchase obligations could impact our liquidity and reduce the amount of cash flows available for working capital, capital expenditures, growth opportunities, acquisitions, and other general corporate purposes. Our obligations to the holders of Series A Convertible Preferred Stock could also limit our ability to obtain additional financing or increase our borrowing costs, which could have an adverse effect on our financial condition. The preferential rights could also result in divergent interests between the holders of our Series A Convertible Preferred Stock and holders of our common stock.

Multinational Operations. *Our multinational operations, including in new and emerging markets, expose us to business and legal risks.* For the years ended December 31, 2017 and 2016, the percentage of our revenue from outside of the United States was 50% and 53%, respectively, and we expect our percentage of revenue generated outside the United States to continue to be significant. In addition, we continue to seek to further penetrate existing international markets, and to identify opportunities to enter into or expand our presence in developing and emerging markets. While we believe that our geographic diversity may help to mitigate some risks associated with geographic concentrations of operations, our ability to manufacture and sell our solutions internationally, including in new and emerging markets, is subject to risks, which include, among others:

- the impact of ongoing and future economic and credit conditions on the stability of national and regional economies and industries within those economies;
- political conditions and local regulations that could adversely affect demand for our solutions, our ability to access funds and resources, or our ability to sell products in these markets;
- the impact of a downturn in the global economy, or in regional economies, on demand for our products;
- currency exchange rate fluctuations that could result in lower demand for our products as well as generate currency translation losses;
- limited availability of local currencies to pay vendors, employees and third parties and to distribute funds outside of the country;
- changes to global or regional trade agreements that could limit our ability to sell products in these markets;
- the imposition of import or export tariffs, taxes, trade policies or import and export controls that could increase the expense of, or limit demand for our products;
- changes to and compliance with a variety of laws and regulations that may increase our cost of doing business or otherwise prevent us from effectively competing internationally;
- government uncertainty or limitations on the ability to enforce legal rights and remedies, including as a result of new, or changes to, laws and regulations;
- reduced protection for intellectual property rights in certain countries;
- implementing and managing systems, procedures and controls to monitor our operations in foreign markets;
- changing competitive requirements and deliverables in developing and emerging markets;
- longer collection cycles and the financial viability and reliability of contracting partners and customers;
- managing a geographically dispersed workforce, work stoppages and other labor conditions or issues;
- disruptions in transportation and shipping infrastructure; and
- the impact of civil unrest relating to war and terrorist activity on the economy or markets in general, or on our ability, or that of our suppliers, to meet commitments.

In addition, as a result of our revenue generated outside of the United States, the amount of cash and cash equivalents that is held by our foreign subsidiaries continues to be significant. U.S. Tax Reform includes a one-time mandatory deemed repatriation tax

("repatriation tax") on accumulated earnings of our foreign subsidiaries. Also, under U.S. Tax Reform, the future earnings accumulated after December 31, 2017 held by our foreign subsidiaries will be currently taxed in the U.S., and as such, distributions of earnings to the U.S. no longer generates additional negative U.S. income tax consequences. However, any distributions of earnings from foreign subsidiaries may be subject to foreign withholding taxes, which would reduce the amount of cash and cash equivalents that are available for our use.

Environmental. *Our historical and ongoing manufacturing activities subject us to environmental exposures.* Our facilities and operations are subject to a wide range of environmental protection laws, and we have investigatory and remedial activities underway at a number of facilities that we currently own or operate, or formerly owned or operated, to comply, or to determine compliance, with such laws. In addition, our products are subject to environmental laws in a number of jurisdictions. Given the uncertainties inherent in such activities, there can be no assurances that the costs required to comply with applicable environmental laws will not impact future operating results. We have also been identified as a potentially responsible party in connection with certain environmental matters, including the Fox River and Kalamazoo River matters, as further described in Note 9, "Commitments and Contingencies" of the Notes to Consolidated Financial Statements included in Item 8 of Part II of this Report; in "Environmental Matters" within Item 1 of Part I of this Report; and in "Environmental and Legal Contingencies" within the "Critical Accounting Policies and Estimates" section of "Management's Discussion and Analysis of Financial Condition and Results of Operations" included in Item 7 of Part II of this Report, and we incorporate such disclosures by reference and make them a part of this discussion of risk factors.

Acquisitions, Divestitures and Alliances. *If we do not successfully integrate acquisitions or effectively manage alliance activities, we may not drive future growth.* As part of our overall solutions strategy, we have made, and intend to continue to make, investments in companies, products, services and technologies, either through acquisitions, investments, joint ventures or strategic alliances. Acquisitions and alliance activities inherently involve risks. The risks we may encounter include those associated with:

- assimilating and integrating different business operations, corporate cultures, personnel, infrastructures (such as data centers) and technologies or products acquired or licensed;
- the potential for unknown liabilities within the acquired or combined business; and
- the possibility of conflict with joint venture or alliance partners regarding strategic direction, prioritization of objectives and goals, governance matters or operations.

Further, we may make acquisitions and investments in order to acquire or obtain access to new technology or products that expand our offerings. There is risk that the new technology or products may not perform as anticipated and may not meet estimated growth projections or expectations, or investment recipients may not successfully execute their business plans. There is also risk that key employees of an acquired business may not remain with us as long as expected. In the event that these risks materialize, we may not be able to fully realize the benefit of our investments, and our operating results could be adversely affected. An acquisition or alliance, and the integration of an acquired business, may also disrupt our ongoing business or we may not be able to successfully incorporate acquired products, services or technologies into our solutions and maintain quality. Further, we may not achieve the projected synergies once we have integrated the business into our operations, which may lead to additional costs not anticipated at the time of acquisition.

Circumstances associated with divestitures could adversely affect our results of operations and financial condition. In May 2016, we completed the sale of most of the assets of our Interactive Printer Solutions (IPS) business to Atlas Holdings, LLC, and in June 2012 we completed the divestiture of our entertainment business to Redbox Automated Retail, LLC. We continue to evaluate the strategic fit of our other businesses and products and may decide to sell a business or product based on such an evaluation. Despite a decision to divest a business or product, we may encounter difficulty in finding buyers or executing alternative exit strategies at acceptable prices and terms and in a timely manner. In addition, prospective buyers may have difficulty obtaining financing. Divestitures, including the divestiture of the IPS business, could involve additional risks, including:

- difficulties in the separation of operations, services, products and personnel;
- the need to provide significant ongoing post-closing transition support to a buyer;
- the diversion of management's attention from other business concerns;
- the retention of certain current or future liabilities in order to induce a buyer to complete a divestiture;
- the obligation to indemnify or reimburse a buyer for certain past liabilities of a divested business;
- the disruption of our business; and
- the potential loss of key employees.

We may not be successful in managing these or any other significant risks that we may encounter in divesting a business or product, which could have a material adverse effect on our business.

Intellectual Property. *Our continuing ability to be a leading technology and services solutions provider could be negatively affected if we do not protect intellectual property that drives innovation.* It is critical to our continued development of leading technologies that we are able to protect and enhance our proprietary rights in our intellectual property through patent, copyright, trademark and trade secret laws. These efforts include protection of the products and the application, diagnostic and other software we develop. To the extent we are not successful in protecting our proprietary rights, our business could be adversely impacted. Also, many of our offerings rely on technologies developed by others, and if we are unable to continue to obtain licenses for such technologies, our business could be adversely impacted. From time to time, we receive notices from third parties regarding patent and other intellectual property claims. Whether such claims have merit, they may require significant resources to defend. If an infringement claim is successful and we are required to pay damages, or we are unable to license the infringed technology or to substitute similar non-infringing technology, our business could be adversely affected.

Work Environment. *Continuous improvement, customer experience, restructuring and cost reduction initiatives could negatively impact productivity and business results.* In the past, we have undertaken restructuring plans, and, in addition, as part of our ongoing efforts to optimize our cost structure, from time to time, we shift and realign our internal organizational structure and resources. These activities could temporarily result in reduced productivity levels. If we are not able to timely execute on these initiatives, or if the costs to complete these initiatives is higher than anticipated, our results of operations or financial condition could be adversely affected. In addition to these initiatives, we have initiatives to grow and expand our software business, streamline our services business, enable our sales force to better sell our solutions, invest in our software and cloud solutions and improve the experience of our customers. We typically have many such initiatives underway. If we are not successful in implementing and managing these various initiatives and minimizing any resulting loss in productivity, we may not be able to achieve targeted cost savings or productivity gains, and our business and operating results could be negatively impacted.

On January 8, 2018, we opened our new world headquarters in Atlanta, Georgia, and are in the process of relocating our headquarters operations to this facility. From time to time we may undertake similar projects with respect to our office, manufacturing or other facilities. Implementation of relocation plans such as these could result in business disruption due to a lack of business continuity, which, among other things, could have a negative impact on our productivity and business and operating results.

If we do not retain key employees, or attract quality new and replacement employees, we may not be able to meet our business objectives. Our employees are vital to our success, including the successful transformation of the Company into a software and solutions driven business. Therefore, our ability to retain our key business leaders and our highly skilled software development, technical, sales, consulting and other key personnel, including key personnel of acquired businesses, is critical. These key employees may decide to leave NCR for other opportunities, or may be unavailable for health or other reasons. In addition, as our business model evolves, we may need to attract employees with different skill sets, experience and attributes to support that evolution. If we are unable to retain our key personnel, or we are unable to attract highly qualified new and replacement employees by offering competitive compensation, secure work environments and leadership opportunities now and in the future, our business and operating results could be negatively impacted.

Our ability to effectively manage our business could be negatively impacted if we do not invest in and maintain reliable technology infrastructure and information systems. It is periodically necessary to add to, replace, upgrade or modify our technology infrastructure and internal information systems. If we are unable to expand, replace, upgrade or modify such systems in a timely and cost-effective manner, especially in light of demands on our information technology resources, our ability to capture and process financial transactions and, therefore, our financial condition, results of operations, or ability to comply with legal and regulatory reporting obligations, may be negatively impacted.

Reliance on Third Parties. *If third party suppliers upon which we rely are not able to fulfill our needs, our ability to bring our products to market in a timely fashion could be affected.* In most cases, there are a number of vendors providing the services and producing the parts and components that we utilize in or in connection with our products. However, there are some services and components that are licensed or purchased from single sources due to price, quality, technology, functionality or other reasons. For example, we depend on transaction processing services from Accenture, computer chips and microprocessors from Intel and operating systems from Microsoft. Certain parts and components used in the manufacturing of our ATMs and the delivery of many of our retail solutions are also supplied by single sources. In addition, there are a number of key suppliers for our businesses that provide us with critical products for our solutions. If we were unable to secure the necessary services, including contract manufacturing, parts, software, components or products from a particular vendor, and we had to find an alternative supplier, our new and existing product shipments and solution deliveries, or the provision of contracted services, could be delayed, impacting our business and operating results.

We have, from time to time, formed alliances with third parties that have complementary products, software, services and skills. These alliances represent many different types of relationships, such as outsourcing arrangements to manufacture hardware and subcontract agreements with third parties to perform services and provide products and software to our customers in connection with our solutions. For example, we rely on third parties for cash replenishment services for our ATM products. These alliances introduce risks that we cannot control, such as nonperformance by third parties and difficulties with or delays in integrating elements provided by third parties into our solutions. Lack of information technology infrastructure, shortages in business capitalization, and manual processes and data integrity issues of smaller suppliers can also create product time delays, inventory and invoicing problems, staging delays, as well as other operating issues. The failure of third parties to provide high-quality products or services that conform to required specifications or contractual arrangements could impair the delivery of our solutions on a timely basis, create exposure for non-compliance with our contractual commitments to our customers and impact our business and operating results. Also, some of these third parties have access to confidential NCR and customer data, the integrity and security of which are of significant importance to the Company.

Internal Controls. *If we do not maintain effective internal controls, accounting policies, practices, and information systems necessary to ensure reliable reporting of our results, our ability to comply with our legal obligations could be negatively affected.* Our internal controls, accounting policies and practices, and internal information systems enable us to capture and process transactions in a timely and accurate manner in compliance with applicable accounting standards, laws and regulations, taxation requirements and federal securities laws and regulations. Our internal controls and policies are being closely monitored by management as we continue to implement a worldwide Enterprise Resource Planning (ERP) system. While we believe these controls, policies, practices and systems are adequate to ensure data integrity, unanticipated and unauthorized actions of employees or contractors (both domestic and international), temporary lapses in internal controls due to shortfalls in transition planning and oversight, or resource constraints, could lead to improprieties and undetected errors that could impact our financial condition, results of operations, or compliance with legal obligations. Moreover, while management has concluded that the Company's internal control over financial reporting was effective as of December 31, 2017 (as set forth in "Management's Report on Internal Control over Financial Reporting" included in Item 9A of Part II of this Report), due to their inherent limitations, such controls may not prevent or detect misstatements in our reported financial statements. Such limitations include, among other things, the potential for human error or circumvention of controls. Further, the Company's internal control over financial reporting is subject to the risk that controls may become inadequate because of a failure to remediate control deficiencies, changes in conditions or a deterioration of the degree of compliance with established policies and procedures.

Contingencies. *We face uncertainties with regard to regulations, lawsuits and other related matters.* In the normal course of business, we are subject to proceedings, lawsuits, claims and other matters, including, for example, those that relate to the environment, health and safety, labor and employment, employee benefits, import/export compliance, intellectual property, data privacy and security, product liability, commercial disputes and regulatory compliance, among others. Because such matters are subject to many uncertainties, their outcomes are not predictable and we must make certain estimates and assumptions in our financial statements. While we believe that amounts provided in our Consolidated Financial Statements with respect to such matters are currently adequate in light of the probable and estimable liabilities, there can be no assurances that the amounts required to satisfy alleged liabilities from such matters will not impact future operating results. Additionally, we are subject to diverse and complex laws and regulations, including those relating to corporate governance, public disclosure and reporting, environmental safety and the discharge of materials into the environment, product safety, import and export compliance, data privacy and security, antitrust and competition, government contracting, anti-corruption, and labor and human resources, which are rapidly changing and subject to many possible changes in the future. Compliance with these laws and regulations, including changes in accounting standards, taxation requirements, and federal securities laws among others, may create a substantial burden on us, and substantially increase costs to our organization or could have an impact on our future operating results.

Additionally, doing business on a worldwide basis requires us and our subsidiaries to comply with the laws and regulations of the U.S. government and various international jurisdictions. For example, our international operations are subject to U.S. and foreign anti-corruption laws and regulations, such as the Foreign Corrupt Practices Act (FCPA), which generally prohibits U.S. companies or agents acting on behalf of such companies from making improper payments to foreign officials for the purpose of obtaining or keeping business. Our international operations are also subject to economic sanction programs administered by the U.S. Treasury Department's Office of Foreign Assets Control (OFAC). If we are not in compliance with such laws and regulations, we may be subject to criminal and civil penalties, which may cause harm to our reputation and to our brand and could have an adverse effect on our business, financial condition and results of operations. See Note 9, "Commitments and Contingencies" of the Notes to Consolidated Financial Statements included in Item 8 of Part II of this Report for information regarding our prior FCPA and OFAC investigations, which disclosures are incorporated by reference and made a part of this discussion of risk factors.

Item 1B. UNRESOLVED STAFF COMMENTS

None.

Item 2. PROPERTIES

As of December 31, 2017, NCR operated 210 facilities consisting of approximately 5.5 million square feet in 61 countries throughout the world, which are generally used by all of NCR's operating segments. On a square footage basis, 20% of these facilities are owned and 80% are leased. Within the total facility portfolio, NCR operates 14 research and development and manufacturing facilities totaling 1.4 million square feet, 62% of which is leased. The remaining 4.1 million square feet of space includes office, repair, and warehousing space and other miscellaneous sites, and is 85% leased. NCR also owns 7 land parcels totaling 2.6 million square feet in 2 countries.

NCR is headquartered in Atlanta, Georgia, USA. Our address at our corporate headquarters is 864 Spring Street Northwest, Atlanta Georgia, 30308, USA.

Item 3. LEGAL PROCEEDINGS

Information regarding legal proceedings is included in Item 8 of Part II of this Report as part of Note 9, "Commitments and Contingencies" of the Notes to Consolidated Financial Statements and is incorporated herein by reference.

Item 4. MINE SAFETY DISCLOSURES

Not applicable.

PART II

Item 5. MARKET FOR THE REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

Market Information

NCR common stock is listed on the New York Stock Exchange (NYSE) and trades under the symbol “NCR”. There were approximately 91,451 holders of NCR common stock as of February 14, 2018. The following table presents the high and low per share prices for NCR common stock for each quarter of 2017 and 2016 as reported on the NYSE.

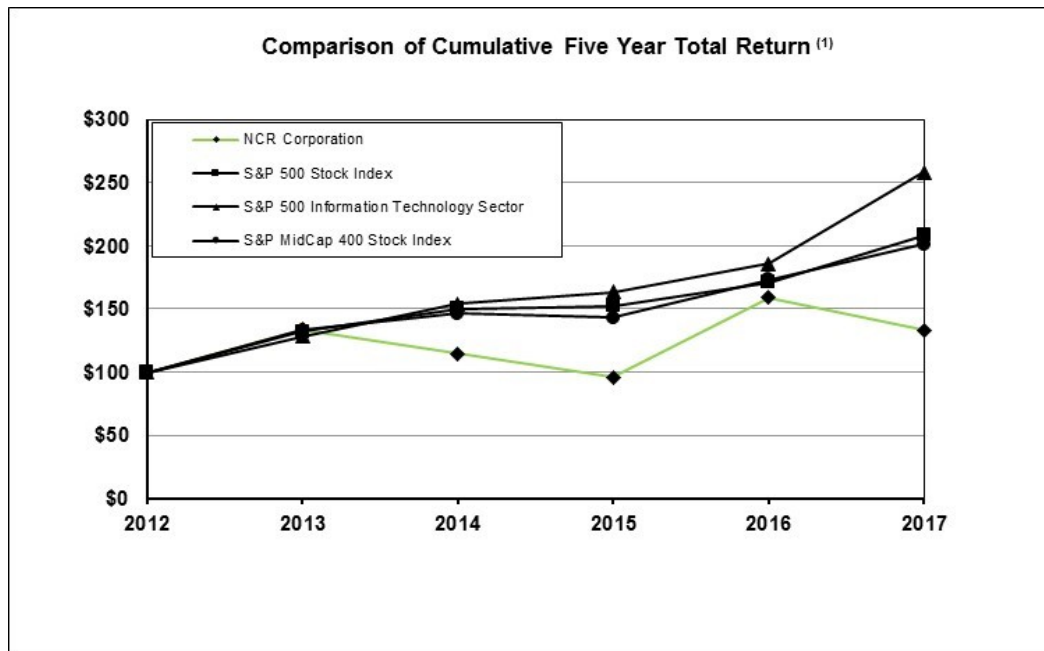
	2017			2016	
	High	Low		High	Low
1st quarter	\$ 49.90	\$ 40.85	1st quarter	\$ 30.14	\$ 18.02
2nd quarter	\$ 45.64	\$ 38.07	2nd quarter	\$ 31.84	\$ 25.20
3rd quarter	\$ 43.24	\$ 34.17	3rd quarter	\$ 34.99	\$ 26.21
4th quarter	\$ 38.13	\$ 29.20	4th quarter	\$ 42.07	\$ 29.83

Dividends

Historically NCR has not paid cash dividends and does not anticipate the payment of cash dividends on NCR common stock in the immediate future. The declaration of dividends is restricted under our senior secured credit facility and the terms of the indentures for our senior unsecured notes, and would be further subject to the discretion of NCR’s Board of Directors.

Stock Performance Graph

The following graph compares the relative investment performance of NCR stock, the Standard & Poor’s MidCap 400 Stock Index, Standard & Poor’s 500 Information Technology Sector and the Standard & Poor’s 500 Stock Index. This graph covers the five-year period from December 31, 2012 through December 31, 2017.



<u>Company / Index</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>
NCR Corporation	\$ 134	\$ 114	\$ 96	\$ 159	\$ 133
S&P 500 Stock Index	\$ 132	\$ 151	\$ 153	\$ 171	\$ 208
S&P 500 Information Technology Sector	\$ 128	\$ 154	\$ 163	\$ 186	\$ 258
S&P MidCap 400 Stock Index	\$ 134	\$ 147	\$ 143	\$ 173	\$ 201

⁽¹⁾ In each case, assumes a \$100 investment on December 31, 2012, and reinvestment of all dividends, if any.

Purchase of Company Common Stock

On October 19, 2016, the Board approved a share repurchase program, with no expiration from the date of authorization, for the systematic repurchase of the Company's common stock to offset the dilutive effects of the Company's employee stock purchase plan, equity awards and in-kind dividends on the Company's Series A Convertible Preferred Stock. Availability under this program accrues quarterly based on the average value of dilutive issuances during the quarter.

On March 12, 2017, the Board approved a second share repurchase program that provides for the repurchase of up to \$300 million of the Company's common stock.

No shares were repurchased under these programs during the three months ended December 31, 2017.

As of December 31, 2017, \$300 million was available for repurchases under the March 2017 program, and approximately \$189 million was available for repurchases under the October 2016 dilution offset program. The timing and amount of repurchases under these programs depend upon market conditions and may be made from time to time in open market purchases, privately negotiated transactions, accelerated stock repurchase programs, issuer self-tender offers or otherwise. The repurchases will be made in compliance with applicable securities laws and may be discontinued at any time.

The Company occasionally purchases vested restricted stock or exercised stock options at the current market price to cover withholding taxes. For the three months ended December 31, 2017, 209,353 shares of vested restricted stock were purchased at an average price of \$33.86 per share.

The Company's ability to repurchase its common stock is restricted under the Company's senior secured credit facility and terms of the indentures for the Company's senior unsecured notes, which prohibit certain share repurchases, including during the occurrence of an event of default, and establish limits on the amount that the Company is permitted to allocate to share repurchases and other restricted payments. The limitations are calculated using formulas based generally on 50% of the Company's consolidated net income for the period beginning in the third quarter of 2012 through the end of the most recently ended fiscal quarter, subject to certain other adjustments and deductions, with certain prescribed minimums. These formulas are described in greater detail in the Company's senior secured credit facility and the indentures for the Company's senior unsecured notes, each of which is filed with the SEC.

Item 6. SELECTED FINANCIAL DATA
In millions, except per share and employee and contractor amounts

For the years ended December 31	2017	2016	2015	2014	2013
Continuing Operations ^(a,d)					
Revenue	\$ 6,516	\$ 6,543	\$ 6,373	\$ 6,591	\$ 6,123
Income from operations	\$ 676	\$ 599	\$ 135	\$ 353	\$ 666
Interest expense	\$ (163)	\$ (170)	\$ (173)	\$ (181)	\$ (103)
Income tax expense (benefit) ^(b)	\$ 242	\$ 92	\$ 55	\$ (48)	\$ 98
Income (loss) from continuing operations attributable to NCR common stockholders	\$ 237	\$ 283	\$ (154)	\$ 181	\$ 452
(Loss) income from discontinued operations, net of tax	\$ (5)	\$ (13)	\$ (24)	\$ 10	\$ (9)
Basic earnings (loss) per common share attributable to NCR common stockholders:					
From continuing operations ^(a,d)	\$ 1.05	\$ 1.86	\$ (0.94)	\$ 1.08	\$ 2.73
From discontinued operations	\$ (0.04)	\$ (0.10)	\$ (0.15)	\$ 0.06	\$ (0.05)
Total basic earnings (loss) per common share	\$ 1.01	\$ 1.76	\$ (1.09)	\$ 1.14	\$ 2.68
Diluted earnings (loss) per common share attributable to NCR common stockholders: ^(c)					
From continuing operations ^(a,d)	\$ 1.01	\$ 1.80	\$ (0.94)	\$ 1.06	\$ 2.67
From discontinued operations	\$ (0.04)	\$ (0.10)	\$ (0.15)	\$ 0.06	\$ (0.05)
Total diluted earnings (loss) per common share	\$ 0.97	\$ 1.71	\$ (1.09)	\$ 1.12	\$ 2.62
Cash dividends per share	\$ —	\$ —	\$ —	\$ —	\$ —
As of December 31					
Total assets	\$ 7,654	\$ 7,673	\$ 7,635	\$ 8,566	\$ 8,061
Total debt	\$ 2,991	\$ 3,051	\$ 3,252	\$ 3,618	\$ 3,307
Series A convertible preferred stock	\$ 810	\$ 847	\$ 798	\$ —	\$ —
Total NCR stockholders' equity	\$ 719	\$ 695	\$ 720	\$ 1,871	\$ 1,769
Number of employees and contractors	34,000	33,500	32,600	30,200	29,300

^(a) Continuing operations excludes the costs and insurance recoveries relating to certain environmental obligations associated with discontinued operations, including those relating to the Fox River, and Kalamazoo River matters.

^(b) Income tax expense in 2017 includes a provisional charge of \$130 million for the impact of U.S. Tax Reform. See Note 6, "Income Taxes" in the Notes to Consolidated Financial Statements in Item 8 of Part II of this Report for further discussion.

^(c) See Note 1, "Basis of Presentation and Significant Accounting Policies" in the Notes to Consolidated Financial Statements in Item 8 of Part II of this Report for further discussion of the diluted earnings (loss) per common share attributable to NCR common stockholders from continuing operations, discontinued operations and total.

^(d) The following income (expense) amounts, net of tax are included in income from continuing operations attributable to NCR for the years ended December 31:

In millions	2017	2016	2015	2014	2013
Pension mark-to-market adjustments	\$ (25)	\$ (78)	\$ (445)	\$ (63)	\$ 65
Restructuring/Transformation costs	(20)	(21)	(50)	(116)	—
Acquisition related amortization of intangibles	(79)	(83)	(85)	(80)	(48)
Acquisition related costs	(3)	(5)	(8)	(20)	(36)
Divestiture and liquidation losses	—	(5)	(29)	—	—
Reserve related to subcontract in MEA	—	—	(13)	—	—
OFAC and FCPA investigations	—	—	—	(2)	(2)
Japan valuation reserve release	—	—	—	—	15
Tax reform	(130)	—	—	—	—
Total	\$ (257)	\$ (192)	\$ (630)	\$ (281)	\$ (6)

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Item 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS (MD&A)

BUSINESS OVERVIEW

NCR is a leading global provider of omni-channel technology solutions that enrich the interactions of businesses with their customers. Our solutions are designed to allow businesses in the financial services, retail, hospitality, travel and telecommunications and technology industries to deliver a rich, integrated and personalized experience to consumers across physical and digital commerce channels. Our offerings include a portfolio of omni-channel platform software and other software applications, industry-focused smart-edge devices including automated teller machines (ATMs), point of sale (POS) terminals and devices and self-service kiosks, and a complete suite of consulting, implementation, maintenance and managed services. We also resell third-party networking products and provide related service offerings in the telecommunications and technology sectors. Our solutions create value for our customers by increasing productivity and allowing them to address consumer demand for convenience, value and individual service across different commerce channels.

We have three operating segments: Software, Services, and Hardware. Each of our operating segments derives its revenue in each of the sales theaters in which NCR operates.

Our solutions are based on a foundation of long-established industry knowledge and expertise, omni-channel platform and other software, industry-focused hardware and smart-edge devices, and global implementation, consulting, maintenance, support and managed services.

NCR's reputation is founded upon over 133 years of providing quality products, services and solutions to our customers. At the heart of our customer and other business relationships is a commitment to acting responsibly, ethically and with the highest level of integrity. This commitment is reflected in NCR's Code of Conduct, which is available on the Corporate Governance page of our website.

2017 OVERVIEW

As more fully discussed in later sections of this MD&A, the following were significant themes and events for 2017:

- Revenue was flat year-over-year, and increased 1% after adjusting for the divestiture of our Interactive Printer Solutions (IPS) business;
- Software revenue increased 3% from the prior year, driven by cloud revenue growth of 6% and professional services revenue growth of 5%. Net annual contract value, which is a measure of our net bookings for cloud revenue and is an indicator of potential cloud revenue growth in future periods, grew 46% in 2017;
- Services revenue increased 3% and operating margin rate expanded 340 basis points from the prior year;
- Hardware revenue decreased 6% and operating margin rate declined 270 basis points from the prior year;
- We generated cash flows from operations and free cash flow of \$755 million and \$453 million, respectively, in 2017; and
- We repurchased approximately 7.4 million shares of our common stock for \$350 million in the first quarter of 2017 and subsequently announced a new \$300 million share repurchase program and a replacement for our dilution offset share repurchase program.

OVERVIEW OF STRATEGIC INITIATIVES AND TRENDS

The rise of digital commerce, mobile engagement and globalization have dramatically altered the relationship between business and consumer. Increasingly, mega-trends such as big data, the Internet of things and the cloud are driving the next generation of changes in consumer behavior. Consumers now expect businesses to provide a rich, integrated and personalized experience across all commerce channels, including in-store, online and mobile. NCR is at the forefront of this shift to an omni-channel experience, assisting businesses of every size in their omni-channel, digital enablement and channel transformation journeys. Our mission is to innovate and enable the next generation of consumer experiences and productivity gains to enrich the interactions of businesses with their customers. To fulfill this mission, we have developed a long-term strategy built on being a global technology solutions company that uses cloud-based and other software, coupled with end-to-end smart-edge hardware and services solutions, to help our customers deliver on the promise of an omni-channel experience. We believe that our mission and long-term strategy position NCR to continue to drive sustainable revenue, profit and cash flow, and to improve value for all of our stakeholders.

To deliver on our mission and strategy, we are focused on the following main initiatives in 2018:

- *Strategic and Recurring Revenue* - Continuing our focus on cloud, software platform, smart-edge devices and professional and managed services to drive profitable revenue and operating income.
- *Sales Effectiveness* - Providing our sales force with the training, tools, support and coverage model necessary to optimize efficiency and achieve our sales plan.
- *Services Transformation* - Driving performance and sustainable margin improvement by focusing on productivity and efficiency improvements, expanding our remote diagnostics and repair capabilities, creating greater discipline in our product lifecycle management, and employing a higher mix of managed services.
- *Evolving our Business Model* - Continuing the shift in our business model to provide innovative end-to-end solutions for our customers, with best in class support while keeping an efficient cost structure to create competitive advantage.
- *New Products* - Launching new industry products, powered by our platform software with best in class product lifecycle management and go-to-market support, and migrating and releasing existing licensed software products as cloud-based products.
- *Operating Model Innovation* - Eliminating waste, utilizing effective product lifecycle management, increasing productivity, using technology as an enabler, and executing on business process improvements to reduce costs and use savings to invest in strategic initiatives, product innovation and people.
- *Customer Experience* - Improving the customer experience by improving solution quality, availability and security.
- *Team and Talent* - Developing and retaining top talent by deploying competitive recruiting and training programs, evolving our brand, and continuously engaging with employees.

Consistent with the foregoing, we are evaluating certain initiatives focused on realigning resources and optimizing our portfolio of software solutions, accelerating structural changes in our services business and streamlining our hardware operations, particularly in supply chain and manufacturing. In addition, we plan, in pursuing our strategy, to continue to manage our costs effectively, to selectively pursue acquisitions and divestitures that promote our strategy, and to selectively penetrate market adjacencies in single and emerging growth industry segments.

Potentially significant risks to the execution of our initiatives and achievement of our strategy include the strength of demand for automated teller machines and other financial services hardware and its effect on our businesses; domestic and global economic and credit conditions including, in particular, those resulting from the imposition or threat of protectionist trade policies or import or export tariffs, global and regional market conditions and spending trends in the financial services and retail industries, new comprehensive U.S. tax legislation, modified or new global or regional trade agreements, the determination by the United Kingdom to exit the European Union, uncertainty over further potential changes in Eurozone participation and fluctuations in oil and commodity prices; our ability to transform our business model and to sell higher-margin software and services, including our ability to successfully streamline our hardware operations; the success of our restructuring plans and cost reduction initiatives; our ability to improve execution in our sales and services organizations; market acceptance of new solutions and competition in the information technology industry; cybersecurity risks and compliance with data privacy and protection requirements; disruptions in or problems with our data center hosting facilities; defects or errors in our products; the historical seasonality of our sales; tax rates and new US tax legislation; and foreign currency fluctuations. For further information on potential risks and uncertainties see Item 1A "Risk Factors."

RESULTS OF OPERATIONS

The following table shows our results for the years ended December 31:

In millions	2017	2016	2015
Revenue	\$6,516	\$6,543	\$6,373
Gross margin	1,864	1,782	1,469
Gross margin as a percentage of revenue	28.6%	27.2%	23.1%
Operating expenses			
Selling, general and administrative expenses	\$932	\$926	\$1,042
Research and development expenses	256	242	230
Restructuring-related charges	—	15	62
Income from operations	\$676	\$599	\$135

The following tables show our revenue by geographic theater for the years ended December 31:

In millions	2017	% of Total	2016	% of Total	% Increase (Decrease)	% Increase (Decrease) Adjusted Constant Currency ⁽¹⁾
Americas	\$ 3,809	59%	\$ 3,743	57%	2%	4%
Europe, Middle East Africa (EMEA)	1,786	27%	1,896	29%	(6)%	(4)%
Asia Pacific (APJ)	921	14%	904	14%	2%	3%
Consolidated revenue	\$ 6,516	100%	\$ 6,543	100%	—%	1%

In millions	2016	% of Total	2015	% of Total	% Increase (Decrease)	% Increase (Decrease) Adjusted Constant Currency ⁽¹⁾
Americas	\$ 3,743	57%	\$ 3,499	55%	7%	11%
Europe, Middle East Africa (EMEA)	1,896	29%	1,964	31%	(3)%	2%
Asia Pacific (APJ)	904	14%	910	14%	(1)%	1%
Consolidated revenue	\$ 6,543	100%	\$ 6,373	100%	3%	7%

The following table shows our revenue by segment for the years ended December 31:

In millions	2017	% of Total	2016	% of Total	% Increase (Decrease)	% Increase (Decrease) Adjusted Constant Currency ⁽¹⁾
Software	\$ 1,900	29%	\$ 1,841	28%	3%	3%
Services	2,373	37%	2,306	35%	3%	3%
Hardware	2,243	34%	2,396	37%	(6)%	(2)%
Consolidated revenue	\$ 6,516	100%	\$ 6,543	100%	—%	1%

In millions	2016	% of Total	2015	% of Total	% Increase (Decrease)	% Increase (Decrease) Adjusted Constant Currency ⁽¹⁾
Software	\$ 1,841	28%	\$ 1,747	27%	5%	6%
Services	2,306	35%	2,218	35%	4%	6%
Hardware	2,396	37%	2,408	38%	—%	9%
Consolidated revenue	\$ 6,543	100%	\$ 6,373	100%	3%	7%

⁽¹⁾ The tables above include presentations of period-over-period revenue growth or decline on an adjusted constant currency or constant currency basis. Revenue growth on a constant currency basis is a non-GAAP measure that excludes the effects of foreign currency fluctuations. We calculate this information by translating prior period revenue growth at current period monthly average exchange rates. Revenue growth on an adjusted constant currency basis excludes the effects of foreign currency fluctuations and the impact of the IPS divestiture, and is calculated by translating prior period revenue growth at current period monthly average exchange rates and, for the 2016 comparison, by excluding the prior period results of the divested IPS business for the comparable period after the completion of the sale in May 2016. We believe that examining period-over-period revenue growth or decline excluding foreign currency fluctuations and adjusting for the impact of the IPS divestiture is useful for assessing the underlying performance of our business and provides additional insight into historical and/or future performance, and our management uses revenue growth adjusted for constant currency and the impact of the IPS divestiture to evaluate period-over-period operating performance on a more consistent and comparable basis. These non-GAAP measures should not be considered substitutes for, or superior to, period-over-period revenue growth under GAAP.

The following table provides a reconciliation of region revenue % growth (GAAP) to revenue % growth adjusted constant currency (non-GAAP) for the years ended December 31:

	2017				2016			
	Revenue % Growth (GAAP)	Favorable (unfavorable) FX impact	Divestiture impact	Revenue % Growth Adjusted Constant Currency (non-GAAP)	Revenue % Growth (GAAP)	Favorable (unfavorable) FX impact	Divestiture Impact	Revenue % Growth Adjusted Constant Currency (non-GAAP)
Americas	2%	—%	(2)%	4%	7%	—%	(4)%	11%
EMEA	(6)%	(1)%	(1)%	(4)%	(3)%	(2)%	(3)%	2%
APJ	2%	1%	(2)%	3%	(1)%	—%	(2)%	1%
Consolidated revenue	—%	—%	(1)%	1%	3%	(1)%	(3)%	7%

The following table provides a reconciliation of segment revenue % growth (GAAP) to revenue % growth adjusted constant currency (non-GAAP) for the years ended December 31:

	2017				2016			
	Revenue % Growth (GAAP)	Favorable (unfavorable) FX impact	Divestiture impact	Revenue % Growth Adjusted Constant Currency (non-GAAP)	Revenue % Growth (GAAP)	Favorable (unfavorable) FX impact	Divestiture Impact	Revenue % Growth Adjusted Constant Currency (non-GAAP)
Software	3%	—%	—%	3%	5%	(1)%	—%	6%
Services	3%	—%	—%	3%	4%	(2)%	—%	6%
Hardware	(6)%	1%	(5)%	(2)%	—%	—%	(9)%	9%
Consolidated Revenue	—%	—%	(1)%	1%	3%	(1)%	(3)%	7%

2017 compared to 2016 results discussion

Revenue

Revenue was flat in 2017 from 2016 due to growth in Software and Services revenue offset by lower Hardware revenue. Foreign currency fluctuations did not have a significant impact on the revenue comparison and the IPS divestiture unfavorably impacted the revenue comparison by 1%.

Software revenue increased 3% driven by growth in cloud, software maintenance, and professional services. Services revenue increased 3% from 2016 driven by growth in both implementation services and hardware maintenance services. Hardware revenue was down 6% due to declines in Automated Teller Machine (ATM) revenue and consumables revenue as a result of the IPS divestiture, offset by increases in self-checkout (SCO) and point-of-sale (POS) revenue.

Gross Margin

Gross margin as a percentage of revenue was 28.6% in 2017 compared to 27.2% in 2016. Gross margin for the year ended December 31, 2017 included \$1 million benefit from pension mark-to-market adjustments, \$11 million related to restructuring and transformation costs, and \$50 million related to amortization of acquisition related intangible assets. Gross margin for the year ended December 31, 2016 included \$38 million expense from pension mark-to-market adjustments, \$4 million related to restructuring and transformation costs, and \$58 million related to amortization of acquisition related intangible assets. Excluding these items, gross margin increased approximately 70 basis points driven by continued focus on productivity improvements in our Services segment.

2016 compared to 2015 results discussion

Revenue

Revenue increased 3% in 2016 from 2015 due to growth in Software and Services. Foreign currency fluctuations and the IPS divestiture unfavorably impacted the revenue comparison by 1% and 3%, respectively.

Software revenue increased 5% driven by growth in all of our software revenue streams, which include software license, software maintenance, cloud, and professional services. Services revenue increased 4% from 2015 driven by growth in both implementation services and hardware maintenance services as a result of our focus on improving the customer experience. Hardware revenue was flat due to growth in ATM revenue and self-checkout revenue offset by declines in point-of-sale revenue and consumables revenue as a result of the IPS divestiture.

Gross Margin

Gross margin as a percentage of revenue was 27.2% in 2016 compared to 23.1% in 2015. Gross margin for the year ended December 31, 2016 included \$38 million in pension mark-to-market adjustments, \$4 million related to restructuring and transformation costs, and \$58 million related to amortization of acquisition related intangible assets. Gross margin for the year ended December 31, 2015 included \$313 million in pension mark-to-market adjustments which primarily included the settlement of the UK London pension plan, \$12 million related to restructuring and \$63 million related to amortization of acquisition related intangible assets. Excluding these items, gross margin was slightly down, due to investment associated with new hardware product introductions offset by growth in our Software segment.

Effects of Pension, Postemployment, and Postretirement Benefit Plans

NCR's income from continuing operations for the years ended December 31 was impacted by certain employee benefit plans as reflected in the table below:

In millions	2017	2016	2015
Pension expense	\$36	\$103	\$464
Postemployment expense	24	10	17
Postretirement (benefit)	(3)	(11)	(15)
Total expense	\$57	\$102	\$466

In 2017, pension expense was \$36 million compared to \$103 million in 2016 and \$464 million in 2015. In 2017, pension expense included actuarial losses of \$28 million compared to \$85 million in 2016. Discount rates in 2017 remained consistent with 2016 and actuarial losses in 2017 were primarily due to a mortality update in the United States. Actuarial losses in 2016 were due to a decrease in the discount rate from the prior year, offset by a higher than expected return on global pension assets. In 2017, approximately 82% of the pension expense was included in operating expenses, with the remaining 18% included in cost of products and services. In 2015, pension expense included a settlement loss of \$427 million related to the completion of the transfer of NCR's UK London pension plan to an insurer, in addition to actuarial losses of \$29 million. The actuarial losses were primarily attributable to lower than expected return on U.S. pension assets, partially offset by an increase in the discount rate.

Postemployment expense (severance and disability medical) was \$24 million in 2017 compared to \$10 million in 2016 and \$17 million in 2015. In July 2014, the Company announced a restructuring plan to strategically reallocate resources and position the Company to focus on higher growth, higher margin opportunities and recorded a related charge of zero, \$4 million, and \$1 million in the years ended December 31, 2017, 2016, and 2015 respectively.

Selling, General and Administrative Expenses

Selling, general and administrative expenses increased \$6 million to \$932 million in 2017 from \$926 million in 2016. As a percentage of revenue, these expenses were 14.3% in 2017 and 14.2% in 2016. In 2017, selling, general and administrative expenses included \$12 million of pension mark-to-market adjustments, \$65 million of acquisition-related amortization of intangibles, \$5 million of acquisition-related costs, and \$14 million of transformation costs. In 2016, selling, general and administrative expenses included \$24 million of pension mark-to-market adjustments, \$7 million of acquisition-related costs, \$65 million of acquisition-related amortization of intangibles and \$7 million of restructuring and transformation costs. Excluding these items, selling, general and administrative expenses increased as a percentage of revenue from 12.6% in 2016 to 12.8% in 2017 due to increased sales investment as we expand our strategic offers and go to market strategy.

Selling, general, and administrative expenses decreased \$116 million to \$926 million in 2016 from \$1,042 million in 2015. As a percentage of revenue, these expenses were 14.2% in 2016 and 16.4% in 2015. In 2016, selling, general, and administrative expenses included \$24 million of pension mark-to-market adjustments, \$7 million of acquisition-related costs, \$65 million of acquisition-related amortization of intangibles and \$7 million of restructuring and transformation costs. In 2015, selling, general, and administrative expenses included \$123 million of pension mark-to-market adjustments, \$11 million of acquisition-related costs, \$62 million of amortization of acquisition-related intangible assets, a \$20 million reserve on a subcontracting arrangement in emerging industries in Middle East Africa and \$1 million of OFAC and FCPA related legal costs. Excluding these items, selling, general and administrative expenses decreased as a percentage of revenue from 12.9% in 2015 to 12.6% in 2016 due to the continued cost reduction actions focused on limiting discretionary spending and the benefit of cost savings from the restructuring program initiated in 2014.

Research and Development Expenses

Research and development expenses increased \$14 million to \$256 million in 2017 from \$242 million in 2016. As a percentage of revenue, these costs were 3.9% in 2017 and 3.7% in 2016. In 2017, research and development expenses included \$17 million of pension mark-to-market adjustments and \$4 million of transformation costs. In 2016, research and development expenses included \$23 million of pension mark-to-market adjustments and zero of transformation costs. After considering this item, research and development expenses increased from 3.3% in 2016 to 3.6% in 2017 driven by planned incremental investments to further advance our software and hardware solutions.

Research and development expenses increased \$12 million to \$242 million in 2016 from \$230 million in 2015. As a percentage of revenue, these costs were 3.7% in 2016 and 3.6% in 2015. Research and development expenses included pension mark-to-market adjustments of \$23 million in 2016 and \$18 million in 2015. After considering this item, research and development expenses remained consistent as a percentage of revenue at 3.3%.

Restructuring-Related Charges

In 2016, the Company recorded restructuring-related charges of \$15 million related to the restructuring program announced in 2014. The charges consist of severance and other employee related costs of \$4 million, other exit costs of \$9 million and asset-related charges of \$2 million.

In 2015, the Company recorded restructuring-related charges of \$62 million related to the restructuring program announced in July 2014. The charges consist of severance and other employee related costs of \$20 million, other exit costs of \$13 million and asset-related charges of \$29 million.

Interest Expense

Interest expense was \$163 million in 2017 compared to \$170 million in 2016 and \$173 million in 2015. Interest expense in all years was primarily related to the Company's senior unsecured notes and borrowings under the Company's senior secured credit facility.

Other Expense

Other (expense), net was \$31 million in 2017 compared to \$50 million in 2016 and \$57 million in 2015. Interest income was \$3 million in 2017, \$4 million in 2016 and \$5 million in 2015. In 2017, other (expense), net included \$26 million related to losses from foreign currency fluctuations and foreign exchange contracts and \$8 million in bank-related fees. In 2016, other (expense), net included \$40 million related to losses from foreign currency fluctuations and foreign exchange contracts, \$8 million in bank-related fees, \$6 million related to the loss on sale of the IPS business and entity liquidations. In 2015, other (expense), net included \$21 million related to losses from foreign currency fluctuations and foreign exchange contracts, \$9 million in bank-related fees, and \$34 million related to the loss on the then pending sale of the IPS business.

Income Taxes

Our effective tax rate was 50% in 2017, 24% in 2016, and (58)% in 2015. During 2017, our tax rate includes a provisional charge of approximately \$130 million as a result of the impact of U.S. Tax Reform enacted in December 2017. The provisional charge primarily relates to the application of the newly enacted 21% corporate income tax rate to our net U.S. deferred income tax assets in addition to the repatriation tax. The \$130 million provisional charge represents NCR's current best estimate, which may be refined and adjusted over the course of 2018. During 2016, our tax rate was impacted by a less favorable mix of earnings, primarily driven by actuarial pension losses in foreign jurisdictions with a valuation allowance against deferred tax assets. During 2015, there was no tax benefit recorded on the \$427 million charge related to the settlement of the UK London pension plan due to a valuation allowance against deferred tax assets in the United Kingdom. Refer to Note 8, "Employee Benefit Plans" of the Notes to Consolidated Financial Statements included in Item 8 of Part II of this Report for additional discussion on the settlement of the UK London pension plan. Additionally, we favorably settled examinations with Canada for tax years 2002 through 2006 that resulted in a tax benefit of \$10 million in 2015.

During 2014, the Internal Revenue Service (IRS) finalized an examination of our 2009 and 2010 income tax returns and commenced an examination of our 2011, 2012 and 2013 income tax returns, which is ongoing. While we are subject to numerous federal, state and foreign tax audits, we believe that appropriate reserves exist for issues that might arise from these audits. Should these audits be settled, the resulting tax effect could impact the tax provision and cash flows in future periods. During 2018, the Company expects to resolve certain tax matters related to U.S. and foreign jurisdictions. These resolutions could have a material impact on the effective tax rate in 2018.

We regularly review our deferred tax assets for recoverability and establish a valuation allowance if it is more likely than not that some portion or all of a deferred tax asset will not be realized. The determination as to whether a deferred tax asset will be realized is made on a jurisdictional basis and is based on the evaluation of positive and negative evidence. This evidence includes historical taxable income/loss, projected future taxable income, the expected timing of the reversal of existing temporary differences and the implementation of tax planning strategies. Given current earnings and anticipated future earnings at certain subsidiaries, the Company believes that there is a reasonable possibility sufficient positive evidence may become available that would allow the release of a valuation allowance within the next twelve months.

Loss from Discontinued Operations

In 2017, loss from discontinued operations was \$5 million, net of tax, primarily related to updates in estimates and assumptions for the Fox River reserve partially offset by insurance recoveries received during the year.

In 2016, loss from discontinued operations was \$13 million, net of tax, primarily related to updates in estimates and accruals for litigation expenses related to the Fox River reserve.

In 2015, loss from discontinued operations was \$24 million, net of tax, primarily related to updates in estimates and accruals for litigation expenses related to the Fox River reserve in addition to accruals for litigation expenses related to the Kalamazoo River environmental matter.

Revenue and Operating Income by Segment

As described in Note 12, "Segment Information and Concentrations" of the Notes to Consolidated Financial Statements, the Company manages and reports its businesses in the following segments:

- **Software** - Our software offerings include industry-based software platforms, applications and application suites for the financial services, retail, hospitality and small business industries. We also offer a portfolio of other industry-oriented software applications including cash management software, video banking software, fraud and loss prevention applications, check and document imaging, remote-deposit capture and customer-facing mobile and digital banking applications for the financial services industry; and secure electronic and mobile payment solutions, sector-specific point of sale software applications, and back-office inventory and store and restaurant management applications for the retail and hospitality industries. Additionally, we provide ongoing software support and maintenance services, as well as consulting and implementation services for our software solutions.
- **Services** - Our global end-to-end services solutions include assessment and preparation, staging, installation, implementation, and maintenance and support for our solutions. We also provide systems management and complete managed services for our product offerings. In addition, we provide installation, maintenance and servicing for third party networking products and computer hardware from select manufacturers.

- **Hardware** - Our hardware solutions include our suite of financial-oriented self-service ATM-related hardware, and our retail- and hospitality-oriented point of sale terminal, self-checkout kiosk and related hardware. We also offer other self-service kiosks, such as self-check in/out kiosks for airlines, and wayfinding solutions for buildings and campuses.

Each of these segments derives its revenue by selling in the sales theaters in which NCR operates. Segments are measured for profitability by the Company's chief operating decision maker based on revenue and segment operating income. For purposes of discussing our operating results by segment, we exclude the impact of certain non-operational items from segment operating income, consistent with the manner by which management reviews each segment, evaluates performance, and reports our segment results under GAAP. This format is useful to investors because it allows analysis and comparability of operating trends. It also includes the same information that is used by NCR management to make decisions regarding the segments and to assess our financial performance. Our segment results are reconciled to total Company results reported under GAAP in Note 12, "Segment Information and Concentrations" of the Notes to Consolidated Financial Statements included in Item 8 of Part II of this Report.

In the segment discussions below, we have disclosed the impact of foreign currency fluctuations and the IPS divestiture as it relates to our segment revenue due to their significance.

Software Segment

The following table presents the Software revenue and segment operating income for the years ended December 31:

In millions	2017	2016	2015
Revenue	\$1,900	\$1,841	\$1,747
Operating income	\$567	\$577	\$539
Operating income as a percentage of revenue	29.8%	31.3%	30.9%

Software revenue increased 3% in 2017 compared to 2016 driven by growth in cloud revenue of 6%, software maintenance revenue of 1%, professional services revenue of 5%, offset by a decline in software license revenue of 1%. Cloud revenue increased due to prior period bookings. Software maintenance revenue grew due to software license growth in prior periods. Professional services revenue grew due to demand for the Company's channel transformation and digital enablement solutions. Software license revenue declined due to lower software license revenue attached to hardware. Foreign currency fluctuations had no impact on the revenue comparison.

Software revenue increased 5% in 2016 compared to 2015 driven by growth in software license revenue of 13%, software maintenance revenue of 7%, cloud revenue of 4% and professional services revenue of 2%. Growth in software license revenue was driven primarily by store transformation and attached software revenue driven by the increase in hardware sales. Software maintenance revenue grew due to the growth in software licenses in prior periods and cloud revenue growth was due to growth in the financial services and hospitality industries. Foreign currency fluctuations negatively impacted the year-over-year revenue comparison of 1%.

Operating income decreased in 2017 compared to 2016 driven by the decrease in software license revenue but partially offset by improved efficiency in cloud and software maintenance. Operating income increased in 2016 compared to 2015 driven by higher revenue.

Services Segment

The following table presents the Services revenue and segment operating income for the years ended December 31:

In millions	2017	2016	2015
Revenue	\$2,373	\$2,306	\$2,218
Operating income	\$288	\$201	\$194
Operating income as a percentage of revenue	12.1%	8.7%	8.7%

Services revenue increased 3% in 2017 compared to 2016 primarily driven by growth in implementation services as well as hardware maintenance as a result of our focus on improving the customer experience. Foreign currency fluctuations had no impact on the year-over-year revenue comparison.

Services revenue increased 4% in 2016 compared to 2015 primarily driven by growth in implementation, hardware maintenance and managed services as a result of our focus on improving the customer experience. Foreign currency fluctuations negatively impacted the year-over-year revenue comparison by 2%.

Operating income increased in 2017 compared to 2016 primarily driven by continued focus on productivity and efficiency improvements. Operating income increased in 2016 compared to 2015 primarily driven by higher revenue.

Hardware Segment

The following table presents the Hardware revenue and segment operating income for the years ended December 31:

In millions	2017	2016	2015
Revenue	\$2,243	\$2,396	\$2,408
Operating (loss) income	\$(2)	\$62	\$87
Operating (loss) income as a percentage of revenue	(0.1)%	2.6%	3.6%

On May 27, 2016, NCR completed the sale of substantially all of the IPS business to Atlas Holdings LLC, which excluded the IPS operations in the Middle East and Africa (MEA). Accordingly, the Hardware segment revenue and operating income results exclude the results of the IPS operations, except for the IPS MEA operations, from May 27, 2016 through the end of 2017.

Hardware revenue decreased 6% in 2017 compared to 2016 driven by the impact of the IPS divestiture in the prior year and declines in ATM revenue of 17% partially offset by growth in self-checkout revenue of 16% and point-of-sale revenue of 20%. Self-checkout revenue increased due to store transformation. Point-of-sale revenue increased due to growth from a new solution in the petroleum and convenience sector. ATM revenue decreased mainly due to delays in customer spending in North America as well as declines in the Middle East and Africa. Foreign currency fluctuations positively impacted the year-over-year comparison by 1% and the IPS divestiture negatively impacted the year-over-year revenue comparison by 5%.

Hardware revenue was relatively flat in 2016 compared to 2015 with growth in ATM revenue of 3% and self-checkout revenue of 88% offset by declines in point-of-sale revenue of 3% and IPS revenue as a result of the divestiture. ATM revenue increased mainly due to new product introductions and branch transformation, and self-checkout revenue increased due to store transformation. Point-of-sale revenue was down mainly in the retail industry. Foreign currency fluctuations and the IPS divestiture negatively impacted the year-over-year revenue comparison by 0% and 9%, respectively.

Operating income decreased in 2017 compared to 2016 driven by lower volume and the impact on new product introductions. Operating income decreased in 2016 compared to 2015 due to a decline in gross margins attributable to expenses associated with new product launches. The gross margin rate in 2016 was negatively impacted by higher initial expenses from the roll-out of a new ATM product family and macroeconomic challenges.

FINANCIAL CONDITION, LIQUIDITY AND CAPITAL RESOURCES

In the year ended December 31, 2017, cash provided by operating activities was \$755 million and in the year ended December 31, 2016 cash provided by operating activities was \$894 million. The decrease was due to lower working capital, partially offset by higher operating income.

NCR's management uses a non-GAAP measure called "free cash flow" to assess the financial performance of the Company. We define free cash flow as net cash provided by (used in) operating activities and cash provided by (used in) discontinued operations, less capital expenditures for property, plant and equipment, less additions to capitalized software plus discretionary pension contributions and settlements. Free cash flow does not have a uniform definition under GAAP, and therefore NCR's definition of this measure may differ from that of other companies. We believe free cash flow information is useful for investors because it relates the operating cash flows from the Company's continuing and discontinued operations to the capital that is spent to continue and improve business operations. In particular, free cash flow indicates the amount of cash available after capital expenditures for, among other things, investments in the Company's existing businesses, strategic acquisitions and investments, repurchase of NCR stock and repayment of debt obligations. Free cash flow does not represent the residual cash flow available for discretionary expenditures, since there may be other non-discretionary expenditures that are not deducted from the measure. This non-GAAP measure should not be considered a substitute for, or superior to, cash flows from operating activities under GAAP. The table below reconciles net cash provided by (used in) operating activities, the most directly comparable GAAP measure, to NCR's non-GAAP measure of free cash flow for the years ended December 31:

In millions	2017	2016	2015
Net cash provided by operating activities	\$755	\$894	\$681
Capital expenditures for property, plant and equipment	(128)	(73)	(79)
Additions to capitalized software	(166)	(154)	(150)
Net cash used in discontinued operations	(8)	(39)	(43)
Pension discretionary contributions and settlements	—	—	—
Free cash flow (non-GAAP)	<u>\$453</u>	<u>\$628</u>	<u>\$409</u>

In 2017, net cash provided by operating activities decreased \$139 million, and net cash used in discontinued operations decreased \$31 million, which contributed to a net decrease in free cash flow of \$175 million in comparison to 2016. Additionally, capital expenditures for property, plant and equipment increased \$55 million primarily due to expenditures related to the new global headquarters in Atlanta Georgia. Expenditures related to the new global headquarters were approximately \$60 million offset by approximately \$44 million of reimbursements by the lessor which was included in net cash provided by operating activities. Additions to capitalized software increased \$12 million due to continued investment in software solution enhancements. The net cash used in discontinued operations in 2017 was lower than 2016 primarily due to decreased litigation payments associated with the Fox River and Kalamazoo environmental matters as well as insurance settlements received in 2017.

In 2016, net cash provided by operating activities increased \$213 million, and net cash used in discontinued operations decreased \$4 million, which contributed to a net increase in free cash flow of \$219 million in comparison to 2015. Additionally, capital expenditures decreased \$6 million and capitalized software additions increased \$4 million due to continued investment in software solution enhancements. The net cash used in discontinued operations in 2016 was lower than 2015 primarily due to lower remediation payments associated with the Fox River environmental matter.

Financing activities and certain other investing activities are not included in our calculation of free cash flow. Our other investing activities primarily include business acquisitions, divestitures and investments as well as proceeds from the sales of property, plant and equipment. During the year ended December 31, 2016, we completed the sale of our IPS business, excluding its MEA operations, to Atlas Holdings LLC for cash consideration of \$47 million.

Our financing activities primarily include proceeds from the issuance of preferred stock, employee stock plans, borrowings on term credit facilities and the issuance of unsecured notes, as well as payments made for share repurchases, repayments of term credit facilities and tax withholding on behalf of employees. During the years ended December 31, 2017 and 2016, we repurchased a total of \$350 million and \$250 million, respectively, of our common stock. During the year ended December 31, 2015, we issued and sold shares of our Series A Convertible Preferred Stock for \$820 million, less \$26 million of issuance costs, and completed a share repurchase by modified "Dutch auction" tender offer for \$1 billion, plus \$5 million of issuance costs. During the years ended December 31, 2017, 2016 and 2015, proceeds from employee stock plans were \$15 million in all periods. During the years ended December 31, 2017, 2016 and 2015, payments made for tax withholding on behalf of employees totaled \$31 million, \$16 million and \$16 million, respectively.

Long Term Borrowings As of December 31, 2017, our senior secured credit facility consisted of a term loan facility with an aggregate principal amount outstanding of \$810 million, and a revolving credit facility in an aggregate principal amount of \$1.10 billion, of which none was outstanding. Additionally, the revolving credit facility has up to \$400 million available to certain foreign subsidiaries. Loans under the revolving credit facility are available in U.S. Dollars, Euros and Pound Sterling. The revolving credit facility also allows a portion of the availability to be used for outstanding letters of credit, and as of December 31, 2017, there were no letters of credit outstanding. As of December 31, 2016, the outstanding principal balance of the term loan facility was \$866 million and no amounts were outstanding under the revolving credit facility.

As of December 31, 2017 and 2016, we had outstanding \$700 million in aggregate principal balance of 6.375% senior unsecured notes due 2023, \$600 million in aggregate principal balance of 5.00% senior unsecured notes due 2022, \$500 million in aggregate principal balance of 4.625% senior unsecured notes due 2021 and \$400 million in aggregate principal balance of 5.875% senior unsecured notes due 2021.

Our revolving trade receivables securitization facility provides the Company with up to \$200 million in funding based on the availability of eligible receivables and other customary factors and conditions. As of December 31, 2017 and December 31, 2016, the Company had no amounts outstanding under the facility.

See Note 5, "Debt Obligations" of the Notes to Consolidated Financial Statements included in Item 8 of Part II of this Report for further information on the senior secured credit facility, the senior unsecured notes and the trade receivables securitization facility.

Employee Benefit Plans We expect to make pension, postemployment and postretirement plan contributions of approximately \$92 million in 2018. See Note 8, "Employee Benefit Plans" of the Notes to the Consolidated Financial Statements included in Item 8 of Part II of this Report for additional discussion on our pension, postemployment and postretirement plans.

Restructuring Program In 2014, we announced a restructuring plan to strategically reallocate resources so that we can focus on higher-growth, higher-margin opportunities in the software-driven omni-channel industry and as of March 31, 2017, this plan was complete. Refer to Note 14, "Restructuring Plan" of the Notes to the Consolidated Financial Statements included in Item 8 of Part II of this Report for additional discussion on our restructuring plan.

In addition to the above, we remain focused on continuing our transformation to build share in the most promising growth areas while driving further operating efficiencies. To accelerate our transformation journey, we are evaluating programs to prioritize driving sustainable margin improvement, higher productivity and process efficiencies focusing on investing in software products that accelerate growth, driving growth in services through structural improvements and optimizing its hardware production, sourcing and supply chain strategy. As we finalize these programs, NCR expects to incur a related pre-tax charge over the next two years in the range of approximately \$200 million to \$250 million, with \$100 million to \$150 million in 2018, that will be included in income from operations. The cash impact of the restructuring plan is expected to be approximately \$150 million to \$200 million over the next two years, with \$100 million in 2018. We plan to achieve run-rate savings of approximately \$150 million per year by 2020.

Series A Convertible Preferred Stock On December 4, 2015, NCR issued 820,000 shares of Series A Convertible Preferred Stock to certain entities affiliated with the Blackstone Group L.P. (collectively, Blackstone) for an aggregate purchase price of \$820 million, or \$1,000 per share, pursuant to an Investment Agreement between the Company and Blackstone, dated November 11, 2015. In connection with the issuance of the Series A Convertible Preferred Stock, the Company incurred direct and incremental expenses of \$26 million. These direct and incremental expenses reduced the Series A Convertible Preferred Stock, and will be accreted through retained earnings as a deemed dividend from the date of issuance through the first possible known redemption date, March 16, 2024. Holders of Series A Convertible Preferred Stock are entitled to a cumulative dividend at the rate of 5.5% per annum, payable quarterly in arrears and payable in-kind for the first sixteen dividend payments, after which, dividends will be payable in cash or in-kind at the option of the Company. During the twelve months ended December 31, 2017 and 2016, the Company paid dividends-in-kind of \$45 million and \$47 million, respectively, associated with the Series A Convertible Preferred Stock. As of December 31, 2017 and 2016, the Company had accrued dividends of \$3 million and \$3 million, respectively. There were no cash dividends declared in the years ended December 31, 2017 and 2016.

The Series A Convertible Preferred Stock is convertible at the option of the holders at any time into shares of common stock at a conversion price of \$30.00 per share and a conversion rate of 33.333 shares of common stock per share of Series A Convertible Preferred Stock. As of December 31, 2017 and 2016, the maximum number of common shares that could be required to be issued if converted was 27.5 million and 29.0 million shares, respectively, which would represent approximately 18% and 19% of our outstanding common stock as of December 31, 2017 and 2016 including the preferred shares on an as-converted basis.

Under the Investment Agreement, Blackstone agreed not to sell or otherwise transfer its shares of Series A Convertible Preferred Stock (or any shares of common stock issued upon conversion thereof) without the Company's consent until June 4, 2017. In March 2017, we provided Blackstone with an early release from this lock-up, allowing Blackstone to sell approximately 49% of its shares of Series A Convertible Preferred Stock, and in return, Blackstone agreed to amend the Investment Agreement to extend the lock-up on the remaining 51% of its shares of Series A Convertible Preferred Stock for six months until December 1, 2017.

In connection with the early release of the lock-up, Blackstone offered for sale 342,000 shares of Series A Convertible Preferred Stock in an underwritten public offering. In addition, Blackstone converted 90,000 shares of Series A Convertible Preferred Stock into shares of our common stock and we repurchased those shares of common stock for \$48.47 per share. The underwritten offering and the stock repurchase were consummated on March 17, 2017.

Cash and Cash Equivalents Held by Foreign Subsidiaries Cash and cash equivalents held by the Company's foreign subsidiaries were \$442 million and \$428 million at December 31, 2017 and 2016, respectively. As a result of U.S. Tax Reform, including the repatriation tax, in general we will not be subject to additional U.S. taxes if cash and cash equivalents and short-term investments held outside the U.S. are distributed to the U.S. in the form of dividends or otherwise. However, we may be subject to foreign withholding taxes, which could be significant.

Summary As of December 31, 2017, our cash and cash equivalents totaled \$537 million and our total debt was \$3.01 billion. Our borrowing capacity under our senior secured credit facility was \$1.10 billion and under our trade receivables securitization facility was \$200 million at December 31, 2017. Our ability to generate positive cash flows from operations is dependent on general economic conditions, and the competitive environment in our industry, and is subject to the business and other risk factors described in Item 1A

of Part I of this Report. If we are unable to generate sufficient cash flows from operations, or otherwise comply with the terms of our credit facilities, we may be required to seek additional financing alternatives.

We believe that we have sufficient liquidity based on our current cash position, cash flows from operations and existing financing to meet our expected pension, postemployment, and postretirement plan contributions, remediation payments related to the Fox River environmental matter, debt servicing obligations, payments related to transformation initiatives, and our operating requirements for the next twelve months.

Contractual Obligations In the normal course of business, we enter into various contractual obligations that impact, or could impact, the liquidity of our operations. The following table and discussion outlines our material obligations as of December 31, 2017 on an undiscounted basis, with projected cash payments in the years shown:

In millions	Total Amounts	2018	2019 - 2020	2021 - 2022	2023 & Thereafter	All Other
Debt obligations	\$ 3,014	\$ 52	\$ 174	\$ 2,085	\$ 703	\$ —
Interest on debt obligations	679	150	290	192	47	—
Estimated environmental liability payments	35	22	12	1	—	—
Lease obligations	729	135	161	90	343	—
Purchase obligations	735	679	29	27	—	—
Uncertain tax positions	148	—	—	—	—	148
Total obligations	\$ 5,340	\$ 1,038	\$ 666	\$ 2,395	\$ 1,093	\$ 148

As of December 31, 2017, we had short and long-term debt totaling \$2.99 billion, which includes debt issuance costs as a direct reduction from the carrying amount of debt.

For purposes of this table, we used interest rates as of December 31, 2017 to estimate the future interest on debt obligations outstanding as of December 31, 2017 and have assumed no voluntary prepayments of existing debt. See Note 5, "Debt Obligations" of the Notes to Consolidated Financial Statements included in Item 8 of Part II of this Report for additional disclosure related to our debt obligations and the related interest rate terms.

The estimated environmental liability payments included in the table of contractual obligations shown above are related to the Fox River environmental matter. The amounts shown are our expected payments, net of the payment obligations of co-obligors; the amounts do not include an estimate for payments to be received from insurers or indemnification parties. For additional information, refer to Note 9, "Commitments and Contingencies" included in Item 8 of Part II of this Report.

Our lease obligations are primarily for certain sales and manufacturing facilities in various domestic and international locations as well as leases related to equipment and vehicles. Our lease obligations also include future rental amounts owed for our world headquarters in Atlanta commencing after construction completion. Due to ongoing construction, we have included assumptions regarding the total project cost and lease commencement.

Purchase obligations represent committed purchase orders and other contractual commitments for goods or services. The purchase obligation amounts were determined through information in our procurement systems and payment schedules for significant contracts. Included in the amounts are committed payments in relation to the long-term service agreement with Accenture under which NCR's transaction processing activities and functions are performed.

We have a \$148 million liability related to our uncertain tax positions. Due to the nature of the underlying liabilities and the extended time often needed to resolve income tax uncertainties, we cannot make reliable estimates of the amount or timing of cash payments that may be required to settle these liabilities. For additional information, refer to Note 6, "Income Taxes" of the Notes to Consolidated Financial Statements included in Item 8 of Part II of this Report.

Our U.S. and international employee benefit plans, which are described in Note 8, "Employee Benefit Plans" of the Notes to Consolidated Financial Statements included in Item 8 of Part II of this Report, could require significant future cash payments. The funded status of NCR's U.S. pension plan is an underfunded position of \$506 million as of December 31, 2017 compared to an underfunded position of \$463 million as of December 31, 2016. The increase in our underfunded position is primarily attributable to a change in mortality assumptions in 2017. Our international retirement plans were in an underfunded status of \$187 million as of December 31, 2017, as compared to an underfunded status of \$194 million as of December 31, 2016. Contributions to international pension plans are expected to be approximately \$30 million in 2018.

We also have product warranties that may affect future cash flows. These items are not included in the table of obligations shown above, but are described in detail in Note 9, "Commitments and Contingencies" of the Notes to Consolidated Financial Statements included in Item 8 of Part II of this Report.

Our senior secured credit facility and the indentures for our senior unsecured notes include affirmative and negative covenants that restrict or limit our ability to, among other things, incur indebtedness; create liens on assets; engage in certain fundamental corporate changes or changes to our business activities; make investments; sell or otherwise dispose of assets; engage in sale-leaseback or hedging transactions; pay dividends or make similar distributions; repay other indebtedness; engage in certain affiliate transactions; or enter into agreements that restrict our ability to create liens, pay dividends or make loan repayments. Our senior secured credit facility also includes financial covenants that require us to maintain:

- a consolidated leverage ratio on the last day of any fiscal quarter, not to exceed (i) in the case of any fiscal quarter ending on or prior to December 31, 2017, (a) the sum of 4.25 and an amount (not to exceed 0.50) to reflect debt used to reduce NCR's unfunded pension liabilities to (b) 1.00, (ii) in the case of any fiscal quarter ending after December 31, 2017 and on or prior to December 31, 2019, (a) the sum of 4.00 and an amount (not to exceed 0.50) to reflect debt used to reduce NCR's unfunded pension liabilities to (b) 1.00, and (iii) in the case of any fiscal quarter ending after December 31, 2019, the sum of (a) 3.75 and an amount (not to exceed 0.50) to reflect debt used to reduce NCR's unfunded pension liabilities to (b) 1.00; and
- an interest coverage ratio on the last day of any fiscal quarter greater than or equal to 3.50 to 1.00.

At December 31, 2017, the maximum consolidated leverage ratio under the senior secured credit facility was 4.35 to 1.00.

Off-Balance Sheet Arrangements We have no significant contractual obligations not fully recorded on our Consolidated Balance Sheets or fully disclosed in the notes to our consolidated financial statements. We have no material off-balance sheet arrangements as defined by SEC Regulation S-K Item 303 (a) (4) (ii).

See Note 9, "Commitments and Contingencies" in the Notes to Consolidated Financial Statements in Item 8 of Part II of this Report for additional information on guarantees associated with our business activities.

CRITICAL ACCOUNTING POLICIES AND ESTIMATES

Our consolidated financial statements are prepared in accordance with GAAP. In connection with the preparation of these financial statements, we are required to make assumptions, estimates and judgments that affect the reported amounts of assets, liabilities, revenue, expenses and the related disclosure of contingent liabilities. These assumptions, estimates and judgments are based on historical experience and are believed to be reasonable at the time. However, because future events and their effects cannot be determined with certainty, the determination of estimates requires the exercise of judgment. Our critical accounting policies are those that require assumptions to be made about matters that are highly uncertain. Different estimates could have a material impact on our financial results. Judgments and uncertainties affecting the application of these policies and estimates may result in materially different amounts being reported under different conditions or circumstances. Our management continually reviews these assumptions, estimates and judgments to ensure that our financial statements are presented fairly and are materially correct.

In many cases, the accounting treatment of a particular transaction is specifically dictated by GAAP and does not require significant management judgment in its application. There are also areas in which management's judgment in selecting among available alternatives would not produce a materially different result. The significant accounting policies and estimates that we believe are the most critical to aid in fully understanding and evaluating our reported financial results are discussed in the paragraphs below. Our senior management has reviewed these critical accounting policies and related disclosures with our independent registered public accounting firm and the Audit Committee of our Board of Directors. See Note 1, "Description of Business and Significant Accounting Policies" of the Notes to Consolidated Financial Statements in Item 8 of Part II of this Report, which contains additional information regarding our accounting policies and other disclosures required by GAAP.

Revenue Recognition NCR frequently enters into multiple-element arrangements with its customers including hardware, software, professional consulting services and maintenance support services. For arrangements involving multiple deliverables, when deliverables include software and non-software products and services, NCR evaluates and separates each deliverable to determine whether it represents a separate unit of accounting based on the following criteria: (a) the delivered item has value to the customer on a stand-alone basis; and (b) if the contract includes a general right of return relative to the delivered item, delivery or performance of the undelivered items is considered probable and substantially in the control of NCR.

Consideration is allocated to each unit of accounting based on the unit's relative selling prices. In such circumstances, the Company uses a hierarchy to determine the selling price to be used for allocating revenue to each deliverable: (i) vendor-specific objective evidence of selling price (VSOE), (ii) third-party evidence of selling price (TPE), and (iii) best estimate of selling price (BESP). VSOE generally exists only when the Company sells the deliverable separately and is the price actually charged by the Company for that deliverable. VSOE is established for our software maintenance and software-related professional services. We use TPE to establish selling prices for our installation and transaction services. The Company uses BESP to allocate revenue when we are unable to establish VSOE or TPE of selling price. BESP is used for hardware maintenance and elements such as products that are not consistently priced within a narrow range. The Company determines BESP for a deliverable by considering multiple factors including product class, geography, average discount, and management's historical pricing practices. Amounts allocated to the delivered hardware and software elements are recognized at the time of sale provided the other conditions for revenue recognition have been met. Amounts allocated to the undelivered maintenance and other services elements are recognized as the services are provided or on a straight-line basis over the service period. In certain instances, customer acceptance is required prior to the passage of title and risk of loss of the delivered products. In such cases, revenue is not recognized until the customer acceptance is obtained. Delivery and acceptance generally occur in the same reporting period.

In situations where NCR's solutions contain software that is more than incidental, revenue related to the software and software-related elements is recognized in accordance with authoritative guidance on software revenue recognition. For the software and software-related elements of such transactions, revenue is allocated based on the relative fair value of each element, and fair value is determined by VSOE. If the Company cannot objectively determine the fair value of any undelivered element included in such multiple-element arrangements, the Company defers revenue until all elements are delivered and services have been performed, or until fair value can objectively be determined for any remaining undelivered elements. When the fair value of a delivered element has not been established, but fair value exists for the undelivered elements, the Company uses the residual method to recognize revenue. Under the residual method, the fair value of the undelivered elements is deferred and the remaining portion of the arrangement fee is allocated to the delivered elements and is recognized as revenue. If an arrangement includes software and services that involve significant production, modification or customization of the software, the services cannot be separated from the software. The Company accounts for these arrangements as a long-term contract.

For certain of NCR's long-term contracts, the Company utilizes a percentage-of-completion accounting method, which requires estimates of future revenue and costs over the full term of product and/or service delivery. Estimated losses, if any, on long-term projects are recognized as soon as such losses become known.

Revenue recognition for complex contractual arrangements, especially those with multiple elements, requires a significant level of judgment and is based upon a review of specific contracts, past experience, the selling price of undelivered elements when sold separately, creditworthiness of customers, international laws and other factors. Changes in judgments about these factors could impact the timing and amount of revenue recognized between periods.

Allowance for Doubtful Accounts We evaluate the collectability of our accounts receivable based on a number of factors. We establish provisions for doubtful accounts using percentages of our accounts receivable balance as an overall proxy to reflect historical average credit losses and also use management judgment that may include elements that are uncertain, including specific provisions for known issues. The percentages are applied to aged accounts receivable balances. Aged accounts are determined based on the number of days the receivable is outstanding, measured from the date of the invoice, or from the date of revenue recognition. As the age of the receivable increases, the provision percentage also increases. This policy is applied consistently among all of our operating segments.

Based on the factors below, we periodically review customer account activity in order to assess the adequacy of the allowances provided for potential losses. Factors include economic conditions and judgments regarding collectability of account balances, each customer's payment history and creditworthiness.

The allowance for doubtful accounts was \$37 million as of December 31, 2017, \$41 million as of December 31, 2016, and \$47 million as of December 31, 2015. These allowances represent, as a percentage of gross receivables, 2.8% in 2017, 3.1% in 2016, and 3.6% in 2015.

Given our experience, the reserves for potential losses are considered adequate, but if one or more of our larger customers were to default on its obligations, we could be exposed to potentially significant losses in excess of the provisions established. We continually evaluate our reserves for doubtful accounts and economic deterioration could lead to the need to increase our allowances.

Inventory Valuation Inventories are stated at the lower of cost or net realizable value, using the average cost method. Each quarter, we reassess raw materials, work-in-process, parts and finished equipment inventory costs to identify purchase or usage variances from standards, and valuation adjustments are made. Additionally, to properly provide for potential exposure due to slow-moving, excess,

obsolete or unusable inventory, inventory values are reduced based on forecasted usage, orders, technological obsolescence and inventory aging. These factors are impacted by market conditions, technology changes and changes in strategic direction, and require estimates and management judgment that may include elements that are uncertain. On a quarterly basis, we review the current net realizable value of inventory and adjust for any inventory exposure due to age or excess of cost over net realizable value.

We have inventory in more than 40 countries around the world. We purchase inventory from third party suppliers and manufacture inventory at our plants. This inventory is transferred to our distribution and sales organizations at cost plus a mark-up. This mark-up is referred to as inter-company profit. Each quarter, we review our inventory levels and analyze our inter-company profit to determine the correct amount of inter-company profit to eliminate. Key assumptions are made to estimate product gross margins, the product mix of existing inventory balances and current period shipments. Over time, we refine these estimates as facts and circumstances change. If our estimates require refinement, our results could be impacted. The policies described are applied consistently across all of our operating segments.

Warranty Reserves One of our key objectives is to provide superior quality products and services. To that end, we provide a standard manufacturer's warranty typically extending up to 12 months, allowing our customers to seek repair of products under warranty at no additional cost. A corresponding estimated liability for potential warranty costs is recorded at the time of the sale. We sometimes offer extended warranties in the form of product maintenance services to our customers for purchase. We defer the fair value of this revenue and recognize revenue over the life of the extended warranty period. Refer to Note 1, "Description of Business and Significant Accounting Policies" in the Notes to Consolidated Financial Statements in Item 8 of Part II of this Report for further information regarding our accounting for extended warranties.

Future warranty obligation costs are based upon historical factors such as labor rates, average repair time, travel time, number of service calls per machine and cost of replacement parts. When a sale is consummated, the total customer revenue is recognized and the associated warranty liability is recorded based upon the estimated cost to provide the service over the warranty period.

Total warranty costs were \$43 million in 2017, \$42 million in 2016, and \$41 million in 2015. Warranty costs as a percentage of total product revenue was 1.7% in 2017, 1.5% in 2016, and 1.5% in 2015. Historically, the principal factor used to estimate our warranty costs has been service calls per machine. Significant changes in this factor could result in actual warranty costs differing from accrued estimates. Although no near-term changes in our estimated warranty reserves are currently anticipated, in the unlikely event of a significant increase in warranty claims by one or more of our larger customers, costs to fulfill warranty obligations would be higher than provisioned, thereby impacting results.

Goodwill Goodwill is tested at the reporting unit level for impairment on an annual basis during the fourth quarter or more frequently if certain events occur indicating that the carrying value of goodwill may be impaired. A significant amount of judgment is involved in determining if an indicator of impairment has occurred. Such indicators may include a decline in expected cash flows, a significant adverse change in legal factors or in the business climate, a decision to sell a business, unanticipated competition, or slower growth rates, among others.

In the evaluation of goodwill for impairment, we have the option to perform a qualitative assessment to determine whether further impairment testing is necessary or to perform a quantitative assessment by comparing the fair value of a reporting unit to its carrying amount, including goodwill. Under the qualitative assessment, an entity is not required to calculate the fair value of a reporting unit unless the entity determines that it is more likely than not that its fair value is less than its carrying amount. If under the quantitative assessment the fair value of a reporting unit is less than its carrying amount, then the amount of the impairment loss, if any, must be measured under step two of the impairment analysis. In step two of the analysis, we will record an impairment loss equal to the excess of the carrying value of the reporting unit's goodwill over its implied fair value. Fair values of the reporting units are estimated using a weighted methodology considering the output from both the income and market approaches. The income approach incorporates the use of a discounted cash flow (DCF) analysis. A number of significant assumptions and estimates are involved in the application of the DCF model to forecast operating cash flows, including markets and market shares, sales volumes and prices, costs to produce, tax rates, capital spending, discount rate and working capital changes. Several of these assumptions vary among reporting units. The cash flow forecasts are generally based on approved strategic operating plans. The market approach is performed using the Guideline Public Companies (GPC) method which is based on earnings multiple data. We perform a reconciliation between our market capitalization and our estimate of the aggregate fair value of the reporting units, including consideration of a control premium.

We performed our annual impairment assessment of goodwill during the fourth quarter of 2017, which did not indicate an impairment existed. The reporting unit with the lowest percentage by which the fair value exceeded the carrying value was the Hardware reporting unit, where the excess of fair value over carrying value was approximately 20%. We are in the process of identifying initiatives to accelerate our transformation to improve profitability in our Hardware segment through optimizing our production, sourcing and supply chain strategy.

Valuation of Long-lived Assets and Amortizable Other Intangible Assets We perform impairment tests for our long-lived assets if an event or circumstance indicates that the carrying amount of our long-lived assets may not be recoverable. In response to changes in industry and market conditions, we may also strategically realign our resources and consider restructuring, disposing of, or otherwise exiting businesses. Such activities could result in impairment of our long-lived assets or other intangible assets. We also are subject to the possibility of impairment of long-lived assets arising in the ordinary course of business. We consider the likelihood of impairment if certain events occur indicating that the carrying value of the long-lived assets may be impaired and we may recognize impairment if the carrying amount of a long-lived asset or intangible asset is not recoverable from its undiscounted cash flows. Impairment is measured as the difference between the carrying amount and the fair value of the asset. We use both the income approach and market approach to estimate fair value. Our estimates of fair value are subject to a high degree of judgment since they include a long-term forecast of future operations. Accordingly, any value ultimately derived from our long-lived assets may differ from our estimate of fair value.

Pension, Postretirement and Postemployment Benefits We sponsor domestic and foreign defined benefit pension and postemployment plans as well as domestic postretirement plans. As a result, we have significant pension, postretirement and postemployment benefit costs, which are developed from actuarial valuations. Actuarial assumptions attempt to anticipate future events and are used in calculating the expense and liability relating to these plans. These factors include assumptions we make about interest rates, expected investment return on plan assets, rate of increase in healthcare costs, total and involuntary turnover rates, and rates of future compensation increases. In addition, our actuarial consultants advise us about subjective factors such as withdrawal rates and mortality rates to use in our valuations. We generally review and update these assumptions on an annual basis at the beginning of each fiscal year. We are required to consider current market conditions, including changes in interest rates, in making these assumptions. The actuarial assumptions that we use may differ materially from actual results due to changing market and economic conditions, higher or lower withdrawal rates, or longer or shorter life spans of participants. These differences may result in a significant impact to the amount of pension, postretirement or postemployment benefits expense we have recorded or may record. Ongoing pension, postemployment and postretirement expense impacts all of our segments. Pension mark-to-market adjustments, settlements, curtailments and special termination benefits are excluded from our segment results as those items are not included in the evaluation of segment performance. See Note 12, "Segment Information and Concentrations," in the Notes to Consolidated Financial Statements in Item 8 of Part II of this Report for a reconciliation of our segment results to income from operations.

The key assumptions used in developing our 2017 expense were discount rates of 3.4% for our U.S. pension plan and 3.2% for our postretirement plan, and an expected return on assets assumption of 3.5% for our U.S. pension plan in 2017. The U.S. plan represented 60% of the pension obligation and 100% of the postretirement medical plan obligation as of December 31, 2017. Holding all other assumptions constant, a 0.25% change in the discount rate used for the U.S. plan would have increased or decreased 2017 ongoing pension expense by approximately \$3 million and would have had an immaterial impact on 2017 postretirement income. A 0.25% change in the expected rate of return on plan assets assumption for the U.S. pension plan would have increased or decreased 2017 ongoing pension expense by approximately \$4 million. Our expected return on plan assets has historically been and will likely continue to be material to net income. For 2018, we intend to use discount rates of 3.2% and 3.1% in determining the 2018 U.S. pension and postretirement expense, respectively. We intend to use an expected rate of return on assets assumption of 3.1% for the U.S. pension plan.

Effective January 1, 2017, we changed the method used to estimate the service and interest components of net periodic benefit cost for our significant pension plans where yield curves are available. Previously, we estimated such cost components utilizing a single weighted-average discount rate derived from the yield curve used to measure the pension benefit obligation. The new methodology utilizes a full yield curve approach by applying the specific spot rates along the yield curve used in the determination of the pension benefit obligation to their underlying projected cash flows and provides a more precise measurement of service and interest costs by improving the correlation between projected cash flows and their corresponding spot rates. This change does not affect the measurement of our total benefit obligation and is applied prospectively as a change in estimate.

We recognize additional changes in the fair value of plan assets and net actuarial gains or losses of our pension plans upon remeasurement, which occurs at least annually in the fourth quarter of each year. The remaining components of pension expense, primarily net service cost, interest cost, and the expected return on plan assets, are recorded on a quarterly basis as ongoing pension expense. While it is required that we review our actuarial assumptions each year at the measurement date, we generally do not change them between measurement dates. We use a measurement date of December 31 for all of our plans. Changes in assumptions or asset values may have a significant effect on the annual measurement of expense or income in the fourth quarter.

The most significant assumption used in developing our 2018 postemployment plan expense is the assumed rate of involuntary turnover of 4.8%. The involuntary turnover rate is based on historical trends and projections of involuntary turnover in the future. A 0.25% change in the rate of involuntary turnover would have increased or decreased 2017 expense by approximately \$2 million. The sensitivity

of the assumptions described above is specific to each individual plan and not to our pension, postretirement and postemployment plans in the aggregate.

Environmental and Legal Contingencies Each quarter, we review the status of each claim and legal proceeding and assess our potential financial exposure. If the potential loss from any claim or legal proceeding would be material and is considered probable and the amount can be reasonably estimated, we accrue a liability for the estimated loss. To the extent that the amount of such a probable loss is estimable only by reference to a range of equally likely outcomes, and no amount within the range appears to be a better estimate than any other amount, we accrue the amount at the low end of the range. Because of uncertainties related to these matters, the use of estimates, assumptions and judgments, and external factors beyond our control, accruals are based on the best information available at the time. As additional information becomes available, we reassess the potential liability related to our pending claims and litigation and may revise our estimates. Such revisions in the estimates of the potential liabilities could have a material impact on our results of operations and financial position. When insurance carriers or third parties have agreed to pay any amounts related to costs, and we believe that it is probable that we can collect such amounts, those amounts are reflected as receivables in our Consolidated Balance Sheet.

The most significant legal contingencies impacting our Company relates to the Fox River and Kalamazoo River matters, which are further described in detail in Note 9, "Commitments and Contingencies" in the Notes to Consolidated Financial Statements in Item 8 of Part II of this Report. NCR has been identified as a potentially responsible party (PRP) at both sites.

As described below and in Note 9, "Commitments and Contingencies" in the Notes to Consolidated Financial Statements in Item 8 of Part II of this Report, while substantial progress has been made in the Fox River clean-up including a consent decree that establishes the general limits on NCR's liability therefor (it is subject to appeal), and while significant litigation activities have taken place with respect to the Kalamazoo River, the extent of our potential liabilities continues to be subject to significant uncertainties described below.

Our net reserve for the Fox River matter as of December 31, 2017 was approximately \$35 million as further discussed in Note 9, "Commitments and Contingencies" in the Notes to Consolidated Financial Statements in Item 8 of Part II of this Report. The Company regularly re-evaluates the assumptions used in determining the appropriate reserve for the Fox River matter as additional information becomes available and, when warranted, makes appropriate adjustments.

Income Taxes We recognize deferred tax assets and liabilities based on the differences between the financial statement carrying amounts and the tax basis of assets and liabilities. The deferred tax assets and liabilities are determined based on the enacted tax rates expected to apply in the periods in which the deferred tax assets or liabilities are anticipated to be settled or realized.

We regularly review our deferred tax assets for recoverability and establish a valuation allowance if it is more likely than not that some portion or all of a deferred tax asset will not be realized. The determination as to whether a deferred tax asset will be realized is made on a jurisdictional basis and is based on the evaluation of positive and negative evidence. This evidence includes historical taxable income, projected future taxable income, the expected timing of the reversal of existing temporary differences and the implementation of tax planning strategies. Projected future taxable income is based on our expected results and assumptions as to the jurisdiction in which the income will be earned. The expected timing of the reversals of existing temporary differences is based on current tax law and our tax methods of accounting. As a result of this determination, we had valuation allowances of \$415 million as of December 31, 2017 and \$445 million as of December 31, 2016, related to certain deferred income tax assets, primarily tax loss carryforwards, in jurisdictions where there is uncertainty as to the ultimate realization of a benefit from those tax assets.

If we are unable to generate sufficient future taxable income, or if there is a material change in the actual effective tax rates or the time period within which the underlying temporary differences become taxable or deductible, or if the tax laws change unfavorably, then we could be required to increase our valuation allowance against our deferred tax assets, resulting in an increase in our effective tax rate.

The Tax Cuts and Jobs Act of 2017 ("U.S. Tax Reform") was enacted in December 2017. The legislation significantly changes U.S. tax law by, among other things, lowering U.S. corporate income tax rates, implementing a territorial tax system and imposing a one-time tax on deemed repatriated earnings of foreign subsidiaries. The legislation reduces the U.S. corporate income tax rate from 35% to 21%, effective January 1, 2018. The SEC staff issued guidance to address the application of U.S. GAAP in situations when a registrant does not have the necessary information available, prepared, or analyzed (including computations) in reasonable detail to complete the accounting for certain income tax effects of U.S. Tax Reform and allows the registrant to record provisional amounts during a measurement period not to extend beyond one year of the enactment date. We have recognized the provisional impacts related to the one-time repatriation tax and remeasurement of deferred tax balances and included these estimates in our consolidated financial statements for the year ended December 31, 2017. The ultimate impact may materially differ from these provisional amounts, due to, among other things, additional analysis, changes in interpretations and assumptions we have made, additional regulatory guidance that may be issued, and actions we may take as a result of U.S. Tax Reform. In addition, foreign governments may enact tax laws in response

to the U.S. legislation that could result in further changes to global taxation and materially affect our financial position and results of operations.

The Company recognizes the tax benefit from an uncertain tax position 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 consolidated financial statements from such a position are measured based on the largest benefit that has a greater than fifty percent likelihood of being realized upon settlement. Interest and penalties related to uncertain tax positions are recognized as part of the provision for income taxes and are accrued beginning in the period that such interest and penalties would be applicable under relevant tax law until such time that the related tax benefits are recognized.

The provision for income taxes may change period-to-period based on non-recurring events, such as the settlement of income tax audits and changes in tax laws, as well as recurring factors including the geographic mix of income before taxes, state and local taxes and the effects of various global income tax strategies. We maintain certain strategic management and operational activities in overseas subsidiaries and our foreign earnings are taxed at rates that are generally lower than in the United States. As of December 31, 2017, we did not provide for U.S. federal income taxes or foreign withholding taxes on approximately \$2.5 billion of undistributed earnings of our foreign subsidiaries as such earnings are expected to be reinvested indefinitely unless it is determined that future repatriation would give rise to little or no net tax costs.

Refer to Note 6, "Income Taxes" in the Notes to Consolidated Financial Statements in Item 8 of Part II of this Report for disclosures related to foreign and domestic pretax income, foreign and domestic income tax (benefit) expense and the effect foreign taxes have on our overall effective tax rate.

Stock-based Compensation We measure compensation cost for stock awards at fair value and recognize compensation expense over the service period for which awards are expected to vest. We utilize the Black-Scholes option pricing model to estimate the fair value of options at the date of grant, which requires the input of highly subjective assumptions, including expected volatility and expected holding period. We estimate forfeitures for awards granted which are not expected to vest. The estimation of stock awards that will ultimately vest requires judgment, and to the extent that actual results or updated estimates differ from our current estimates, such amounts will be recorded as a cumulative adjustment in the period in which estimates are revised. We consider many factors when estimating expected forfeitures, including types of awards and historical experience. Actual results and future changes in estimates may differ from our current estimates.

We have performance-based awards that vest only if specific performance conditions are satisfied, typically at the end of a multi-year performance period, and the service requirement is fulfilled. The number of shares that will be earned can vary based on actual performance. No shares will vest if the objectives are not met, and in the event the objectives are exceeded, additional shares will vest up to a maximum amount. The cost of these awards is expensed over the service period based upon management's estimates of achievement against the performance criteria. Because the actual number of shares to be awarded is not known until the end of the performance period, the actual compensation expense related to these awards could differ from our current expectations.

We also have market-based awards and the cost of the awards is recognized as the requisite service is rendered by the employees, regardless of when, if ever, the market-based performance conditions are satisfied. The fair value of market-based awards is based on the Monte Carlo simulation model. Assumptions and estimates utilized in the calculation of the fair value of the market-based awards include the risk-free interest rate, dividend yield, expected volatility based on the historical volatility of publicly traded peer companies and remaining performance period of the award. The market-based awards vest and result in the issuance of common stock based upon the recipient's continuing employment and the achievement of targeted stock prices for a specified period of time noted in the award agreement.

RECENTLY ISSUED ACCOUNTING PRONOUNCEMENTS

A discussion of recently issued accounting pronouncements is described in Note 1, "Basis of Presentation and Significant Accounting Policies" of the Notes to Consolidated Financial Statements in Item 8 of Part II of this Report, and we incorporate by reference such discussion in this MD&A.

Item 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Market Risk

We are exposed to market risks primarily from changes in foreign currency exchange rates and interest rates. It is our policy to manage our foreign exchange exposure and debt structure in order to manage capital costs, control financial risks and maintain financial

flexibility over the long term. In managing market risks, we employ derivatives according to documented policies and procedures, including foreign currency contracts and interest rate swaps. We do not use derivatives for trading or speculative purposes.

Foreign Exchange Risk

Since a substantial portion of our operations and revenue occur outside the U.S., and in currencies other than the U.S. Dollar, our results can be significantly impacted by changes in foreign currency exchange rates. We have exposure to approximately 50 functional currencies and are exposed to foreign currency exchange risk with respect to our sales, profits and assets and liabilities denominated in currencies other than the U.S. Dollar. Although we use financial instruments to hedge certain foreign currency risks, we are not fully protected against foreign currency fluctuations and our reported results of operations could be affected by changes in foreign currency exchange rates. To manage our exposures and mitigate the impact of currency fluctuations on the operations of our foreign subsidiaries, we hedge our main transactional exposures through the use of foreign exchange forward and option contracts. These foreign exchange contracts are designated as highly effective cash flow hedges. This is primarily done through the hedging of foreign currency denominated inter-company inventory purchases by the marketing units. All of these transactions are forecasted. We also use derivatives not designated as hedging instruments consisting primarily of forward contracts to hedge foreign currency denominated balance sheet exposures. For these derivatives we recognize gains and losses in the same period as the remeasurement losses and gains of the related foreign currency-denominated exposures.

We utilize non-exchange traded financial instruments, such as foreign exchange forward and option contracts, that we purchase exclusively from highly rated financial institutions. We record these contracts on our balance sheet at fair market value based upon market price quotations from the financial institutions. We do not enter into non-exchange traded contracts that require the use of fair value estimation techniques, but if we did, they could have a material impact on our financial results.

For purposes of analyzing potential risk, we use sensitivity analysis to quantify potential impacts that market rate changes may have on the fair values of our hedge portfolio related to firmly committed or forecasted transactions. The sensitivity analysis represents the hypothetical changes in value of the hedge position and does not reflect the related gain or loss on the forecasted underlying transaction. A 10% appreciation or depreciation in the value of the U.S. Dollar against foreign currencies from the prevailing market rates would have resulted in a corresponding increase or decrease of \$23 million as of December 31, 2017 in the fair value of the hedge portfolio. The Company expects that any increase or decrease in the fair value of the portfolio would be substantially offset by increases or decreases in the underlying exposures being hedged.

The U.S. Dollar was slightly weaker in 2017 compared to 2016 based on comparable weighted averages for our functional currencies. This had no impact on 2017 revenue versus 2016 revenue. This excludes the effects of our hedging activities and, therefore, does not reflect the actual impact of fluctuations in exchange rates on our operating income.

Interest Rate Risk

We are subject to interest rate risk principally in relation to variable-rate debt. Approximately 73% of our borrowings were on a fixed rate basis as of December 31, 2017. The increase in pre-tax interest expense for the twelve months ended December 31, 2017 from a hypothetical 100 basis point increase in variable interest rates would be approximately \$11 million.

Concentrations of Credit Risk

We are potentially subject to concentrations of credit risk on accounts receivable and financial instruments, such as hedging instruments and cash and cash equivalents. Credit risk includes the risk of nonperformance by counterparties. The maximum potential loss may exceed the amount recognized on the balance sheet. Exposure to credit risk is managed through credit approvals, credit limits, selecting major international financial institutions as counterparties to hedging transactions and monitoring procedures. Our business often involves large transactions with customers for which we do not require collateral. If one or more of those customers were to default in its obligations under applicable contractual arrangements, we could be exposed to potentially significant losses. Moreover, a prolonged downturn in the global economy could have an adverse impact on the ability of our customers to pay their obligations on a timely basis. We believe that the reserves for potential losses are adequate. As of December 31, 2017, we did not have any significant concentration of credit risk related to financial instruments.

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Item 8. FINANCIAL STATEMENTS AND SUPPLEMENTAL DATA

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Stockholders of NCR Corporation

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the consolidated financial statements, including the related notes, as listed in the index appearing under Item 15(a)(1), and the financial statement schedule listed in the index appearing under Item 15(a)(2), of NCR Corporation and its subsidiaries (the "Company") (collectively referred to as the "consolidated financial statements"). We also have audited the Company's internal control over financial reporting as of December 31, 2017, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2017 and December 31, 2016, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2017 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2017, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the COSO.

Change in Accounting Principle

As discussed in Note 1 to the consolidated financial statements, the Company changed the manner in which it accounts for employee share-based payments in 2017.

Basis for Opinions

The Company's management is responsible for these consolidated financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in Management's Report on Internal Control over Financial Reporting appearing under Item 9A. Our responsibility is to express opinions on the Company's consolidated financial statements and on the Company's internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) ("PCAOB") and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

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

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

Definition and Limitations of Internal Control over Financial Reporting

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

prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

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

/s/ PricewaterhouseCoopers LLP

Atlanta, Georgia

February 26, 2018

We have served as the Company's auditor since 1993.

NCR Corporation
Consolidated Statements of Operations

For the years ended December 31, (in millions, except per share amounts)	2017	2016	2015
Product revenue	\$ 2,579	\$ 2,737	\$ 2,711
Service revenue	3,937	3,806	3,662
Total revenue	6,516	6,543	6,373
Cost of products	2,026	2,102	2,072
Cost of services	2,626	2,659	2,832
Selling, general and administrative expenses	932	926	1,042
Research and development expenses	256	242	230
Restructuring-related charges	—	15	62
Total operating expenses	5,840	5,944	6,238
Income from operations	676	599	135
Interest expense	(163)	(170)	(173)
Other (expense), net	(31)	(50)	(57)
Income (loss) from continuing operations before income taxes	482	379	(95)
Income tax expense	242	92	55
Income (loss) from continuing operations	240	287	(150)
Loss from discontinued operations, net of tax	(5)	(13)	(24)
Net income (loss)	235	274	(174)
Net income attributable to noncontrolling interests	3	4	4
Net income (loss) attributable to NCR	\$ 232	\$ 270	\$ (178)
Amounts attributable to NCR common stockholders:			
Income (loss) from continuing operations	\$ 237	\$ 283	\$ (154)
Series A convertible preferred stock dividends	(47)	(49)	(4)
Deemed dividend on modification of Series A convertible preferred stock	(4)	—	—
Deemed dividend on Series A convertible preferred stock related to redemption	(58)	—	—
Income (loss) from continuing operations attributable to NCR	128	234	(158)
Loss from discontinued operations, net of tax	(5)	(13)	(24)
Net income (loss) attributable to NCR common stockholders	\$ 123	\$ 221	\$ (182)
Income (loss) per share attributable to NCR common stockholders:			
Income (loss) per common share from continuing operations			
Basic	\$ 1.05	\$ 1.86	\$ (0.94)
Diluted	\$ 1.01	\$ 1.80	\$ (0.94)
Net income (loss) per common share			
Basic	\$ 1.01	\$ 1.76	\$ (1.09)
Diluted	\$ 0.97	\$ 1.71	\$ (1.09)
Weighted average common shares outstanding			
Basic	121.9	125.6	167.6
Diluted (continuing operations)	127.0	157.4	167.6
Diluted (net income)	127.0	129.2	167.6

The accompanying notes are an integral part of the Consolidated Financial Statements.

NCR Corporation
Consolidated Statements of Comprehensive Income

For the years ended December 31 (in millions)	2017	2016	2015
Net income (loss)	\$ 235	\$ 274	\$ (174)
Other comprehensive income (loss):			
Currency translation adjustments			
Currency translation adjustments	39	(57)	(50)
Derivatives			
Unrealized gain (loss) on derivatives	(16)	19	10
Gains on derivatives arising during the period	(1)	(1)	(7)
Less income tax benefit (expense)	3	(4)	(1)
Employee benefit plans			
Prior service benefit	—	—	9
Amortization of prior service cost	(11)	(19)	(21)
Net (loss) gain arising during the period	(13)	(1)	43
Amortization of actuarial (loss) gain	(2)	(2)	2
Less income tax benefit (expense)	5	5	(2)
Other comprehensive income (loss)	4	(60)	(17)
Total comprehensive income (loss)	239	214	(191)
Less comprehensive income attributable to noncontrolling interests:			
Net income	3	4	4
Currency translation adjustments	(2)	(5)	(3)
Amounts attributable to noncontrolling interests	1	(1)	1
Comprehensive income (loss) attributable to NCR common stockholders	\$ 238	\$ 215	\$ (192)

The accompanying notes are an integral part of the Consolidated Financial Statements.

NCR Corporation
Consolidated Balance Sheets

As of December 31 (in millions except per share amounts)	2017	2016
Assets		
Current assets		
Cash and cash equivalents	\$ 537	\$ 498
Accounts receivable, net	1,270	1,282
Inventories	780	699
Other current assets	243	278
Total current assets	2,830	2,757
Property, plant and equipment, net	341	287
Goodwill	2,741	2,727
Intangibles, net	578	672
Prepaid pension cost	118	94
Deferred income taxes	460	575
Other assets	586	561
Total assets	\$ 7,654	\$ 7,673
Liabilities and stockholders' equity		
Current liabilities		
Short-term borrowings	\$ 52	\$ 50
Accounts payable	762	781
Payroll and benefits liabilities	219	234
Deferred service revenue and customer deposits	458	468
Other current liabilities	398	432
Total current liabilities	1,889	1,965
Long-term debt	2,939	3,001
Pension and indemnity plan liabilities	798	739
Postretirement and postemployment benefits liabilities	133	127
Income tax accruals	148	142
Other liabilities	200	138
Total liabilities	6,107	6,112
Commitments and Contingencies (Note 9)		
Redeemable noncontrolling interest	15	15
Series A convertible preferred stock: par value \$0.01 per share, 3.0 shares authorized, 0.8 shares issued and outstanding as of December 31, 2017 and 0.9 shares issued and outstanding as of December 31, 2016; redemption amount and liquidation preference of \$825 and \$870 as of December 31, 2017 and 2016, respectively	810	847
Stockholders' equity		
NCR stockholders' equity		
Preferred stock: par value \$0.01 per share, 100.0 shares authorized, no shares issued and outstanding as of December 31, 2017 and 2016, respectively	—	—
Common stock: par value \$0.01 per share, 500.0 shares authorized, 122.0 and 124.6 shares issued and outstanding as of December 31, 2017 and 2016, respectively	1	1
Paid-in capital	60	32
Retained earnings	857	867
Accumulated other comprehensive loss	(199)	(205)
Total NCR stockholders' equity	719	695
Noncontrolling interests in subsidiaries	3	4
Total stockholders' equity	722	699
Total liabilities and stockholders' equity	\$ 7,654	\$ 7,673

The accompanying notes are an integral part of the Consolidated Financial Statements.

NCR Corporation
Consolidated Statements of Cash Flows

For the years ended December 31 (in millions)	2017	2016	2015
Operating activities			
Net income (loss)	\$ 235	\$ 274	\$ (174)
Adjustments to reconcile net income (loss) to net cash provided by operating activities:			
Loss from discontinued operations	5	13	24
Depreciation and amortization	354	344	308
Stock-based compensation expense	77	61	42
Deferred income taxes	173	10	24
Gain on sale of property, plant and equipment and other assets	(3)	—	(2)
Loss on divestiture	—	2	—
Impairment of long-lived and other assets	1	2	63
Changes in assets and liabilities:			
Receivables	29	(89)	28
Inventories	(68)	(86)	(46)
Current payables and accrued expenses	(78)	216	8
Deferred service revenue and customer deposits	10	88	19
Employee benefit plans	(4)	33	384
Other assets and liabilities	24	26	3
Net cash provided by operating activities	755	894	681
Investing activities			
Expenditures for property, plant and equipment	(128)	(73)	(79)
Proceeds from sales of property, plant and equipment	6	—	19
Additions to capitalized software	(166)	(154)	(150)
Business acquisitions, net	(8)	—	—
Proceeds from divestiture	3	47	—
Other investing activities, net	3	(9)	1
Net cash used in investing activities	(290)	(189)	(209)
Financing activities			
Short term borrowings, net	(4)	(8)	8
Payments on term credit facilities	(61)	(97)	(383)
Payments on revolving credit facilities	(1,940)	(1,431)	(1,694)
Borrowings on revolving credit facilities	1,940	1,331	1,698
Debt issuance costs	—	(9)	—
Series A convertible preferred stock issuance, net of issuance costs of \$26 million	—	—	794
Tender offer, including costs of \$5 million	—	—	(1,005)
Repurchases of Company common stock	(350)	(250)	—
Tax withholding payments on behalf of employees	(31)	(16)	(16)
Proceeds from employee stock plans	15	15	15
Other financing activities	(3)	(2)	—
Net cash used in financing activities	(434)	(467)	(583)
Cash flows from discontinued operations			
Net cash used in discontinued operations operating activities	(8)	(39)	(43)
Effect of exchange rate changes on cash and cash equivalents	16	(29)	(29)
Increase (decrease) in cash and cash equivalents	39	170	(183)
Cash and cash equivalents at beginning of period	498	328	511
Cash and cash equivalents at end of period	\$ 537	\$ 498	\$ 328
Supplemental data			
Cash paid during the year for:			
Income taxes	\$ 98	\$ 66	\$ 60
Interest	\$ 159	\$ 155	\$ 163

The accompanying notes are an integral part of the Consolidated Financial Statements.

NCR Corporation
Consolidated Statements of Changes in Stockholders' Equity

in millions	NCR Stockholders						
	Common Stock		Paid-in Capital	Retained Earnings	Accumulated Other Comprehensive (Loss) Income	Non-Redeemable Noncontrolling Interests in Subsidiaries	Total
	Shares	Amount					
December 31, 2014	169	\$ 2	\$ 442	\$ 1,563	\$ (136)	\$ 12	\$ 1,883
Comprehensive income (loss):							
Net income (loss)	—	—	—	(178)	—	2	(176)
Other comprehensive income (loss)	—	—	—	—	(14)	(2)	(16)
Total comprehensive income (loss)	—	—	—	(178)	(14)	—	(192)
Employee stock purchase and stock compensation plans	1	—	50	—	—	—	50
Repurchase of Company Common Stock	(37)	(1)	(492)	(512)	—	—	(1,005)
Series A Convertible Preferred Stock dividends	—	—	—	(4)	—	—	(4)
Sale of noncontrolling interest	—	—	—	—	—	(6)	(6)
December 31, 2015	133	1	—	869	(150)	6	726
Comprehensive income (loss):							
Net income (loss)	—	—	—	270	—	2	272
Other comprehensive income (loss)	—	—	—	—	(55)	(2)	(57)
Total comprehensive income (loss)	—	—	—	270	(55)	—	215
Employee stock purchase and stock compensation plans	2	—	59	—	—	—	59
Dividend distribution to minority shareholder	—	—	—	—	—	(2)	(2)
Repurchase of Company common stock	(10)	—	(27)	(223)	—	—	(250)
Series A convertible preferred stock dividends	—	—	—	(49)	—	—	(49)
December 31, 2016	125	1	32	867	(205)	4	699
Comprehensive income (loss):							
Net income (loss)	—	—	—	232	—	3	235
Other comprehensive income (loss)	—	—	—	—	6	(2)	4
Total comprehensive income (loss)	—	—	—	232	6	1	239
Cumulative effect of a change in accounting principle related to employee share-based payments	—	—	—	39	—	—	39
Employee stock purchase and stock compensation plans	1	—	61	—	—	—	61
Dividend distribution to minority shareholder	—	—	—	—	—	(2)	(2)
Repurchase of Company common stock	(7)	—	(178)	(172)	—	—	(350)
Series A convertible preferred stock dividends	—	—	—	(47)	—	—	(47)
Deemed dividend on modification of Series A Convertible Preferred Stock	—	—	—	(4)	—	—	(4)
Deemed dividend on redemption of Series A Convertible Preferred Stock	—	—	58	(58)	—	—	—
Redemption of Series A Convertible Preferred Stock	3	—	87	—	—	—	87
December 31, 2017	122	\$ 1	\$ 60	\$ 857	\$ (199)	\$ 3	\$ 722

The accompanying notes are an integral part of the Consolidated Financial Statements.

NCR Corporation
Notes to Consolidated Financial Statements

1. BASIS OF PRESENTATION AND SIGNIFICANT ACCOUNTING POLICIES

Description of Business NCR is a leading global provider of omni-channel technology solutions that enrich the interactions of businesses with their customers. Our solutions are designed to allow businesses in the financial services, retail, hospitality, travel and telecommunications and technology industries to deliver a rich, integrated and personalized experience to consumers across physical and digital commerce channels. Our offerings include a portfolio of omni-channel platform software and other software applications, industry-focused hardware and smart-edge devices including automated teller machines (ATMs), point of sale (POS) terminals and devices and self-service kiosks, and a complete suite of consulting, implementation, maintenance and managed services. We also resell third-party networking products and provide related service offerings in the telecommunications and technology sectors. Our solutions create value for our customers by increasing productivity allowing them to address consumer demand for convenience, value and individual service across different commerce channels.

Our solutions are based on a foundation of long-established industry knowledge and expertise, omni-channel platform and other software, industry-focused hardware and smart-edge devices and global implementation, consulting, maintenance and customer support services.

Use of Estimates The preparation of financial statements in accordance with generally accepted accounting principles in the United States (U.S. GAAP) requires management to make estimates and judgments that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the date of the financial statements, and revenue and expenses during the periods reported. Actual results could differ from those estimates.

Subsequent Events The Company evaluated subsequent events through the date that our Consolidated Financial Statements were issued. Except as described in Note 18, "Subsequent Events", no matters were identified that required adjustment of the Consolidated Financial Statements or additional disclosure.

Basis of Consolidation The consolidated financial statements include the accounts of NCR and its majority-owned subsidiaries. Long-term investments in affiliated companies in which NCR owns between 20% and 50%, and therefore, exercises significant influence, but which it does not control, are accounted for using the equity method. Investments in which NCR does not exercise significant influence (generally, when NCR has an investment of less than 20% and no significant influence, such as representation on the investee's board of directors) are accounted for using the cost method. All significant inter-company transactions and accounts have been eliminated. In addition, the Company is required to determine whether it is the primary beneficiary of economic income or losses that may be generated by variable interest entities in which the Company has such an interest. In circumstances where the Company determined it is the primary beneficiary, consolidation of that entity would be required. For the periods presented, no variable interest entities have been consolidated.

Reclassifications Certain prior-period amounts have been reclassified in the accompanying Consolidated Financial Statements and Notes thereto in order to conform to the current period presentation.

Revenue Recognition The Company records revenue, net of taxes, when it is realized, or realizable, and earned. The Company considers these criteria met when persuasive evidence of an arrangement exists, the products or services have been provided to the customer, the sales price is fixed or determinable, and collectability is reasonably assured. For product sales, delivery is deemed to have occurred when the customer has assumed risk of loss of the goods sold and all performance obligations are complete. For service sales, revenue is recognized as the services are provided or ratably over the service period, or, if applicable, after customer acceptance of the services.

NCR frequently enters into multiple-element arrangements with its customers including hardware, software, professional consulting services, transaction services and maintenance support services. For arrangements involving multiple deliverables, when deliverables include software and non-software products and services, NCR evaluates and separates each deliverable to determine whether it represents a separate unit of accounting based on the following criteria: (a) whether the delivered item has value to the customer on a stand-alone basis; and (b) if the contract includes a general right of return relative to the delivered item, whether delivery or performance of the undelivered items is considered probable and substantially in the control of NCR.

Consideration is allocated to each unit of accounting based on the units' relative selling prices. In such circumstances, the Company uses a hierarchy to determine the selling price to be used for allocating revenue to each deliverable: (i) vendor-specific objective evidence of selling price (VSOE); (ii) third-party evidence of selling price (TPE); and (iii) best estimate of selling price (BESP).

NCR Corporation
Notes to Consolidated Financial Statements-(Continued)

VSOE generally exists only when the Company sells the deliverable separately and is the price actually charged by the Company for that deliverable. VSOE is established for our software maintenance and software-related professional services. We use TPE to establish selling prices for our installation and transaction services. The Company uses BESP to allocate revenue when we are unable to establish VSOE or TPE of selling price. BESP is used for hardware maintenance and elements such as products that are not consistently priced within a narrow range. The Company determines BESP for a deliverable by considering multiple factors including product class, geography, average discount, and management's historical pricing practices. Amounts allocated to the delivered hardware and software elements are recognized at the time of sale, provided the other conditions for revenue recognition have been met. Amounts allocated to the undelivered maintenance and other service elements are recognized as the services are provided or on a straight-line basis over the service period. In certain instances, customer acceptance is required prior to the passage of title and risk of loss of the delivered products. In such cases, revenue is not recognized until the customer acceptance is obtained. Delivery and acceptance generally occur in the same reporting period.

In situations where NCR's solutions contain software that is more than incidental, revenue related to the software and software-related elements is recognized in accordance with authoritative guidance on software revenue recognition. For the software and software-related elements of such transactions, revenue is allocated based on the relative fair value of each element, and fair value is determined by VSOE. If the Company cannot objectively determine the fair value of any undelivered element included in such multiple-element arrangements, the Company defers revenue until all elements are delivered and services have been performed, or until fair value can objectively be determined for any remaining undelivered elements. When the fair value of a delivered element has not been established, but fair value evidence exists for the undelivered elements, the Company uses the residual method to recognize revenue. Under the residual method, the fair value of the undelivered elements is deferred and the remaining portion of the arrangement fee is allocated to the delivered elements and is recognized as revenue. If an arrangement includes software and services that involve significant production, modification or customization of the software, the services cannot be separated from the software. The Company accounts for these arrangements as a long-term contract.

For certain of NCR's long-term contracts, the Company utilizes a percentage-of-completion accounting method, which requires estimates of future revenue and costs over the full term of product and/or service delivery. Estimated losses, if any, on long-term projects are recognized as soon as such losses become known.

NCR's customers may request that delivery and passage of title and risk of loss occur on a bill and hold basis. For the years ended December 31, 2017, 2016, and 2015, the revenue recognized from bill and hold transactions approximated 1% of total revenue.

In addition to the standard product warranty, the Company periodically offers extended warranties to its customers in the form of product maintenance services. For contracts that are not separately priced but include product maintenance, the Company defers revenue at an amount based on the selling price, using objective and reliable evidence, and recognizes the deferred revenue over the service term. For separately priced product maintenance contracts, NCR defers the stated amount of the separately priced contract and recognizes the deferred revenue ratably over the service term.

Warranty and Sales Returns Provisions for product warranties and sales returns and allowances are recorded in the period in which NCR becomes obligated to honor the related right, which generally is the period in which the related product revenue is recognized. The Company accrues warranty reserves based upon historical factors such as labor rates, average repair time, travel time, number of service calls per machine and cost of replacement parts. When a sale is consummated, a warranty reserve is recorded based upon the estimated cost to provide the service over the warranty period. The Company accrues sales returns and allowances using percentages of revenue to reflect the Company's historical average of sales return claims.

Research and Development Costs Research and development costs primarily include payroll and benefit-related costs, contractor fees, facilities costs, infrastructure costs, and administrative expenses directly related to research and development support and are expensed as incurred, except certain software development costs are capitalized after technological feasibility of the software is established.

Advertising Advertising costs are recognized in selling, general and administrative expenses when incurred.

Shipping and Handling Costs related to shipping and handling are included in cost of products in the Consolidated Statements of Operations.

Stock Compensation Stock-based compensation represents the costs related to share-based awards granted to employees and non-employee directors. The Company's outstanding stock-based compensation awards are classified as equity. The Company measures stock-based compensation cost at the grant date, based on the estimated fair value of the award and recognizes the cost

NCR Corporation
Notes to Consolidated Financial Statements-(Continued)

over the requisite service period. See Note 7, "Stock Compensation Plans" for further information on NCR's stock-based compensation plans.

Income Taxes Income tax expense is provided based on income before income taxes. Deferred income taxes reflect the impact of temporary differences between assets and liabilities recognized for financial reporting purposes and such amounts recognized for tax purposes. These deferred taxes are determined based on the enacted tax rates expected to apply in the periods in which the deferred assets or liabilities are expected to be settled or realized. NCR records valuation allowances related to its deferred income tax assets when it is more likely than not that some portion or all of the deferred income tax assets will not be realized.

The Company recognizes the tax benefit from an uncertain tax position 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 consolidated financial statements from such a position are measured based on the largest benefit that has a greater than fifty percent likelihood of being sustained upon examination by authorities. Interest and penalties related to uncertain tax positions are recognized as part of the provision for income taxes and are accrued beginning in the period that such interest and penalties would be applicable under relevant tax law and until such time that the related tax benefits are recognized.

On December 22, 2017, the U.S. enacted the Tax Cuts and Jobs Act of 2017 ("U.S. Tax Reform") that instituted fundamental changes to the taxation of multinational corporations. See Note 6, "Income Taxes" for additional information on the Company's assessment and related impacts.

Earnings Per Share Basic earnings per share (EPS) is calculated by dividing net income, less any dividends, accretion or decrction, redemption or induced conversion on our Series A Convertible Preferred Stock, by the weighted average number of shares outstanding during the reported period.

In computing diluted EPS, we adjust the numerator used in the basic EPS computation, subject to anti-dilution requirements, to add back the dividends (declared or cumulative undeclared) applicable to the Series A Convertible Preferred Stock. Such add-back would also include any adjustments to equity in the period to accrete the Series A Convertible Preferred Stock to its redemption price, or recorded upon a redemption or induced conversion. We adjust the denominator used in the basic EPS computation, subject to anti-dilution requirements, to include the dilution from potential shares resulting from the issuance of the Series A Convertible Preferred Stock, restricted stock units, and stock options.

The holders of Series A Convertible Preferred Stock and unvested restricted stock units do not have nonforfeitable rights to common stock dividends or common stock dividend equivalents. Accordingly, the Series A Convertible Preferred Stock and unvested restricted stock units do not qualify as participating securities. See Note 7, "Stock Compensation Plans" for share information on NCR's stock compensation plans.

NCR Corporation
Notes to Consolidated Financial Statements-(Continued)

The components of basic earnings (loss) per share are as follows:

In millions, except per share amounts	Twelve months ended December 31		
	2017	2016	2015
Income (loss) from continuing operations	\$ 237	\$ 283	\$ (154)
Series A convertible preferred stock dividends	(47)	(49)	(4)
Deemed dividend on modification of Series A Convertible Preferred Stock	(4)	—	—
Deemed dividend on Series A Convertible Preferred Stock redemption	(58)	—	—
Net income (loss) from continuing operations attributable to NCR common stockholders	128	234	(158)
Loss from discontinued operations, net of tax	(5)	(13)	(24)
Net income (loss) attributable to NCR common stockholders	\$ 123	\$ 221	\$ (182)
Denominator			
Basic weighted average number of shares outstanding	121.9	125.6	167.6
Basic earnings (loss) per share:			
From continuing operations	\$ 1.05	\$ 1.86	\$ (0.94)
From discontinued operations	(0.04)	(0.10)	(0.15)
Total basic earnings (loss) per share	\$ 1.01	\$ 1.76	\$ (1.09)

NCR Corporation
Notes to Consolidated Financial Statements-(Continued)

The components of diluted earnings (loss) per share are as follows:

In millions, except per share amounts	Twelve months ended December 31		
	2017	2016	2015
Income (loss) from continuing operations	\$ 237	\$ 283	\$ (154)
Series A convertible preferred stock dividends	(47)	—	(4)
Deemed dividend on modification of Series A Convertible Preferred Stock	(4)	—	—
Deemed dividend on Series A Convertible Preferred Stock redemption	(58)	—	—
Net income (loss) from continuing operations attributable to NCR common stockholders	128	283	(158)
Loss from discontinued operations, net of tax	(5)	(13)	(24)
Series A convertible preferred stock dividends	—	(49)	—
Net income (loss) attributable to NCR common stockholders	\$ 123	\$ 221	\$ (182)
Basic weighted average number of shares outstanding	121.9	125.6	167.6
Dilutive effect of as-if Series A Convertible Preferred Stock	—	28.2	—
Dilutive effect of employee stock options and restricted stock units	5.1	3.6	—
Denominator - from continuing operations	127.0	157.4	167.6
Basic weighted average number of shares outstanding	121.9	125.6	167.6
Dilutive effect of employee stock options and restricted stock units	5.1	3.6	—
Denominator - total	127.0	129.2	167.6
Diluted earnings (loss) per share:			
From continuing operations	\$ 1.01	\$ 1.80	\$ (0.94)
From discontinued operations	(0.04)	(0.10)	(0.15)
Total diluted earnings (loss) per share	\$ 0.97	\$ 1.71	\$ (1.09)

For 2017, diluted earnings (loss) per share from continuing operations and total diluted earnings (loss) per share, it is more dilutive to assume the Series A Convertible Preferred Stock is not converted to common stock and therefore weighted average outstanding shares of common stock are not adjusted by the as-if converted Series A Convertible Preferred Stock shown above because the effect would be anti-dilutive. If the as-if converted Series A Convertible Preferred Stock had been dilutive, approximately 27.4 million additional shares, considering the existing and redeemed shares, would have been included in the diluted weighted average number of shares outstanding for the year ended December 31, 2017. For 2017, there were 0.8 million weighted anti-dilutive restricted stock units outstanding.

For 2016, diluted earnings (loss) per share from continuing operations, it is more dilutive to assume the Series A Convertible Preferred Stock is converted to common stock and therefore weighted average outstanding shares of common stock are adjusted by the as-if converted Series A Convertible Preferred Stock. For 2016, total diluted earnings (loss) per share, it is more dilutive to assume the Series A Convertible Preferred Stock is not converted to common stock and therefore weighted average outstanding shares of common stock are not adjusted by the as-if converted Series A Convertible Preferred Stock shown above because the effect would be anti-dilutive. Therefore, total diluted earnings (loss) per share less diluted earnings (loss) per share from continuing operations does not equal diluted earnings (loss) per share from discontinued operations. For 2016, there were 0.4 million weighted anti-dilutive restricted stock units outstanding.

For 2015, it is more dilutive to assume the Series A Convertible Preferred Stock is not converted to common stock and therefore weighted average outstanding shares of common stock are not adjusted by the as-if converted Series A Convertible Preferred Stock because the effect would be anti-dilutive. If the as-if converted Series A Convertible Preferred Stock had been dilutive, approximately 2.0 million additional shares would have been included in the diluted weighted average number of shares outstanding for the year ended December 31, 2015.

NCR Corporation
Notes to Consolidated Financial Statements-(Continued)

For 2015, due to the net loss attributable to NCR common stockholders, potential common shares that would cause dilution, such as the Series A Convertible Preferred Stock, restricted stock units and stock options, have been excluded from the diluted share count because their effect would have been anti-dilutive. For the year ended December 31, 2015, the fully diluted shares would have been 172.2 million shares.

Cash and Cash Equivalents All short-term, highly liquid investments having original maturities of three months or less, including time deposits, are considered to be cash equivalents.

Allowance for Doubtful Accounts NCR establishes provisions for doubtful accounts using percentages of accounts receivable balances to reflect historical average credit losses and specific provisions for known issues.

Inventories Inventories are stated at the lower of cost or net realizable value, using the average cost method. Cost includes materials, labor and manufacturing overhead related to the purchase and production of inventories. Service parts are included in inventories and include reworkable and non-reworkable service parts. The Company regularly reviews inventory quantities on hand, future purchase commitments with suppliers and the estimated utility of inventory. If the review indicates a reduction in utility below carrying value, inventory is reduced to a new cost basis. Excess and obsolete write-offs are established based on forecasted usage, orders, technological obsolescence and inventory aging.

Capitalized Software Certain direct development costs associated with internal-use software are capitalized within other assets and amortized over the estimated useful lives of the resulting software. NCR typically amortizes capitalized internal-use software on a straight-line basis over four to seven years beginning when the asset is substantially ready for use, as this is considered to approximate the usage pattern of the software. When it becomes probable that internal-use software being developed will not be completed or placed into service, the internal-use software is reported at the lower of the carrying amount or fair value.

Costs incurred for the development of software that will be sold, leased or otherwise marketed are capitalized when technological feasibility has been established. These costs are included within other assets and are amortized on a sum-of-the-years' digits or straight-line basis over the estimated useful lives ranging from three to five years, using the method that most closely approximates the sales pattern of the software. Amortization begins when the product is available for general release. Costs capitalized include direct labor and related overhead costs. Costs incurred prior to technological feasibility or after general release are expensed as incurred. NCR performs periodic reviews to ensure that unamortized program costs remain recoverable from future revenue. If future revenue does not support the unamortized program costs, the amount by which the unamortized capitalized cost of a software product exceeds the net realizable value is written off.

The following table identifies the activity relating to total capitalized software:

In millions	2017	2016	2015
Beginning balance as of January 1	\$ 345	\$ 311	\$ 257
Capitalization	166	154	150
Amortization	(145)	(118)	(80)
Impairment	—	(2)	(16)
Ending balance as of December 31	<u>\$ 366</u>	<u>\$ 345</u>	<u>\$ 311</u>

Goodwill and Other Intangible Assets Goodwill represents the excess of purchase price over the fair value of the net tangible and identifiable intangible assets of businesses acquired. Goodwill is tested at the reporting unit level for impairment on an annual basis during the fourth quarter or more frequently if certain events occur indicating that the carrying value of goodwill may be impaired. A significant amount of judgment is involved in determining if an indicator of impairment has occurred. Such indicators may include a decline in expected cash flows, a significant adverse change in legal factors or in the business climate, a decision to sell a business, unanticipated competition, or slower growth rates, among others.

In the evaluation of goodwill for impairment, we have the option to perform a qualitative assessment to determine whether further impairment testing is necessary or to perform a quantitative assessment by comparing the fair value of a reporting unit to its carrying amount, including goodwill. Under the qualitative assessment, an entity is not required to calculate the fair value of a reporting unit unless the entity determines that it is more likely than not that its fair value is less than its carrying amount. If under the quantitative assessment the fair value of a reporting unit is less than its carrying amount, then the amount of the impairment loss, if any, must be measured under step two of the impairment analysis. In step two of the analysis, we will record an impairment loss

NCR Corporation
Notes to Consolidated Financial Statements-(Continued)

equal to the excess of the carrying value of the reporting unit's goodwill over its implied fair value should such a circumstance arise. Fair values of the reporting units are estimated using a weighted methodology considering the output from both the income and market approaches. The income approach incorporates the use of discounted cash flow (DCF) analysis. A number of significant assumptions and estimates are involved in the application of the DCF model to forecast operating cash flows, including markets and market shares, sales volumes and prices, costs to produce, tax rates, capital spending, discount rate and working capital changes. Several of these assumptions vary among reporting units. The cash flow forecasts are generally based on approved strategic operating plans. The market approach is performed using the Guideline Public Companies (GPC) method which is based on earnings multiple data. We perform a reconciliation between our market capitalization and our estimate of the aggregate fair value of the reporting units, including consideration of a control premium. During the fourth quarter of each year presented, we performed our annual impairment assessment of goodwill which did not indicate that an impairment existed.

Acquired intangible assets other than goodwill are amortized over their weighted average amortization period unless they are determined to be indefinite. Acquired intangible assets are carried at cost, less accumulated amortization. For intangible assets purchased in a business combination, the estimated fair values of the assets received are used to establish the carrying value. The fair value of acquired intangible assets is determined using common techniques, and the Company employs assumptions developed using the perspective of a market participant.

Property, Plant and Equipment Property, plant and equipment and leasehold improvements are stated at cost less accumulated depreciation. Depreciation is computed over the estimated useful lives of the related assets primarily on a straight-line basis. Machinery and other equipment are depreciated over 3 to 20 years and buildings over 25 to 45 years. Leasehold improvements are depreciated over the life of the lease or the asset, whichever is shorter. Assets classified as held for sale are not depreciated. Upon retirement or disposition of property, plant and equipment, the related cost and accumulated depreciation or amortization are removed from the Company's accounts, and a gain or loss is recorded. Depreciation expense related to property, plant and equipment was \$86 million, \$90 million, and \$91 million for the years ended December 31, 2017, 2016, and 2015, respectively.

Valuation of Long-Lived Assets Long-lived assets such as property, plant and equipment and finite-lived intangible assets are reviewed for impairment when events or changes in circumstances indicate that the carrying amount of the assets may not be recoverable or in the period in which the held for sale criteria are met. For assets held and used, this analysis consists of comparing the asset's carrying value to the expected future cash flows to be generated from the asset on an undiscounted basis. If the carrying amount of the asset is determined not to be recoverable, a write-down to fair value is recorded. Fair values are determined based on quoted market values, discounted cash flows, or external appraisals, as applicable. Long-lived assets are reviewed for impairment at the individual asset or the asset group level for which the lowest level of independent cash flows can be identified. Refer to Note 3, "Goodwill and Purchased Intangible Assets" for further discussion.

Pension, Postretirement and Postemployment Benefits NCR has significant pension, postretirement and postemployment benefit costs, which are developed from actuarial valuations. Actuarial assumptions are established to anticipate future events and are used in calculating the expense and liabilities relating to these plans. These factors include assumptions the Company makes about interest rates, expected investment return on plan assets, rate of increase in healthcare costs, total and involuntary turnover rates, and rates of future compensation increases. In addition, NCR also uses subjective factors, such as withdrawal rates and mortality rates to develop the Company's valuations. NCR generally reviews and updates these assumptions on an annual basis. NCR is required to consider current market conditions, including changes in interest rates, in making these assumptions. The actuarial assumptions that NCR uses may differ materially from actual results due to changing market and economic conditions, higher or lower withdrawal rates, or longer or shorter life spans of participants. These differences may result in a significant impact to the amount of pension, postretirement or postemployment benefits expense, and the related assets and liabilities, the Company has recorded or may record.

Environmental and Legal Contingencies In the normal course of business, NCR is subject to various proceedings, lawsuits, claims and other matters, including, for example, those that relate to the environment and health and safety, labor and employment, employee benefits, import/export compliance, intellectual property, data privacy and security, product liability, commercial disputes and regulatory compliance, among others. Additionally, NCR is subject to diverse and complex laws, regulations, and standards including those relating to corporate governance, public disclosure and reporting, environmental safety and the discharge of materials into the environment, product safety, import and export compliance, data privacy and security, antitrust and competition, government contracting, anti-corruption, and labor and human resources, which are rapidly changing and subject to many possible changes in the future. Compliance with these laws and regulations, including changes in accounting standards, taxation requirements, and federal securities laws among others, may create a substantial burden on, and substantially increase the costs to NCR or could have an impact on NCR's future operating results. NCR believes that the amounts provided in its Consolidated Financial Statements are adequate in light of the probable and estimable liabilities. However, there can be no assurances that the actual amounts required to satisfy alleged liabilities from various lawsuits, claims, legal proceedings and other matters, including

NCR Corporation
Notes to Consolidated Financial Statements-(Continued)

the Fox River and Kalamazoo River environmental matters discussed in Note 9, "Commitments and Contingencies" and to comply with applicable laws and regulations, will not exceed the amounts reflected in NCR's Consolidated Financial Statements or will not have a material adverse effect on the Company's consolidated results of operations, financial condition or cash flows. Any costs that may be incurred in excess of those amounts provided as of December 31, 2017 cannot currently be reasonably determined or are not currently considered probable.

Legal fees and expenses related to loss contingencies are typically expensed as incurred, except for certain costs associated with NCR's environmental remediation obligations. Costs and fees associated with litigating the extent and type of required remedial actions and the allocation of remediation costs among potentially responsible parties are typically included in the measurement of the environmental remediation liabilities.

Leases The Company accounts for material escalation clauses, free or reduced rents and landlord incentives contained in operating type leases on a straight-line basis over the lease term, including any reasonably assured lease renewals. For leasehold improvements that are funded by the landlord, the Company records the incentive as deferred rent. The deferred rent is then amortized as reductions to lease expense over the lease term. For capital leases where NCR is the lessee, we record an amortizable debt and a related fixed asset in the Consolidated Balance Sheet.

Foreign Currency For many NCR international operations, the local currency is designated as the functional currency. Accordingly, assets and liabilities are translated into U.S. Dollars at year-end exchange rates, and revenue and expenses are translated at average exchange rates prevailing during the year. Currency translation adjustments from local functional currency countries resulting from fluctuations in exchange rates are recorded in other comprehensive income. Where the U.S. Dollar is the functional currency, remeasurement adjustments are recorded in other (expense), net.

Derivative Instruments In the normal course of business, NCR enters into various financial instruments, including derivative financial instruments. The Company accounts for derivatives as either assets or liabilities in the Consolidated Balance Sheets at fair value and recognizes the resulting gains or losses as adjustments to earnings or other comprehensive income. For derivative instruments that are designated and qualify as hedging instruments, the Company formally documents the relationship between hedging instruments and hedged items, as well as the risk management objective and strategy for undertaking various hedge transactions. Hedging activities are transacted only with highly rated institutions, reducing exposure to credit risk in the event of nonperformance. Additionally, the Company completes assessments related to the risk of counterparty nonperformance on a regular basis.

The accounting for changes in fair value of a derivative instrument depends on whether it has been designated and qualifies as part of a hedging relationship, and further, on the type of hedging relationship. For those derivative instruments that are designated and qualify as hedging instruments, the Company has designated the hedging instrument, based on the exposure being hedged, as a fair value hedge, a cash flow hedge or a hedge of a net investment in a foreign operation. For derivative instruments designated as fair value hedges, the effective portion of the hedge is recorded as an offset to the change in the fair value of the hedged item, and the ineffective portion of the hedge, if any, is recorded in the Consolidated Statement of Operations. For derivative instruments designated as cash flow hedges and determined to be highly effective, the gains or losses are deferred in other comprehensive income and recognized in the determination of income as adjustments of carrying amounts when the underlying hedged transaction is realized, canceled or otherwise terminated. When hedging certain foreign currency transactions of a long-term investment nature (net investments in foreign operations) gains and losses are recorded in the currency translation adjustment component of accumulated other comprehensive loss. Gains and losses on foreign exchange contracts that are not used to hedge currency transactions of a long-term investment nature, or that are not designated as cash flow or fair value hedges, are recognized in other (expense), net as exchange rates change.

Fair Value of Assets and Liabilities Fair value is defined as an exit price, representing an amount that would be received to sell an asset or the amount paid to transfer a liability in an orderly transaction between market participants at the measurement date. As such, fair value is a market-based measurement determined based on assumptions that market participants would use in pricing an asset or liability. As a basis for considering such assumptions, the guidance prioritizes the inputs used to measure fair value into the following three-tier fair value hierarchy:

- Level 1: Unadjusted quoted prices in active markets for identical assets or liabilities
- Level 2: Unadjusted quoted prices in active markets for similar assets or liabilities, unadjusted quoted prices for identical or similar assets or liabilities in markets that are not active or inputs, other than quoted prices in active markets, that are observable either directly or indirectly
- Level 3: Unobservable inputs for which there is little or no market data

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Notes to Consolidated Financial Statements-(Continued)

Assets and liabilities are classified based on the lowest level of input that is significant to the fair value measurements. The Company reviews the fair value hierarchy classification on a quarterly basis. Changes to the observability of valuation inputs may result in a reclassification of levels for certain securities within the fair value hierarchy.

NCR measures its financial assets and financial liabilities at fair value based on one or more of the following three valuation techniques:

- Market approach: Prices and other relevant information generated by market transactions involving identical or comparable assets or liabilities.
- Cost approach: Amount that would be required to replace the service capacity of an asset (replacement cost).
- Income approach: Techniques to convert future amounts to a single present amount based upon market expectations (including present value techniques, option pricing and excess earnings models).

We regularly review our investments to determine whether a decline in fair value, if any, below the cost basis is other than temporary. If the decline in the fair value is determined to be other than temporary, the cost basis of the security is written down to fair value and the amount of the write-down is included in the Consolidated Statement of Operations. For qualifying investments in debt or equity securities, a temporary impairment charge would be recognized in other comprehensive income (loss).

Redeemable Noncontrolling Interests and Related Party Transactions In 2011, we sold a 49% voting equity interest in NCR Brasil - Indústria de Equipamentos para Automação S.A., a subsidiary of the Company (NCR Manaus) to Scopus Tecnologia Ltda. (Scopus). Under our investment agreements with Scopus, Scopus may elect to sell its shares in NCR Manaus at the then-current fair value to a third party that is not a competitor of NCR. If Scopus is unable to locate a buyer, Scopus may require NCR to purchase its noncontrolling interest for its then-current fair value.

We recognized \$79 million, \$82 million and \$59 million in revenue related to Banco Bradesco SA (Bradesco), the parent of Scopus, for the years ended December 31, 2017, 2016 and 2015, respectively, and we had \$18 million and \$10 million in receivables outstanding from Bradesco as of December 31, 2017 and 2016.

Recent Accounting Pronouncements

Issued

In May 2014, the Financial Accounting Standards Board (FASB) issued a new revenue recognition standard that will supersede current revenue recognition guidance. The core principle of the guidance is that an entity should recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. The standard is effective for the first interim period within annual periods beginning after December 15, 2017, which for NCR is the first quarter of 2018. We will adopt the standard using a modified retrospective approach with an adjustment to retained earnings for the cumulative effect of applying the standard to open contracts as of the adoption date.

The Company has determined our new accounting policies related to the new standard and continues to evaluate the impact on the consolidated financial statements and related disclosures. We continue to believe adoption of the standard will have the following impacts:

- The new standard removes the current limitation on contingent revenue, and we expect that this may result in revenue being recognized earlier for certain contracts containing multiple performance obligations.
- The new standard modifies the accounting for the costs to obtain a contract, such as the capitalization and deferral of commission expenses, and we expect that this will be a change to our current policy to expense as incurred for certain recurring revenue streams.

We have designed, and are in the process of implementing, appropriate changes to our business processes, systems and controls to support revenue recognition and the expanded qualitative and quantitative disclosures required under the new standard.

In February 2016, the FASB issued a new leasing standard that will supersede current guidance related to accounting for leases. The guidance is intended to increase transparency and comparability among organizations by recognizing lease assets and lease liabilities on the balance sheet and disclosing key information about leasing arrangements. The standard will be effective for the first interim period within annual periods beginning after December 15, 2018, with early adoption permitted. The standard is

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Notes to Consolidated Financial Statements-(Continued)

required to be adopted using the modified retrospective approach. We are in the process of identifying and designing appropriate changes to our business processes, systems and controls to support the new standard, and we are continuing to evaluate the impact of the standard on our consolidated financial statements and related disclosures. At this time the Company cannot estimate the quantitative impact of adopting the new standard, but it is expected to have a material effect to the total assets and total liabilities reported on the consolidated balance sheet, and is not expected to have a material effect to the consolidated statement of operations or the consolidated statement of cash flows.

In August 2016, the FASB issued an accounting standards update which provides guidance regarding the classification of certain cash receipts and cash payments on the statement of cash flows, where specific guidance is provided for issues not previously addressed. This guidance is effective for annual reporting periods, including interim reporting within those periods, beginning after December 15, 2017, with early adoption permitted, and is required to be adopted using a retrospective approach. The adoption of this accounting standard update is not expected to have a material effect on the Company's statement of cash flows.

In October 2016, the FASB issued an accounting standards update which requires the recognition of the income tax consequences of an intra-entity transfer of an asset, other than inventory, when the transfer occurs. This standard is effective for interim and annual periods beginning after December 15, 2017. Early adoption is permitted. The adoption of this accounting standard update is not expected to have a material effect on the Company's net income, cash flows or financial condition.

In November 2016, the FASB issued an accounting standards update which clarifies how entities should present restricted cash and restricted cash equivalents in the statement of cash flows. The guidance requires entities to show the changes in the total of cash, cash equivalents, restricted cash and restricted cash equivalents in the statement of cash flows. The accounting standard update is required to be adopted for annual periods beginning after December 15, 2017, including interim periods within that annual period. The amendment is to be applied retrospectively with early adoption permitted. The adoption of this accounting standard update is not expected to have a material effect on the Company's statement of cash flows.

In January 2017, the FASB issued an accounting standards update which clarifies the definition of a business which is used across several areas of accounting. The area expected to see the most change is the evaluation of whether a transaction should be accounted for as an acquisition (or disposal) of assets, or as a business combination. The new guidance clarifies that to be a business there must also be at least one substantive process, and narrows the definition of outputs by more closely aligning it with how outputs are described in the new revenue recognition standard. The accounting standard update is required to be adopted for annual periods beginning after December 15, 2017, including interim periods within that annual period. The amendment is to be applied prospectively with early adoption permitted. We do not expect the adoption of this standard to have a material effect on our financial condition, results of operations or disclosures, as the standard applies only to businesses acquired after the adoption date.

In January 2017, the FASB issued an accounting standards update with new guidance intended to simplify the subsequent measurement of goodwill. The standards update eliminates the requirement for an entity to calculate the implied fair value of goodwill to measure a goodwill impairment charge. Instead, an entity will perform its annual, or interim, goodwill impairment testing by comparing the fair value of a reporting unit with its carrying amount and recording an impairment charge for the amount by which the carrying amount exceeds the fair value. The standards update is effective prospectively for annual and interim goodwill impairment testing performed in fiscal years beginning after December 15, 2019. The adoption of this standards update is not expected to have a material effect on our consolidated financial statements.

In March 2017, the FASB issued an accounting standards update with new guidance on the employer's presentation of defined benefit retirement costs in the income statement. Employers will present the service cost component of net periodic benefit cost in the same income statement line item(s) as other employee compensation costs arising from services rendered during the period on a retrospective basis. Employers will present the other components of the net periodic benefit cost separately from the line item(s) that includes the service cost and outside of any subtotal of operating income, if one is presented, on a retrospective basis. Only the service cost component will be eligible for capitalization in assets and should be applied on a prospective basis. The guidance is effective for fiscal years beginning after December 15, 2017, and interim periods therein, with early adoption permitted. The adoption of this accounting standard update is not expected to have a material effect on the Company's net income, cash flows or financial condition.

In May 2017, the FASB issued an accounting standards update which clarifies when to account for a change to the terms or conditions of a share-based payment award as a modification. This update requires modification only if the fair value, vesting conditions or the classification of the award changes as a result of the change in terms or conditions. This guidance is effective prospectively for fiscal years beginning after December 15, 2017, and interim periods therein, with early adoption permitted. The

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Notes to Consolidated Financial Statements-(Continued)

adoption of this accounting standard update is not expected to have a material effect on the Company's net income, cash flows or financial condition.

In August 2017, the FASB issued an accounting standards update which simplifies certain aspects of hedge accounting and improves disclosures of hedging arrangements through the elimination of the requirement to separately measure and report hedge ineffectiveness. This update generally requires the entire change in the fair value of a hedging instrument to be presented in the same income statement line as the hedged item in order to align financial reporting of hedge relationships with economic results. Entities must apply the amendments to cash flow and net investment hedge relationships that exist on the date of adoption using a modified retrospective approach. The presentation and disclosure requirements must be applied prospectively. This guidance is effective for fiscal years beginning after December 15, 2018, and interim periods therein, with early adoption permitted. The adoption of this accounting standard update is not expected to have a material effect on the Company's net income, cash flows or financial condition.

In February 2018, the FASB issued an accounting standards update which will permit entities to reclassify tax effects stranded in accumulated other comprehensive income as a result of tax reform to retained earnings. Entities can elect to apply the guidance retrospectively or in the period of adoption. This guidance is effective for fiscal years beginning after December 15, 2018, and interim periods therein, with early adoption permitted. The adoption of this accounting standard update is not expected to have a material effect on the Company's net income, cash flows or financial condition.

Adopted

In March 2016, the FASB issued an accounting standards update that amended the accounting standard related to employee share-based payments. The guidance requires the recognition of the income tax effects of awards in the income statement when the awards vest or are settled, thus eliminating additional paid in capital pools. The guidance also allows for the employer to repurchase more of an employee's shares for tax withholding purposes without triggering liability accounting. In addition, the guidance allows for a policy election to account for forfeitures as they occur rather than on an estimated basis. The adoption approach varies based on the amendment topic. As a result of the adoption, we recorded an adjustment of approximately \$39 million to the January 1, 2017 retained earnings balance to recognize federal tax credit carryforwards attributable to excess tax benefits on stock compensation that had not been previously recognized to additional paid in capital. The Company also expects the new standard to have an on-going impact on the recording of excess tax benefits and deficiencies in our consolidated balance sheets and consolidated statements of income and comprehensive income. However, the magnitude of such impact is dependent upon our future grants of stock awards, our future stock price in relation to the fair value of awards on the grant date and the exercise behavior of stock option holders.

2. BUSINESS COMBINATIONS AND DIVESTITURES

Interactive Printer Solutions (IPS) Divestiture

As of December 31, 2015, we determined that it was probable that we would dispose of our Interactive Printer Solutions (IPS) business, which triggered an impairment assessment of the related assets which include long-lived assets and goodwill. The assets related to the IPS business were valued using a market approach based on an independent third-party market price. The assessment resulted in charges to reduce the carrying values of goodwill and property, plant and equipment, net by \$16 million and \$18 million, respectively, for a total charge of \$34 million recorded in other (expense), net in the Consolidated Statements of Operations for the year ended December 31, 2015.

On May 27, 2016, NCR completed the sale of all but the Middle East and Africa (MEA) assets of the IPS business to Atlas Holdings LLC for cash consideration of \$47 million. In connection with the sale, NCR agreed to provide Atlas Holdings with certain support services on a short-term basis following the closing under a transition services agreement. During the year ended December 31, 2016, a loss on sale of \$2 million was recorded to other (expense), net in the Consolidated Statement of Operations.

On December 21, 2017, NCR completed the sale of the MEA assets of the IPS business to Interactive Printer Solutions FZCO for cash consideration of \$3 million.

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3. GOODWILL AND PURCHASED INTANGIBLE ASSETS

Goodwill

The carrying amounts of goodwill by segment are included in the tables below. Foreign currency fluctuations are included within other adjustments.

In millions	January 1, 2017			Additions	Impairment	Other	December 31, 2017		
	Goodwill	Accumulated Impairment Losses	Total				Goodwill	Accumulated Impairment Losses	Total
Software	\$ 1,930	\$ (7)	\$ 1,923	\$ —	\$ —	\$ 14	\$ 1,944	\$ (7)	\$ 1,937
Services	658	—	658	—	—	—	658	—	658
Hardware	162	(16)	146	—	—	—	162	(16)	146
Total goodwill	\$ 2,750	\$ (23)	\$ 2,727	\$ —	\$ —	\$ 14	\$ 2,764	\$ (23)	\$ 2,741

In millions	January 1, 2016			Additions	Impairment	Other	December 31, 2016		
	Goodwill	Accumulated Impairment Losses	Total				Goodwill	Accumulated Impairment Losses	Total
Software	\$ 1,936	\$ (7)	\$ 1,929	\$ 9	\$ —	\$ (15)	\$ 1,930	\$ (7)	\$ 1,923
Services	658	—	658	—	—	—	658	—	658
Hardware	162	(16)	146	—	—	—	162	(16)	146
Total goodwill	\$ 2,756	\$ (23)	\$ 2,733	\$ 9	\$ —	\$ (15)	\$ 2,750	\$ (23)	\$ 2,727

As discussed in Note 1, "Basis of Presentation and Significant Accounting Policies," NCR completed the annual goodwill impairment test during the fourth quarter of 2017. The reporting unit with the lowest percentage by which the fair value exceeded the carrying value was the Hardware reporting unit, where the excess of fair value over carrying value was approximately 20%. We are in the process of identifying initiatives to accelerate our transformation to improve profitability in our Hardware segment through optimizing our production, sourcing and supply chain strategy.

Purchased Intangible Assets

NCR's purchased intangible assets were specifically identified when acquired, and are deemed to have finite lives. These assets are reported in intangibles, net in the Consolidated Balance Sheets. The gross carrying amount and accumulated amortization for NCR's identifiable intangible assets were as set forth in the table below:

In millions	Amortization Period (in Years)	December 31, 2017		December 31, 2016	
		Gross Carrying Amount	Accumulated Amortization	Gross Carrying Amount	Accumulated Amortization
Identifiable intangible assets					
Reseller & customer relationships	1 - 20	\$ 659	\$ (170)	\$ 656	\$ (128)
Intellectual property	2 - 8	410	(351)	392	(302)
Customer contracts	8	89	(81)	89	(66)
Tradenames	2 - 10	73	(51)	73	(42)
Total identifiable intangible assets		\$ 1,231	\$ (653)	\$ 1,210	\$ (538)

The aggregate amortization expense (actual and estimated) for identifiable intangible assets for the following periods is:

In millions	For the year ended December 31, 2017	For the years ended December 31 (estimated)				
		2018	2019	2020	2021	2022
Amortization expense	\$ 115	\$ 85	\$ 75	\$ 57	\$ 49	\$ 45

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Notes to Consolidated Financial Statements-(Continued)

4. SERIES A PREFERRED STOCK

On December 4, 2015, NCR issued 820,000 shares of Series A Convertible Preferred Stock to certain entities affiliated with the Blackstone Group L.P. (collectively, Blackstone) for an aggregate purchase price of \$820 million, or \$1,000 per share, pursuant to an Investment Agreement between the Company and Blackstone, dated November 11, 2015. In connection with the issuance of the Series A Convertible Preferred Stock, the Company incurred direct and incremental expenses of \$26 million, including financial advisory fees, closing costs, legal expenses and other offering-related expenses. These direct and incremental expenses originally reduced the Series A Convertible Preferred Stock, and will be accreted through retained earnings as a deemed dividend from the date of issuance through the first possible known redemption date, March 16, 2024. During the twelve months ended December 31, 2017 and 2016, the Company paid dividends-in-kind of \$45 million and \$47 million, respectively, associated with the Series A Convertible Preferred Stock. As of December 31, 2017 and December 31, 2016, the Company had accrued dividends of \$3 million, respectively, associated with the Series A Convertible Preferred Stock. There were no cash dividends declared during the twelve months ended December 31, 2017 or 2016.

Under the Investment Agreement, Blackstone agreed not to sell or otherwise transfer its shares of Series A Convertible Preferred Stock (or any shares of common stock issued upon conversion thereof) without the Company's consent until June 4, 2017. In March 2017, we provided Blackstone with an early release from this lock-up, allowing Blackstone to sell approximately 49% of its shares of Series A Convertible Preferred Stock, and in return, Blackstone agreed to amend the Investment Agreement to extend the lock-up on the remaining 51% of its shares of Series A Convertible Preferred Stock for six months until December 1, 2017.

In connection with the early release of the lock-up, Blackstone offered for sale 342,000 shares of Series A Convertible Preferred Stock in an underwritten public offering. In addition, Blackstone converted 90,000 shares of Series A Convertible Preferred Stock into shares of our common stock and we repurchased those shares of common stock for \$48.47 per share. The underwritten offering and the stock repurchase were consummated on March 17, 2017.

The repurchase of the common shares immediately upon conversion is considered a redemption of the related preferred shares. As a result, the excess of the fair value of consideration transferred over the carrying value, of \$58 million, was included as a deemed dividend in adjusting the income from common stockholders in calculating earnings per share for the twelve months ended December 31, 2017. Additionally, we determined that the changes to the lock-up period were considered a modification of the Series A Convertible Preferred Stock. The impact of the modification, calculated as the difference in the fair value immediately before and immediately after the changes, of \$4 million, was included as a deemed dividend in adjusting the income from common stockholders in calculating earnings per share for the twelve months ended December 31, 2017. This adjustment was recorded as an increase to the Series A Convertible Preferred Shares and will reduce the accretion of the direct and incremental expenses associated with the original offering as described above. Refer to Note 1, "Basis of Presentation and Significant Accounting Policies" for additional discussion.

Dividend Rights The Series A Convertible Preferred Stock ranks senior to the shares of the Company's common stock, with respect to dividend rights and rights on the distribution of assets on any voluntary or involuntary liquidation, dissolution or winding up of the affairs of the Company. The Series A Convertible Preferred Stock has a liquidation preference of \$1,000 per share. Holders of Series A Convertible Preferred Stock are entitled to a cumulative dividend at the rate of 5.5% per annum, payable quarterly in arrears and payable in-kind for the first sixteen dividend payments, after which, dividends will be payable in cash or in-kind at the option of the Company. If the Company does not declare and pay a dividend, the dividend rate will increase to 8.0% per annum until all accrued but unpaid dividends have been paid in full. Dividends are paid in-kind, through the issuance of additional shares of Series A Convertible Preferred Stock, for the first sixteen dividend payment dates, after which dividends will be payable in cash or in-kind at the option of the Company.

Conversion Features The Series A Convertible Preferred Stock is convertible at the option of the holders at any time into shares of common stock at a conversion price of \$30.00 per share and a conversion rate of 33.333 shares of common stock per share of Series A Convertible Preferred Stock. As of December 31, 2017 and December 31, 2016, the maximum number of common shares that could be required to be issued upon conversion of the outstanding shares of Series A Convertible Preferred Stock was 27.5 million and 29.0 million shares, respectively. The conversion rate is subject to the following customary anti-dilution and other adjustments:

- the issuance of common stock as a dividend or the subdivision, combination, or reclassification of common stock into a greater or lesser number of shares of common stock;

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Notes to Consolidated Financial Statements-(Continued)

- the dividend, distribution or other issuance of rights, options or warrants to holders of Common Stock entitling them to subscribe for or purchase shares of common stock at a price per share that is less than the volume-weighted average price per share of common stock;
- the completion of a tender offer or exchange offer of shares of common stock at a premium to the volume-weighted average price per share of common stock and certain other above-market purchases of common stock;
- the issuance of a dividend or similar distribution in-kind, which can include shares of any class of capital stock, evidences of the Company's indebtedness, assets or other property or securities, to holders of common stock;
- a transaction in which a subsidiary of the Company ceases to be a subsidiary of the Company as a result of the distribution of the equity interests of the subsidiary to the holders of the Company's common stock; and
- the payment of a cash dividend to the holders of common stock.

At any time after December 4, 2018, all outstanding shares of Series A Convertible Preferred Stock are convertible at the option of the Company if the volume-weighted average price of the common stock exceeds \$54.00 for at least 30 trading days in any period of 45 consecutive trading days. The \$54.00 may be adjusted pursuant to the anti-dilution provisions above.

The Series A Convertible Preferred Stock, and the associated dividends for the first sixteen payments, did not generate a beneficial conversion feature (BCF) upon issuance as the fair value of the Company's common stock was greater than the conversion price. The Company will determine and, if required, measure a BCF based on the fair value of our stock price on the date dividends are declared subsequent to the sixteenth dividend. If a BCF is recognized, a reduction to retained earnings and the Series A Convertible Preferred Stock will be recorded, and then subsequently accreted through the first redemption date.

Additionally, the Company determined that the nature of the Series A Convertible Preferred Stock was more akin to an equity instrument and that the economic characteristics and risks of the embedded conversion options were clearly and closely related to the Series A Convertible Preferred Stock. As such, the conversion options were not required to be bifurcated from the host under ASC 815, *Derivatives and Hedging*.

Redemption Rights On any date during the three months commencing on and immediately following March 16, 2024 and the three months commencing on and immediately following every third anniversary of March 16, 2024, holders of Series A Convertible Preferred Stock have the right to require the Company to repurchase all or any portion of the Series A Convertible Preferred Stock at 100% of the liquidation preference thereof plus all accrued but unpaid dividends. Upon certain change of control events involving the Company, holders of Series A Convertible Preferred Stock can require the Company to repurchase, subject to certain exceptions, all or any portion of the Series A Convertible Preferred Stock at the greater of (1) an amount in cash equal to 100% of the liquidation preference thereof plus all accrued but unpaid dividends and (2) the consideration the holders would have received if they had converted their shares of Series A Preferred Convertible Stock into common stock immediately prior to the change of control event.

The Company has the right, upon certain change of control events involving the Company, to redeem the Series A Convertible Preferred Stock at the greater of (1) an amount in cash equal to the sum of the liquidation preference of the Series A Convertible Preferred Stock, all accrued but unpaid dividends and the present value, discounted at a rate of 10%, of any remaining scheduled dividends through the fifth anniversary of the first dividend payment date, assuming the Company chose to pay such dividends in cash (the "make-whole provision") and (2) the consideration the holders would have received if they had converted their shares of Series A Convertible Preferred Stock into common stock immediately prior to the change of control event.

Since the redemption of the Series A Convertible Preferred Stock is contingently or optionally redeemable and therefore not certain to occur, the Series A Convertible Preferred Stock is not required to be classified as a liability under ASC 480, *Distinguishing Liabilities from Equity*. As the Series A Convertible Preferred Stock is redeemable in certain circumstances at the option of the holder and is redeemable in certain circumstances upon the occurrence of an event that is not solely within our control, we have classified the Series A Convertible Preferred Stock in mezzanine equity on the Consolidated Balance Sheets.

As noted above, the Company determined that the nature of the Series A Convertible Preferred Stock was more akin to an equity instrument. However, the Company determined that the economic characteristics and risks of the embedded put options, call option and make-whole provision were not clearly and closely related to the Series A Convertible Preferred Stock. Therefore, the Company assessed the put and call options further, and determined they did not meet the definition of a derivative under ASC 815, *Derivatives and Hedging*. Under the same analysis, the Company determined the make-whole provision did meet the definition of a derivative, but that the value of the derivative was minimal due to the expectations surrounding the scenarios under which the call option and make-whole provision would be exercised.

Voting Rights Holders of Series A Convertible Preferred Stock are entitled to vote with the holders of the common stock on an as-converted basis. Holders of Series A Convertible Preferred Stock are entitled to a separate class vote with respect to certain

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Notes to Consolidated Financial Statements-(Continued)

designees for election to the Company's Board of Directors, amendments to the Company's organizational documents that have an adverse effect on the Series A Convertible Preferred Stock and issuances by the Company of securities that are senior to, or equal in priority with, the Series A Convertible Preferred Stock.

Registration Rights Holders of Series A Convertible Preferred Stock have certain customary registration rights with respect to the Series A Convertible Preferred Stock and the shares of common stock into which they are converted, pursuant to the terms of a registration rights agreement.

5. DEBT OBLIGATIONS

The following table summarizes the Company's short-term borrowings and long-term debt:

In millions, except percentages	December 31, 2017		December 31, 2016	
	Amount	Weighted-Average Interest Rate	Amount	Weighted-Average Interest Rate
Short-Term Borrowings				
Current portion of Senior Secured Credit Facility ⁽¹⁾	\$ 51	3.21%	\$ 45	2.88%
Trade Receivables Securitization Facility	—		—	
Other ⁽²⁾	1	3.71%	5	7.41%
Total short-term borrowings	\$ 52		\$ 50	
Long-Term Debt				
Senior Secured Credit Facility:				
Term loan facility ⁽¹⁾	\$ 759	3.21%	\$ 821	2.88%
Revolving credit facility ⁽¹⁾	—		—	
Senior Notes:				
5.00% Senior Notes due 2022	600		600	
4.625% Senior Notes due 2021	500		500	
5.875% Senior Notes due 2021	400		400	
6.375% Senior Notes due 2023	700		700	
Deferred financing fees	(23)		(29)	
Other ⁽²⁾	3	1.62%	9	6.64%
Total long-term debt	\$ 2,939		\$ 3,001	

⁽¹⁾ Interest rates are weighted average interest rates as of December 31, 2017 and 2016.

⁽²⁾ Interest rates are weighted average interest rates as of December 31, 2017 and 2016 primarily related to various international credit facilities and a note payable in the U.S.

Senior Secured Credit Facility On March 31, 2016, the Company amended and restated its senior secured credit facility with and among certain foreign subsidiaries of NCR (the Foreign Borrowers), the lenders party thereto and JPMorgan Chase Bank, NA (JPMCB) as the administrative agent, and refinanced its term loan facility and revolving credit facility thereunder (the Senior Secured Credit Facility). As of December 31, 2017, the Senior Secured Credit Facility consisted of a term loan facility with an aggregate principal amount outstanding of \$810 million and a revolving credit facility with an aggregate principal amount of \$1,100 million, of which zero was outstanding. The revolving credit facility also allows a portion of the availability to be used for outstanding letters of credit, and as of December 31, 2017, there were no letters of credit outstanding.

Up to \$400 million of the revolving credit facility is available to the Foreign Borrowers. Term loans were made to the Company in U.S. Dollars, and loans under the revolving credit facility are available in U.S. Dollars, Euros and Pound Sterling.

The outstanding principal balance of the term loan facility is required to be repaid in equal quarterly installments of approximately \$11 million beginning June 30, 2016, \$17 million beginning June 30, 2018, and \$23 million beginning June 30, 2019, with the balance being due at maturity on March 31, 2021. Borrowings under the revolving portion of the credit facility are due March 31, 2021. Amounts outstanding under the Senior Secured Credit Facility bear interest at LIBOR (or, in the case of amounts denominated in Euros, EURIBOR), or, at NCR's option, in the case of amounts denominated in U.S. Dollars, at a base rate equal to the highest of (a) the federal funds rate plus 0.50%, (b) JPMCB's "prime rate" and (c) the one-month LIBOR rate

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plus 1.00% (the Base Rate), plus, in each case, a margin ranging from 1.25% to 2.25% for LIBOR-based loans that are either term loans or revolving loans and EURIBOR-based revolving loans and ranging from 0.25% to 1.25% for Base Rate-based loans that are either term loans or revolving loans, in each case, depending on the Company's consolidated leverage ratio. The terms of the Senior Secured Credit Facility also require certain other fees and payments to be made by the Company, including a commitment fee on the undrawn portion of the revolving credit facility.

The obligations of the Company and Foreign Borrowers under the Senior Secured Credit Facility are guaranteed by certain of the Company's wholly-owned domestic subsidiaries. The Senior Secured Credit Facility and these guarantees are secured by a first priority lien and security interest in certain equity interests owned by the Company and the guarantor subsidiaries in certain of their respective domestic and foreign subsidiaries, and a perfected first priority lien and security interest in substantially all of the Company's U.S. assets and the assets of the guarantor subsidiaries, subject to certain exclusions. These security interests would be released if the Company achieves an "investment grade" rating, and will remain released so long as the Company maintains that rating.

The Senior Secured Credit Facility includes affirmative and negative covenants that restrict or limit the ability of the Company and its subsidiaries to, among other things, incur indebtedness; create liens on assets; engage in certain fundamental corporate changes or changes to the Company's business activities; make investments; sell or otherwise dispose of assets; engage in sale-leaseback or hedging transactions; repurchase stock, pay dividends or make similar distributions; repay other indebtedness; engage in certain affiliate transactions; or enter into agreements that restrict the Company's ability to create liens, pay dividends or make loan repayments. The Senior Secured Credit Facility also includes financial covenants that require the Company to maintain:

- a consolidated leverage ratio on the last day of any fiscal quarter, not to exceed (i) in the case of any fiscal quarter ending on or prior to December 31, 2017, (a) the sum of 4.25 and an amount (not to exceed 0.50) to reflect debt used to reduce NCR's unfunded pension liabilities to (b) 1.00, (ii) in the case of any fiscal quarter ending after December 31, 2017 and on or prior to December 31, 2019, (a) the sum of 4.00 and an amount (not to exceed 0.50) to reflect debt used to reduce NCR's unfunded pension liabilities to (b) 1.00, and (iii) in the case of any fiscal quarter ending after December 31, 2019, the sum of (a) 3.75 and an amount (not to exceed 0.50) to reflect debt used to reduce NCR's unfunded pension liabilities to (b) 1.00; and
- an interest coverage ratio on the last day of any fiscal quarter greater than or equal to 3.50 to 1.00.

At December 31, 2017, the maximum consolidated leverage ratio under the Senior Secured Credit Facility was 4.35 to 1.00.

The Senior Secured Credit Facility also includes provisions for events of default, which are customary for similar financings. Upon the occurrence of an event of default, the lenders may, among other things, terminate the loan commitments, accelerate all loans and require cash collateral deposits in respect of outstanding letters of credit. If the Company is unable to pay or repay the amounts due, the lenders could, among other things, proceed against the collateral granted to them to secure such indebtedness.

The Company may request, at any time and from time to time, but the lenders are not obligated to fund, the establishment of one or more incremental term loans and/or revolving credit facilities (subject to the agreement of existing lenders or additional financial institutions to provide such term loans and/or revolving credit facilities) with commitments in an aggregate amount not to exceed the greater of (i) \$150 million, and (ii) such amount as would not (a) prior to the date that the Company obtains an investment grade rating cause the leverage ratio under the Senior Secured Credit Facility, calculated on a pro forma basis including the incremental facility and assuming that it and the revolver are fully drawn, to exceed 2.50 to 1.00, and (b) on and after the date that the Company obtains an "investment grade" rating cause the leverage ratio under the Senior Secured Credit Facility, calculated on a pro forma basis including the incremental facility and assuming that it and the revolver are fully drawn, to exceed a ratio that is 0.50 less than the leverage ratio then applicable under the financial covenants of the Senior Secured Credit Facility, the proceeds of which can be used for working capital requirements and other general corporate purposes.

Senior Unsecured Notes On September 17, 2012, the Company issued \$600 million aggregate principal amount of 5.00% senior unsecured notes due in 2022 (the 5.00% Notes). The 5.00% Notes were sold at 100% of the principal amount and will mature on July 15, 2022. On December 18, 2012, the Company issued \$500 million aggregate principal amount of 4.625% senior unsecured notes due in 2021 (the 4.625% Notes). The 4.625% Notes were sold at 100% of the principal amount and will mature on February 15, 2021. On December 19, 2013, the Company issued \$400 million aggregate principal amount of 5.875% senior unsecured notes due in 2021 (the 5.875% Notes) and \$700 million aggregate principal amount of 6.375% senior unsecured notes due in 2023 (the 6.375% Notes), the proceeds of which were used solely for the acquisition of Digital Insight. The 5.875% Notes were sold at 100% of the principal amount and will mature on December 15, 2021 and the 6.375% Notes were sold at 100% of the principal amount and will mature on December 15, 2023. The senior unsecured notes are guaranteed, fully and unconditionally, on an unsecured

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Notes to Consolidated Financial Statements-(Continued)

senior basis, by our 100% owned subsidiary, NCR International, Inc. Under the indentures for these notes, the Company has the option to redeem each series of notes, in whole or in part, at various times for specified prices, plus accrued and unpaid interest. Under the indentures for these notes, the Company has the option to redeem each series of notes, in whole or in part, at various times for specified prices, plus accrued and unpaid interest.

The Company has the option to redeem the 5.00% Notes, in whole or in part, at any time on or after July 15, 2017, at a redemption price of 102.500%, 101.667%, 100.833% and 100.000% during the 12-month periods commencing on July 15, 2017, 2018, 2019 and 2020 and thereafter, respectively, plus accrued and unpaid interest to the redemption date.

The Company has the option to redeem the 4.625% Notes, in whole or in part, at any time on or after February 15, 2017, at a redemption price of 102.313%, 101.156% and 100% during the 12-month periods commencing on February 15, 2017, 2018 and 2019 and thereafter, respectively, plus accrued and unpaid interest to the redemption date.

The Company has the option to redeem the 5.875% Notes, in whole or in part, at any time on or after December 15, 2017, at a redemption price of 102.938%, 101.469% and 100% during the 12-month periods commencing on December 15, 2017, 2018 and 2019 and thereafter, respectively, plus accrued and unpaid interest to the redemption date.

The Company has the option to redeem the 6.375% Notes, in whole or in part, at any time on or after December 15, 2018, at a redemption price of 103.188%, 102.125%, 101.063% and 100% during the 12-month periods commencing on December 15, 2018, 2019, 2020 and 2021 and thereafter, respectively, plus accrued and unpaid interest to the redemption date. Prior to December 15, 2018, the Company may redeem the 6.375% Notes, in whole or in part, at a redemption price equal to 100% of the principal amount plus a make-whole premium and accrued and unpaid interest to the redemption date.

The terms of the indentures for these notes limit the ability of the Company and certain of its subsidiaries to, among other things, incur additional debt or issue redeemable preferred stock; pay dividends or make certain other restricted payments or investments; incur liens; sell assets; incur restrictions on the ability of the Company's subsidiaries to pay dividends to the Company; enter into affiliate transactions; engage in sale and leaseback transactions; and consolidate, merge, sell or otherwise dispose of all or substantially all of the Company's or such subsidiaries' assets. These covenants are subject to significant exceptions and qualifications. For example, if these notes are assigned an "investment grade" rating by Moody's or S&P and no default has occurred or is continuing, certain covenants will be terminated.

Trade Receivables Securitization Facility In November 2014, the Company established a revolving trade receivables securitization facility (the A/R Facility) with PNC Bank, National Association (PNC) as the administrative agent, and various lenders. In November 2016, the Company amended the A/R Facility to extend the maturity date to November 2018. The A/R Facility provides for up to \$200 million in funding based on the availability of eligible receivables and other customary factors and conditions.

Under the A/R Facility, NCR sells and/or contributes certain of its U.S. trade receivables to a wholly-owned, bankruptcy-remote subsidiary as they are originated, and advances by the lenders to that subsidiary are secured by those trade receivables. The assets of this financing subsidiary are restricted as collateral for the payment of its obligations under the A/R Facility, and its assets and credit are not available to satisfy the debts and obligations owed to the creditors of the Company. The Company includes the assets, liabilities and results of operations of this financing subsidiary in its consolidated financial statements. The financing subsidiary owned \$491 million and \$426 million of outstanding accounts receivable as of December 31, 2017 and 2016, respectively, and these amounts are included in accounts receivable, net in the Company's Consolidated Balance Sheets.

The financing subsidiary will pay annual commitment and other customary fees to the lenders, and advances by a lender under the A/R Facility will accrue interest (i) at a reserve-adjusted LIBOR rate or a base rate equal to the highest of (a) the applicable lender's prime rate or (b) the federal funds rate plus 0.50%, if the lender is funding as a committed lender under the terms of the A/R Facility, or (ii) based on commercial paper interest rates if the lender is funding as a commercial paper conduit lender. Advances may be prepaid at any time without premium or penalty.

The A/R Facility contains various customary affirmative and negative covenants and default and termination provisions which provide for the acceleration of the advances under the A/R Facility in circumstances including, but not limited to, failure to pay interest or principal when due, breach of representation, warranty or covenant, certain insolvency events or failure to maintain the security interest in the trade receivables, and defaults under other material indebtedness.

Debt Maturities Maturities of debt outstanding, in principal amounts, at December 31, 2017 are summarized below:

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Notes to Consolidated Financial Statements-(Continued)

In millions	For the years ended December 31						
	Total	2018	2019	2020	2021	2022	Thereafter
Debt maturities	\$ 3,014	\$ 52	\$ 84	\$ 90	\$ 1,485	\$ 600	\$ 703

Fair Value of Debt The Company utilized Level 2 inputs, as defined in the fair value hierarchy, to measure the fair value of the long-term debt, which, as of December 31, 2017 and 2016 was \$3.07 billion and \$3.16 billion, respectively. Management's fair value estimates were based on quoted prices for recent trades of NCR's long-term debt, quoted prices for similar instruments, and inquiries with certain investment communities.

6. INCOME TAXES

On December 22, 2017, the U.S. enacted comprehensive and complex tax legislation commonly referred to as the Tax Cuts and Jobs Act of 2017 ("U.S. Tax Reform"). The legislation included changes that impacted 2017, including but not limited to, a permanent reduction in the corporate tax rate to 21% and a one-time mandatory tax on certain undistributed earnings of foreign subsidiaries ("repatriation tax").

U.S. Tax Reform also puts in place several new tax laws that are generally effective prospectively from January 1, 2018, including but not limited to: a base erosion and anti-abuse tax; elimination of U.S. federal taxes on substantially all dividends from foreign subsidiaries; a lower U.S. tax rate on certain revenues from sources outside the U.S.; and, implementation of a new provision to tax certain global intangible low-taxed income of foreign subsidiaries.

U.S. GAAP generally requires that the overall impact of tax legislation is recorded in the quarter of enactment. However, given the fundamental complexity of U.S. Tax Reform, the SEC staff issued Staff Accounting Bulletin No. 118 (SAB 118) that allows the Company to record provisional amounts for the impacts of the legislation, with the requirement that the accounting be completed in a period not to exceed one year from the date of enactment of the legislation. As of December 31, 2017, the Company has not completed the accounting in its entirety for the tax effects of the legislation. However, the Company was able to make a reasonable estimate of the impact of U.S. Tax Reform and we have recorded a provisional tax expense of \$130 million in the year ended December 31, 2017. This provisional tax expense includes a \$94 million tax expense to remeasure the net U.S. deferred tax assets to the newly enacted 21% corporate income tax rate. We believe this calculation is complete except for changes in estimates that can result from finalizing the filing of our 2017 U.S. corporate income tax return, as well as changes that may be a direct impact of other provisional amounts recorded due to the enactment of U.S. Tax Reform. The net provisional tax expense also includes a \$36 million tax expense related to the repatriation tax. We believe that our preliminary calculations result in a reasonable estimate of the repatriation tax and related foreign tax credits and, as such, have included those amounts in our year-end income tax provision. As the analysis of accumulated foreign earnings and profits, related foreign tax paid, and state tax consequences are completed, we will update our provisional estimate of the repatriation tax in future periods.

The Company continues to evaluate the realizability of deferred tax assets for foreign tax credit carryforwards under U.S. Tax Reform. Due to the complexity associated with changes to the foreign tax credit laws, we have determined that the accounting is incomplete pursuant to SAB 118 and we have reverted to tax law that existed prior to U.S. Tax Reform. Specifically, we are still evaluating the impact on our future foreign tax credit limitations for our branches and other foreign tax credit carryforwards when applying new laws incorporated within U.S. Tax Reform. Based on prior law that existed before U.S. Tax Reform, the Company concluded that its available foreign tax credits are fully realizable.

We also continue to evaluate our intention concerning future repatriation of earnings from our foreign subsidiaries; however, due to the inability to evaluate the overall impact of U.S. Tax Reform to our organization, we have determined that the accounting is incomplete pursuant to SEC guidance and we have reverted to tax law that existed prior to U.S. Tax Reform. As such, NCR did not provide for additional U.S. income tax or foreign withholding taxes, if any, beyond the repatriation tax in 2017, on approximately \$2.5 billion of undistributed earnings of its foreign subsidiaries as such earnings are intended to be reinvested indefinitely unless it is determined future repatriation would give rise to little or no net tax costs. Due to the complexities in the tax laws, the assumptions that we would have to make and the availability and calculation of associated foreign tax credits, it is not practicable to determine the amount of the related unrecognized deferred income tax liability associated with these undistributed earnings.

Completion of our accounting concerning future repatriation of earnings from our foreign subsidiaries and the realizability of foreign tax credits could lead to a material increase or decrease in our effective tax rate during 2018.

For the years ended December 31, income (loss) from continuing operations before income taxes consisted of the following:

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Notes to Consolidated Financial Statements-(Continued)

In millions	2017	2016	2015
Income (loss) before income taxes			
United States	\$ 149	\$ 35	\$ (24)
Foreign	333	344	(71)
Total income (loss) from continuing operations before income taxes	<u>\$ 482</u>	<u>\$ 379</u>	<u>\$ (95)</u>

For the years ended December 31, income tax expense (benefit) consisted of the following:

In millions	2017	2016	2015
Income tax expense (benefit)			
Current			
Federal	\$ 14	\$ 18	\$ (7)
State	2	4	1
Foreign	54	60	37
Deferred			
Federal	178	12	23
State	(3)	1	(6)
Foreign	(3)	(3)	7
Total income tax expense (benefit)	<u>\$ 242</u>	<u>\$ 92</u>	<u>\$ 55</u>

The following table presents the principal components of the difference between the effective tax rate and the U.S. federal statutory income tax rate for the years ended December 31:

In millions	2017	2016	2015
Income tax expense (benefit) at the U.S. federal tax rate of 35%	\$ 169	\$ 133	\$ (33)
Foreign income tax differential	(38)	(26)	33
U.S. permanent book/tax differences	2	—	(5)
Tax audit settlements	—	—	(10)
Change in liability for unrecognized tax benefits	(2)	(12)	(7)
Nondeductible transaction costs	—	—	(1)
Goodwill impairment	—	—	5
U.S. valuation allowance	—	—	(3)
U.S. manufacturing deduction	(9)	(7)	—
Settlement of UK London pension plan	—	—	77
U.S. Tax Reform	130	—	—
Employee share-based payments	(8)	—	—
Other, net	(2)	4	(1)
Total income tax expense (benefit)	<u>\$ 242</u>	<u>\$ 92</u>	<u>\$ 55</u>

NCR's tax provisions include a provision for income taxes in certain tax jurisdictions where its subsidiaries are profitable, but reflect only a portion of the tax benefits related to certain foreign subsidiaries' tax losses due to the uncertainty of the ultimate realization of future benefits from these losses. During 2017, the tax rate was impacted by a provisional charge of \$130 million relating to U.S. Tax Reform. During 2016, the tax rate was impacted by a less favorable mix of earnings, primarily driven by actuarial pension losses in foreign jurisdictions with valuation allowance against deferred tax assets. During 2015, there was no tax benefit recorded on the \$427 million charge related to the settlement of the UK London pension plan due to a valuation allowance against deferred tax assets in the United Kingdom. Refer to Note 8, "Employee Benefit Plans" for additional discussion on the settlement of the UK London pension plan. Additionally, we favorably settled examinations with Canada for tax years 2002 through 2006 that resulted in a tax benefit of \$10 million.

NCR Corporation
Notes to Consolidated Financial Statements-(Continued)

We regularly review our deferred tax assets for recoverability and establish a valuation allowance if it is more likely than not that some portion or all of a deferred tax asset will not be realized. The determination as to whether a deferred tax asset will be realized is made on a jurisdictional basis and is based on the evaluation of positive and negative evidence. This evidence includes historical taxable income/loss, projected future taxable income, the expected timing of the reversal of existing temporary differences and the implementation of tax planning strategies. Given current earnings and anticipated future earnings at certain subsidiaries, the Company believes that there is a reasonable possibility sufficient positive evidence may become available that would allow the release of a valuation allowance within the next twelve months.

Deferred income tax assets and liabilities included in the Consolidated Balance Sheets as of December 31 were as follows:

In millions	2017	2016
Deferred income tax assets		
Employee pensions and other benefits	\$ 230	\$ 313
Other balance sheet reserves and allowances	185	251
Tax loss and credit carryforwards	525	578
Capitalized research and development	50	99
Property, plant and equipment	6	6
Other	27	38
Total deferred income tax assets	<u>1,023</u>	<u>1,285</u>
Valuation allowance	<u>(415)</u>	<u>(445)</u>
Net deferred income tax assets	<u>608</u>	<u>840</u>
Deferred income tax liabilities		
Intangibles	129	239
Capitalized software	27	43
Other	16	7
Total deferred income tax liabilities	<u>172</u>	<u>289</u>
Total net deferred income tax assets	<u>\$ 436</u>	<u>\$ 551</u>

NCR recorded valuation allowances related to certain deferred income tax assets due to the uncertainty of the ultimate realization of the future benefits from those assets. The valuation allowances cover deferred tax assets, primarily tax loss carryforwards, in tax jurisdictions where there is uncertainty as to the ultimate realization of a benefit from those tax losses. If we are unable to generate sufficient future taxable income in the time period within which the temporary differences underlying our deferred tax assets become deductible, or before the expiration of our loss and credit carryforwards, additional valuation allowance could be required.

As of December 31, 2017, NCR had U.S. federal, U.S. state (tax effected), and foreign tax attribute carryforwards of approximately \$1.5 billion. The net operating loss carryforwards that are subject to expiration will expire in the years 2018 through 2036. This includes U.S. tax credit carryforwards of \$179 million. Approximately \$21 million of the credit carryforwards do not expire, and \$158 million of the credit carryforwards expire in the years 2018 through 2037. As a result of stock ownership changes our U.S. tax attributes could be subject to limitations under Section 382 of the U.S. Internal Revenue Code of 1986, as amended, if further material stock ownership changes occur.

The aggregate changes in the balance of our gross unrecognized tax benefits were as follows for the years ended December 31:

In millions	2017	2016	2015
Gross unrecognized tax benefits - January 1	\$ 183	\$ 209	\$ 248
Increases related to tax positions from prior years	3	3	17
Decreases related to tax positions from prior years	(1)	(34)	(37)
Increases related to tax provisions taken during the current year	23	23	35
Settlements with tax authorities	(4)	(6)	(33)
Lapses of statutes of limitation	(8)	(12)	(21)
Total gross unrecognized tax benefits - December 31	<u>\$ 196</u>	<u>\$ 183</u>	<u>\$ 209</u>

NCR Corporation
Notes to Consolidated Financial Statements-(Continued)

Of the total amount of gross unrecognized tax benefits as of December 31, 2017, \$97 million would affect NCR's effective tax rate if realized. The Company's liability arising from uncertain tax positions is recorded in income tax accruals and other current liabilities in the Consolidated Balance Sheets.

We recognized interest and penalties associated with uncertain tax positions as part of the provision for income taxes in our Consolidated Statements of Operations of \$2 million of expense, zero, and \$4 million of benefit for the years ended December 31, 2017, 2016, and 2015, respectively. The gross amount of interest and penalties accrued as of December 31, 2017 and 2016 was \$45 million and \$41 million, respectively.

In the U.S., NCR files consolidated federal and state income tax returns where statutes of limitations generally range from three to five years. The Company resolved examinations for the tax years of 2009 and 2010 with the IRS in 2014, and U.S. federal tax years remain open from 2011 forward. In 2014, the IRS commenced an examination of our 2011, 2012, and 2013 income tax returns, which is ongoing. Years beginning on or after 2001 are still open to examination by certain foreign taxing authorities, including India, Korea, and other major taxing jurisdictions.

During 2018, the Company expects to resolve certain tax matters related to U.S. and foreign jurisdictions. As of December 31, 2017, we estimate that it is reasonably possible that unrecognized tax benefits may decrease by \$35 million to \$40 million in the next 12 months due to the resolution of these tax matters.

7. STOCK COMPENSATION PLANS

The Company recognizes all share-based payments as compensation expense in its financial statements based on their fair value.

As of December 31, 2017, the Company's stock-based compensation consisted of restricted stock units and an insignificant amount of stock options. The Company recorded stock-based compensation expense for the years ended December 31 as follows:

In millions	2017	2016	2015
Restricted stock units	\$73	\$61	\$42
Employee stock purchase plan	4	—	—
Stock-based compensation expense	77	61	42
Tax benefit	(22)	(18)	(13)
Total stock-based compensation (net of tax)	\$55	\$43	\$29

Approximately 25 million shares remain authorized to be issued under the 2013 Stock Incentive Plan (SIP). Details of the Company's stock-based compensation plans are discussed below.

Restricted Stock Units

The SIP provides for the grant of several different forms of stock-based compensation, including restricted stock units. Restricted stock units can have service-based and/or performance-based vesting with performance goals being established by the Compensation and Human Resource Committee of the Company's Board of Directors. Any grant of restricted stock units is generally subject to a vesting period of 12 months to 48 months, to the extent permitted by the SIP. Performance-based grants conditionally vest upon achievement of future performance goals based on performance criteria such as the Company's achievement of specific return on capital and/or other financial metrics (as defined in the SIP) during the performance period. Performance-based grants must be earned, based on performance, before the actual number of shares to be awarded is known. The Compensation and Human Resource Committee considers the likelihood of meeting the performance criteria based upon estimates and other relevant data, and certifies performance based on its analysis of achievement against the performance criteria. A recipient of restricted stock units does not have the rights of a stockholder and is subject to restrictions on transferability and risk of forfeiture. Other terms and conditions applicable to any award of restricted stock units will be determined by the Compensation and Human Resource Committee and set forth in the agreement relating to that award.

The following table reports restricted stock unit activity during the year ended December 31, 2017:

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Notes to Consolidated Financial Statements-(Continued)

Shares in thousands	Number of Units	Weighted Average Grant-Date Fair Value per Unit
Unvested shares as of January 1	7,469	\$ 24.70
Shares granted	2,211	\$ 46.95
Shares vested	(1,989)	\$ 30.23
Shares forfeited	(533)	\$ 28.12
Unvested shares as of December 31	7,158	\$ 29.78

Stock-based compensation expense is recognized in the financial statements based upon fair value. The total fair value of units vested and distributed in the form of NCR common stock was \$87 million in 2017, \$42 million in 2016, and \$44 million in 2015. As of December 31, 2017, there was \$98 million of unrecognized compensation cost related to unvested restricted stock unit grants. The unrecognized compensation cost is expected to be recognized over a remaining weighted-average period of 0.9 years. The weighted average grant date fair value for restricted stock unit awards granted in 2016 and 2015 was \$20.45 and \$29.40, respectively.

The following table represents the composition of restricted stock unit grants in 2017:

Shares in thousands	Number of Units	Weighted Average Grant-Date Fair Value
Service-based units	1,030	\$ 46.80
Performance-based units	1,181	\$ 47.08
Total restricted stock units	2,211	\$ 46.95

At December 31, 2017, certain of the performance-based shares granted in 2017 were not probable of vesting.

During the first quarter of 2016, the Compensation and Human Resource Committee approved a special multi-year equity grant to a limited group of senior executives of the Company. These awards were performance based price-contingent restricted stock units with a performance period of 60 months. Vesting of these units is dependent upon the achievement of target stock prices established by the Compensation and Human Resource Committee, which have since been achieved, and service conditions. The Company estimated the fair value and derived service period using the Monte Carlo simulation option-pricing model. The Company amortizes the fair value of these awards over the explicit service period of 36 to 48 months, which was longer than the derived service period, adjusted for estimated forfeitures. Provided that the explicit service period is rendered, the total fair value of the price-contingent restricted stock units at the date of grant is recognized as compensation expense even if the market condition is not achieved. However, the number of units that ultimately vest can vary significantly with the performance of the specified market criteria.

The weighted-average assumptions used and the resulting estimates of fair value related to the multi-year equity grants described above were as follows:

	Twelve months ended December 31, 2016
Expected volatility	33.9%
Expected dividend yield	—
Risk-free rate	1.21%
Weighted average fair value per share	\$14.93

Expected volatility is based on the historical volatility derived from NCR stock price movements over the last 60 months. The risk-free interest rate was based upon the U.S. Treasury yield curve in effect at the time of grant with a remaining term of 60 months.

Employee Stock Purchase Plan

Effective January 1, 2017, the Company amended its Employee Stock Purchase Plan ("ESPP") to provide employees a 15% discount on stock purchases using a three-month look-back feature where the discount is applied to the stock price that represents

NCR Corporation
Notes to Consolidated Financial Statements-(Continued)

the lower of NCR's closing stock price on either the first day or the last day of each calendar quarter. Participants can contribute between 1% and 10% of their compensation.

Employees purchased approximately 0.5 million shares in 2017, 0.3 million shares in 2016, and 0.3 million shares in 2015, for approximately \$15 million in 2017, \$7 million in 2016 and \$7 million in 2015. A total of 4 million shares were originally authorized to be issued under the ESPP. In 2016, NCR stockholders approved our amended ESPP to be effective January 1, 2017. Under the amended ESPP, 10 million shares were newly authorized to be issued, plus any shares remaining unissued under the prior ESPP after the last 2016 purchase date. Approximately 10.4 million authorized shares remain unissued under our amended ESPP as of December 31, 2017.

Stock Options

The SIP also provides for the grant of stock options to purchase shares of NCR common stock. The Compensation and Human Resource Committee has discretion to determine the material terms and conditions of option awards under the SIP, provided that (i) the exercise price must be no less than the fair market value of NCR common stock (defined as the closing price) on the date of grant, (ii) the term must be no longer than ten years, and (iii) in no event shall the normal vesting schedule provide for vesting in less than one year. Other terms and conditions of an award of stock options will be determined by the Compensation and Human Resource Committee as set forth in the agreement relating to that award. The Compensation and Human Resource Committee has authority to administer the SIP, except that the Committee on Directors and Governance of the Company's Board of Directors will administer the SIP with respect to non-employee members of the Board of Directors. New shares of the Company's common stock are issued as a result of stock option exercises.

Stock-based compensation expense for options was computed using the Black-Scholes option-pricing model. During the years ended December 31, 2017, 2016 and 2015, the Company did not grant a significant amount of stock options.

The following table summarizes the Company's stock option activity for the year ended December 31, 2017:

Shares in thousands	Shares Under Option	Weighted Average Exercise Price per Share	Weighted Average Remaining Contractual Term (in years)	Aggregate Intrinsic Value (in millions)
Outstanding as of January 1	629	\$ 17.69		
Granted	—	\$ —		
Exercised	(117)	\$ 20.48		
Forfeited or expired	(37)	\$ 21.54		
Outstanding as of December 31	475	\$ 16.70	1.87	\$ 8.2
Fully vested and expected to vest as of December 31	475	\$ 16.70	1.87	\$ 8.2
Exercisable as of December 31	475	\$ 16.70	1.87	\$ 8.2

The total intrinsic value of all options exercised was \$3 million in 2017, \$6 million in 2016, and \$6 million in 2015. Cash received from option exercises under all share-based payment arrangements was \$2 million in 2017, \$8 million in 2016, and \$8 million in 2015. The tax benefit realized from these exercises was \$1 million in 2017, \$2 million in 2016, and \$2 million in 2015.

8. EMPLOYEE BENEFIT PLANS

Pension, Postretirement and Postemployment Plans NCR sponsors defined benefit pension plans. NCR's U.S. pension plan no longer offers additional benefits and is closed to new participants. Internationally, the defined benefit plans are based primarily upon compensation and years of service. Certain international plans also no longer offer additional benefits and are closed to new participants. NCR's funding policy is to contribute annually no less than the minimum required by applicable laws and regulations. Assets of NCR's defined benefit plans are primarily invested in corporate and government debt securities, common and commingled trusts, publicly traded common stocks, real estate investments, and cash or cash equivalents.

NCR recognizes the funded status of each applicable plan on the Consolidated Balance Sheets. Each overfunded plan is recognized as an asset and each underfunded plan is recognized as a liability. For pension plans, changes in the fair value of plan assets and net actuarial gains or losses are recognized upon remeasurement, which is at least annually in the fourth quarter of each year. For

NCR Corporation
Notes to Consolidated Financial Statements-(Continued)

postretirement and postemployment plans, changes to the funded status are recognized as a component of other comprehensive loss in stockholders' equity.

NCR sponsors a U.S. postretirement benefit plan that no longer offers benefits to U.S. participants who had not reached a certain age and years of service with NCR. The plan provides medical care benefits to retirees and their eligible dependents. Non-U.S. employees are typically covered under government-sponsored programs, and NCR generally does not provide postretirement benefits other than pensions to non-U.S. retirees. NCR generally funds these benefits on a pay-as-you-go basis.

NCR offers various postemployment benefits to involuntarily terminated and certain inactive employees after employment but before retirement. These benefits are paid in accordance with NCR's established postemployment benefit practices and policies. Postemployment benefits include mainly severance as well as continuation of healthcare benefits and life insurance coverage while on disability. NCR provides appropriate accruals for these postemployment benefits. These postemployment benefits are funded on a pay-as-you-go basis.

Pension Plans Reconciliation of the beginning and ending balances of the benefit obligations for NCR's pension plans are as follows:

In millions	U.S. Pension Benefits		International Pension Benefits		Total Pension Benefits	
	2017	2016	2017	2016	2017	2016
Change in benefit obligation						
Benefit obligation as of January 1	\$ 2,185	\$ 2,155	\$ 1,172	\$ 1,159	\$ 3,357	\$ 3,314
Net service cost	—	—	8	7	8	7
Interest cost	71	90	20	28	91	118
Actuarial loss	121	53	43	174	164	227
Benefits paid	(427)	(113)	(75)	(75)	(502)	(188)
Plan participant contributions	—	—	1	1	1	1
Currency translation adjustments	—	—	104	(122)	104	(122)
Benefit obligation as of December 31	\$ 1,950	\$ 2,185	\$ 1,273	\$ 1,172	\$ 3,223	\$ 3,357
Accumulated benefit obligation as of December 31	\$ 1,950	\$ 2,185	\$ 1,262	\$ 1,162	\$ 3,212	\$ 3,347

A reconciliation of the beginning and ending balances of the fair value of the plan assets of NCR's pension plans are as follows:

In millions	U.S. Pension Benefits		International Pension Benefits		Total Pension Benefits	
	2017	2016	2017	2016	2017	2016
Change in plan assets						
Fair value of plan assets as of January 1	\$ 1,722	\$ 1,726	\$ 978	\$ 1,009	\$ 2,700	\$ 2,735
Actual return on plan assets	149	109	80	136	229	245
Company contributions	—	—	25	31	25	31
Benefits paid	(427)	(113)	(75)	(75)	(502)	(188)
Currency translation adjustments	—	—	77	(124)	77	(124)
Plan participant contributions	—	—	1	1	1	1
Fair value of plan assets as of December 31	\$ 1,444	\$ 1,722	\$ 1,086	\$ 978	\$ 2,530	\$ 2,700

The following table presents the funded status and the reconciliation of the funded status to amounts recognized in the Consolidated Balance Sheets and in accumulated other comprehensive loss as of December 31:

NCR Corporation
Notes to Consolidated Financial Statements-(Continued)

In millions	U.S. Pension Benefits		International Pension Benefits		Total Pension Benefits	
	2017	2016	2017	2016	2017	2016
Funded Status	\$ (506)	\$ (463)	\$ (187)	\$ (194)	\$ (693)	\$ (657)
Amounts recognized in the Consolidated Balance Sheets						
Noncurrent assets	\$ —	\$ —	\$ 118	\$ 94	\$ 118	\$ 94
Current liabilities	—	—	(13)	(12)	(13)	(12)
Noncurrent liabilities	(506)	(463)	(292)	(276)	(798)	(739)
Net amounts recognized	\$ (506)	\$ (463)	\$ (187)	\$ (194)	\$ (693)	\$ (657)
Amounts recognized in accumulated other comprehensive loss						
Prior service cost	—	—	18	15	18	15
Total	\$ —	\$ —	\$ 18	\$ 15	\$ 18	\$ 15

For pension plans with accumulated benefit obligations in excess of plan assets, the projected benefit obligation, accumulated benefit obligation and fair value of assets were \$2,229 million, \$2,223 million, and \$1,446 million, respectively, as of December 31, 2017, and \$2,711 million, \$2,702 million and \$1,991 million, respectively, as of December 31, 2016.

The net periodic benefit (income) cost of the pension plans for the years ended December 31 was as follows:

In millions	U.S. Pension Benefits			International Pension Benefits			Total Pension Benefits		
	2017	2016	2015	2017	2016	2015	2017	2016	2015
Net service cost	\$ —	\$ —	\$ —	\$ 8	\$ 7	\$ 12	\$ 8	\$ 7	\$ 12
Interest cost	71	90	87	20	28	42	91	118	129
Expected return on plan assets	(57)	(72)	(72)	(35)	(36)	(60)	(92)	(108)	(132)
Amortization of prior service cost	—	—	—	1	1	1	1	1	1
Curtailement	—	—	—	—	—	(2)	—	—	(2)
Settlement	—	—	—	—	—	427	—	—	427
Actuarial loss	28	16	27	—	69	2	28	85	29
Net periodic benefit (income) cost	\$ 42	\$ 34	\$ 42	\$ (6)	\$ 69	\$ 422	\$ 36	\$ 103	\$ 464

During 2017, the Company offered a voluntary lump sum payment option to certain former employees who were deferred vested participants of the Company's U.S. pension plan who had not yet started monthly payments of their pension benefit. The voluntary lump sum payment offer, which resulted in approximately \$130 million being paid out of plan assets, was completed during the fourth quarter of 2017. Additionally, during 2017, the Company entered into a single premium group annuity contract to secure approximately \$190 million of benefits for former employees or their related beneficiaries whose monthly pension benefit amount under the Company's U.S. pension plan was \$500 or less. These actions were completed during the fourth quarter of 2017 which resulted in an actuarial gain of \$25 million and is reflected as a component of the actuarial loss as a result of the annual remeasurement completed in the fourth quarter of 2017.

Effective January 1, 2017, we changed the method used to estimate the service and interest components of net periodic benefit cost for our significant pension plans where yield curves are available. Previously, we estimated such cost components utilizing a single weighted-average discount rate derived from the yield curve used to measure the pension benefit obligation. The new methodology utilizes a full yield curve approach by applying the specific spot rates along the yield curve used in the determination of the pension benefit obligation to their underlying projected cash flows and provides a more precise measurement of service and interest costs by improving the correlation between projected cash flows and their corresponding spot rates. This change does not affect the measurement of our total benefit obligation and was applied prospectively as a change in estimate, beginning January 1, 2017.

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Notes to Consolidated Financial Statements-(Continued)

In November 2013, the trustees of the NCR Pension Plan (UK London) entered into an agreement with Pension Insurance Corporation (PIC) to purchase, as a plan asset, an insurance policy with PIC to facilitate the wind-up and buy-out of the pension plan. NCR Limited, a UK subsidiary of the Company, was the principal employer of the pension plan which had approximately 5,400 participants. During the second quarter of 2015, the Company completed the transfer of the UK London pension plan to PIC by issuing individual insurance policies. As a result of the transfer, for the the year ended December 31, 2015, the Company recorded a settlement loss of \$427 million in the Consolidated Statement of Operations as well as an offsetting decrease to prepaid pension costs in the Consolidated Balance Sheet.

The weighted average rates and assumptions used to determine benefit obligations as of December 31 were as follows:

	U.S. Pension Benefits		International Pension Benefits		Total Pension Benefits	
	2017	2016	2017	2016	2017	2016
Discount rate	3.6%	4.1%	1.9%	1.9%	2.9%	3.3%
Rate of compensation increase	N/A	N/A	0.9%	0.9%	0.9%	0.9%

The weighted average rates and assumptions used to determine net periodic benefit cost for the years ended December 31 were as follows:

	U.S. Pension Benefits			International Pension Benefits			Total Pension Benefits		
	2017	2016	2015	2017	2016	2015	2017	2016	2015
Discount rate - Service Cost	N/A	N/A	N/A	1.4%	2.6%	2.9%	1.4%	2.6%	2.9%
Discount rate - Interest Cost	3.4%	4.3%	4.0%	1.6%	2.6%	2.9%	2.8%	3.7%	3.5%
Expected return on plan assets	3.5%	4.3%	4.0%	3.5%	3.8%	3.8%	3.5%	4.1%	3.9%
Rate of compensation increase	N/A	N/A	N/A	0.9%	1.3%	1.8%	0.9%	1.3%	1.8%

The discount rate used to determine U.S. benefit obligations as of December 31, 2017 was derived by matching the plans' expected future cash flows to the corresponding yields from the Aon Hewitt AA Bond Universe Curve. This yield curve has been constructed to represent the available yields on high-quality, fixed-income investments across a broad range of future maturities. International discount rates were determined by examining interest rate levels and trends within each country, particularly yields on high-quality, long-term corporate bonds, relative to our future expected cash flows. During 2014, the Society of Actuaries published updated mortality tables and an improvement scale for U.S. plans, which both reflect improved longevity. Based on evaluation of these new tables, we updated our mortality assumptions for our U.S. pension benefits as of December 31, 2015. In 2017, we made a further update to utilize the white collar version of the 2014 tables due to a study of plan specific experience.

NCR employs a building block approach as its primary approach in determining the long-term expected rate of return assumptions for plan assets. Historical market returns are studied and long-term relationships between equities and fixed income are preserved consistent with the widely accepted capital market principle that assets with higher volatilities generate higher returns over the long run. Current market factors, such as inflation and interest rates are evaluated before long-term capital market assumptions are determined. The expected long-term portfolio return is established for each plan via a building block approach with proper rebalancing consideration. The result is then adjusted to reflect additional expected return from active management net of plan expenses. Historical plan returns, the expectations of other capital market participants, and peer data may be used to review and assess the results for reasonableness and appropriateness.

Plan Assets The weighted average asset allocations as of December 31, 2017 and 2016 by asset category are as follows:

NCR Corporation
Notes to Consolidated Financial Statements-(Continued)

	U.S. Pension Fund			International Pension Fund		
	Actual Allocation of Plan Assets as of December 31		Target Asset Allocation	Actual Allocation of Plan Assets as of December 31		Target Asset Allocation
	2017	2016		2017	2016	
Equity securities	—%	—%	0 - 0%	22%	23%	12 - 27%
Debt securities	98%	96%	95 - 100%	58%	52%	54 - 72%
Real estate	1%	1%	0 - 2%	12%	13%	6 - 14%
Other	1%	3%	0 - 3%	8%	12%	4 - 9%
Total	100%	100%		100%	100%	

The Company has adopted updated accounting guidance on fair value measurement which removed both the requirement to categorize within the fair value hierarchy and the requirement to provide related sensitivity disclosures for all investments for which fair value is measured using net asset value (NAV) as a practical expedient. The amount of these investments is disclosed separately in the following tables as "Not Subject to Leveling".

The fair value of plan assets as of December 31, 2017 and 2016 by asset category is as follows:

In millions	Notes	U.S.					International				
		Fair Value as of December 31, 2017	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Not Subject to Leveling	Fair Value as of December 31, 2017	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Not Subject to Leveling
Assets											
<i>Equity securities:</i>											
Common stock	1	\$ 1	\$ —	\$ 1	\$ —	\$ —	\$ 56	\$ 56	\$ —	\$ —	\$ —
<i>Fixed income securities:</i>											
Government securities	2	223	—	223	—	—	49	—	49	—	—
Corporate debt	3	895	—	895	—	—	141	—	139	2	—
<i>Other types of investments:</i>											
Money market funds	4	24	—	—	—	24	15	—	10	—	5
Common and commingled trusts - Equities	4	—	—	—	—	—	182	—	—	—	182
Common and commingled trusts - Bonds	4	207	—	—	—	207	421	—	—	—	421
Common and commingled trusts - Short Term Investments	4	31	—	—	—	31	24	—	—	—	24
Common and commingled trusts - Balanced	4	—	—	—	—	—	68	—	—	—	68
Partnership/joint venture interests - Real estate	5	5	—	—	—	5	—	—	—	—	—
Partnership/joint venture interests - Other	5	5	—	—	—	5	—	—	—	—	—
Mutual funds	4	53	53	—	—	—	—	—	—	—	—
Insurance products	4	—	—	—	—	—	1	—	1	—	—
Real estate and other	5	—	—	—	—	—	129	—	—	129	—
Total		\$ 1,444	\$ 53	\$ 1,119	\$ —	\$ 272	\$ 1,086	\$ 56	\$ 199	\$ 131	\$ 700

NCR Corporation
Notes to Consolidated Financial Statements-(Continued)

In millions	Notes	U.S.					International				
		Fair Value as of December 31, 2016	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Observable Inputs (Level 2)	Other	Significant Unobservable Inputs (Level 3)	Not Subject to Leveling	Fair Value as of December 31, 2016	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Assets											
<i>Equity securities:</i>											
Common stock	1	\$ —	\$ —	\$ —	\$ —	\$ —	\$ 47	\$ 47	\$ —	\$ —	\$ —
<i>Fixed income securities:</i>											
Government securities	2	234	—	234	—	—	27	—	27	—	—
Corporate debt	3	797	—	797	—	—	110	—	108	2	—
<i>Other types of investments:</i>											
Money market funds	4	28	—	—	—	28	8	—	8	—	—
Common and commingled trusts - Equities	4	—	—	—	—	—	169	—	—	—	169
Common and commingled trusts - Bonds	4	530	—	—	—	530	363	—	—	—	363
Common and commingled trusts - Short Term Investments	4	23	—	—	—	23	27	—	—	—	27
Common and commingled trusts - Balanced	4	—	—	—	—	—	104	—	—	—	104
Partnership/joint venture interests - Real estate	5	8	—	—	—	8	—	—	—	—	—
Partnership/joint venture interests - Other	5	6	—	—	—	6	—	—	—	—	—
Mutual funds	4	60	60	—	—	—	—	—	—	—	—
Hedge Funds	5	36	—	—	—	36	—	—	—	—	—
Insurance products	4	—	—	—	—	—	1	—	1	—	—
Real estate and other	5	—	—	—	—	—	122	—	—	122	—
Total		\$ 1,722	\$ 60	\$ 1,031	\$ —	\$ 631	\$ 978	\$ 47	\$ 144	\$ 124	\$ 663

Notes:

1. Common stocks are valued based on quoted market prices at the closing price as reported on the active market on which the individual securities are traded.
2. Government securities are valued based on yields currently available on comparable securities of issuers with similar credit ratings. When quoted prices are not available for identical or similar securities, the security is valued under a discounted cash flows approach that maximizes observable inputs, such as current yields on similar instruments but includes adjustments for certain risks that may not be observable, such as credit and liquidity risks.
3. Corporate debt is valued primarily based on observable market quotations for similar bonds at the closing price reported on the active market on which the individual securities are traded. When such quoted prices are not available, the bonds are valued using a discounted cash flows approach using current yields on similar instruments of issuers with similar credit ratings.
4. Common/collective trusts and registered investment companies (RICs) such as mutual funds are valued using a Net Asset Value (NAV) provided by the manager of each fund. The NAV is based on the underlying net assets owned by the fund, divided by the number of shares or units outstanding. The fair value of the underlying securities within the fund, which are generally traded on an active market, are valued at the closing price reported on the active market on which those individual securities are traded. For investments not traded on an active market, or for which a quoted price is not publicly available, a variety of

NCR Corporation
Notes to Consolidated Financial Statements-(Continued)

unobservable valuation methodologies, including discounted cash flow, market multiple and cost valuation approaches, are employed by the fund manager or independent third party to value investments.

5. Partnership/joint ventures and hedge funds are valued based on the fair value of the underlying securities within the fund, which include investments both traded on an active market and not traded on an active market. For those investments that are traded on an active market, the values are based on the closing price reported on the active market on which those individual securities are traded and in the case of hedge funds they are valued using a Net Asset Value (NAV) provided by the manager of each fund. For investments not traded on an active market, or for which a quoted price is not publicly available, a variety of unobservable valuation methodologies, including discounted cash flow, market multiples and cost valuation approaches, are employed by the fund manager to value investments.

The following table presents the reconciliation of the beginning and ending balances of those plan assets classified within Level 3 of the valuation hierarchy. When the determination is made to classify the plan assets within Level 3, the determination is based upon the significance of the unobservable inputs to the overall fair value measurement.

In millions	International Pension Plans	
Balance, December 31, 2015	\$	133
Realized and unrealized gains and losses, net		(8)
Purchases, sales and settlements, net		1
Transfers, net		(2)
Balance, December 31, 2016	\$	124
Realized and unrealized gains and losses, net		7
Purchases, sales and settlements, net		—
Transfers, net		—
Balance, December 31, 2017	\$	131

Investment Strategy NCR has historically employed a total return investment approach, whereby a mix of fixed-income, equities and real estate investments are used to maximize the long-term return of plan assets subject to a prudent level of risk. The risk tolerance is established for each plan through a careful consideration of plan liabilities, plan funded status and corporate financial condition. To reduce volatility in the value of assets held by the U.S. pension plan, we have rebalanced the asset allocation to a portfolio of 98% of fixed income assets as of December 31, 2017. Similar investment strategy changes are under consideration or being implemented in a number of NCR's international plans.

The investment portfolios contain primarily fixed-income investments, which are diversified across U.S. and non-U.S. issuers, type of fixed-income security (i.e., government bonds, corporate bonds, mortgage-backed securities) and credit quality. The investment portfolios also contain a blend of equity investments, which are diversified across U.S. and non-U.S. stocks, small and large capitalization stocks, and growth and value stocks, primarily of non-U.S. issuers. Where applicable, real estate investments are made through real estate securities, partnership interests or direct investment and are diversified by property type and location. Other assets, such as cash or private equity are used judiciously to improve portfolio diversification and enhance risk-adjusted portfolio returns. Derivatives may be used to adjust market exposures in an efficient and timely manner. Due to the timing of security purchases and sales, cash held by fund managers is classified in the same asset category as the related investment. Rebalancing algorithms are applied to keep the asset mix of the plans from deviating excessively from their targets. Investment risk is measured and monitored on an ongoing basis through regular performance reporting, investment manager reviews, actuarial liability measurements and periodic investment strategy reviews.

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Notes to Consolidated Financial Statements-(Continued)

Postretirement Plans Reconciliation of the beginning and ending balances of the benefit obligation for NCR's U.S. postretirement plan is as follows:

In millions	Postretirement Benefits	
	2017	2016
Change in benefit obligation		
Benefit obligation as of January 1	\$ 25	\$ 27
Interest cost	1	1
Actuarial gain	(3)	(2)
Plan participant contributions	—	1
Benefits paid	(2)	(2)
Benefit obligation as of December 31	<u>\$ 21</u>	<u>\$ 25</u>

The following table presents the funded status and the reconciliation of the funded status to amounts recognized in the Consolidated Balance Sheets and in accumulated other comprehensive loss as of December 31:

In millions	Postretirement Benefits	
	2017	2016
Benefit obligation	<u>\$ (21)</u>	<u>\$ (25)</u>
Amounts recognized in the Consolidated Balance Sheets		
Current liabilities	\$ (2)	\$ (3)
Noncurrent liabilities	(19)	(22)
Net amounts recognized	<u>\$ (21)</u>	<u>\$ (25)</u>
Amounts recognized in accumulated other comprehensive loss		
Net actuarial loss	\$ 11	\$ 16
Prior service benefit	(13)	(19)
Total	<u>\$ (2)</u>	<u>\$ (3)</u>

The net periodic benefit income of the postretirement plan for the years ended December 31 was:

In millions	Postretirement Benefits		
	2017	2016	2015
Interest cost	\$ 1	\$ 1	\$ 1
Amortization of:			
Prior service benefit	(6)	(14)	(18)
Actuarial loss	2	2	2
Net periodic benefit income	<u>\$ (3)</u>	<u>\$ (11)</u>	<u>\$ (15)</u>

The assumptions utilized in accounting for postretirement benefit obligations as of December 31 and for postretirement benefit income for the years ended December 31 were:

	Postretirement Benefit Obligations			Postretirement Benefit Costs		
	2017	2016	2015	2017	2016	2015
Discount rate	3.1%	3.2%	3.3%	3.2%	3.3%	3.1%

NCR Corporation
Notes to Consolidated Financial Statements-(Continued)

Assumed healthcare cost trend rates as of December 31 were:

	2017		2016	
	Pre-65 Coverage	Post-65 Coverage	Pre-65 Coverage	Post-65 Coverage
Healthcare cost trend rate assumed for next year	6.6%	5.9%	6.6%	5.8%
Rate to which the cost trend rate is assumed to decline (the ultimate trend rate)	5.0%	5.0%	5.0%	5.0%
Year that the rate reaches the ultimate rate	2025	2025	2024	2024

In addition, a one percentage point change in assumed healthcare cost trend rates would have had an immaterial impact on the postretirement benefit income and obligation.

Postemployment Benefits Reconciliation of the beginning and ending balances of the benefit obligation for NCR's postemployment plan was:

In millions	Postemployment Benefits	
	2017	2016
Change in benefit obligation		
Benefit obligation as of January 1	\$ 127	\$ 143
Restructuring program cost	—	4
Service cost	34	16
Interest cost	2	3
Benefits paid	(34)	(37)
Foreign currency exchange	9	(6)
Actuarial loss	4	4
Benefit obligation as of December 31	\$ 142	\$ 127

The following table present the funded status and the reconciliation of the unfunded status to amounts recognized in the Consolidated Balance Sheets and in accumulated other comprehensive loss at December 31:

In millions	Postemployment Benefits	
	2017	2016
Benefit obligation	\$ (142)	\$ (127)
Amounts recognized in the Consolidated Balance Sheets		
Current liabilities	\$ (28)	\$ (22)
Noncurrent liabilities	(114)	(105)
Net amounts recognized	\$ (142)	\$ (127)
Amounts recognized in accumulated other comprehensive loss		
Net actuarial gain	\$ (20)	\$ (42)
Prior service benefit	(11)	(17)
Total	\$ (31)	\$ (59)

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Notes to Consolidated Financial Statements-(Continued)

The net periodic benefit cost of the postemployment plan for the years ended December 31 was:

In millions	Postemployment Benefits		
	2017	2016	2015
Service cost	\$ 34	\$ 16	\$ 17
Interest cost	2	3	3
Amortization of:			
Prior service benefit	(6)	(6)	(4)
Actuarial gain	(6)	(7)	—
Net benefit cost	\$ 24	\$ 6	\$ 16
Restructuring severance cost	—	4	1
Net periodic benefit cost	\$ 24	\$ 10	\$ 17

During the years ended December 31, 2017, 2016 and 2015, restructuring charges for employee severance of zero, \$4 million and \$1 million, respectively, were recognized associated with the restructuring plan. See Note 14, "Restructuring Plan" for additional information.

The weighted average assumptions utilized in accounting for postemployment benefit obligations as of December 31 and for postemployment benefit costs for the years ended December 31 were:

	Postemployment Benefit Obligations		Postemployment Benefit Costs		
	2017	2016	2017	2016	2015
Discount rate	2.3%	2.0%	2.0%	2.2%	2.1%
Salary increase rate	1.9%	1.8%	1.8%	2.1%	2.0%
Involuntary turnover rate	4.8%	4.8%	4.8%	4.8%	4.8%

Cash Flows Related to Employee Benefit Plans

Cash Contributions NCR does not plan to contribute to the U.S. qualified pension plan in 2018, and plans to contribute approximately \$30 million to the international pension plans in 2018. The Company also plans to make contributions of approximately \$2 million to the U.S. postretirement plan and approximately \$60 million to the postemployment plan in 2018.

Estimated Future Benefit Payments NCR expects to make the following benefit payments reflecting past and future service from its pension, postretirement and postemployment plans:

In millions	U.S. Pension Benefits	International Pension Benefits	Total Pension Benefits	Postretirement Benefits	Postemployment Benefits
Year					
2018	\$ 104	\$ 53	\$ 157	\$ 2	\$ 60
2019	\$ 107	\$ 54	\$ 161	\$ 2	\$ 22
2020	\$ 109	\$ 52	\$ 161	\$ 2	\$ 21
2021	\$ 112	\$ 52	\$ 164	\$ 2	\$ 20
2022	\$ 114	\$ 52	\$ 166	\$ 2	\$ 18
2023-2027	\$ 581	\$ 265	\$ 846	\$ 5	\$ 76

Savings Plans U.S. employees and many international employees participate in defined contribution savings plans. These plans generally provide either a specified percent of pay or a matching contribution on participating employees' voluntary elections. NCR's matching contributions typically are subject to a maximum percentage or level of compensation. Employee contributions can be made pre-tax, after-tax or a combination thereof. The expense under the U.S. plan was approximately \$26 million in 2017, \$24 million in 2016, and \$23 million in 2015. The expense under international and subsidiary savings plans was \$24 million in 2017, \$26 million in 2016, and \$22 million in 2015.

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Notes to Consolidated Financial Statements-(Continued)

Amounts to be Recognized The amounts in accumulated other comprehensive loss that are expected to be recognized as components of net periodic benefit cost (income) during 2018 are as follows:

In millions	U.S. Pension Benefits	International Pension Benefits	Total Pension Benefits	Postretirement Benefits	Postemployment Benefits
Prior service cost (benefit)	\$ —	\$ 1	\$ 1	\$ (5)	\$ (5)
Actuarial loss (gain)	\$ —	\$ —	\$ —	\$ 1	\$ (1)

9. COMMITMENTS AND CONTINGENCIES

In the normal course of business, NCR is subject to various proceedings, lawsuits, claims and other matters, including, for example, those that relate to the environment and health and safety, labor and employment, employee benefits, import/export compliance, intellectual property, data privacy and security, product liability, commercial disputes and regulatory compliance, among others. Additionally, NCR is subject to diverse and complex laws and regulations, including those relating to corporate governance, public disclosure and reporting, environmental safety and the discharge of materials into the environment, product safety, import and export compliance, data privacy and security, antitrust and competition, government contracting, anti-corruption, and labor and human resources, which are rapidly changing and subject to many possible changes in the future. Compliance with these laws and regulations, including changes in accounting standards, taxation requirements, and federal securities laws among others, may create a substantial burden on, and substantially increase costs to NCR or could have an impact on NCR's future operating results. The Company has reflected all liabilities when a loss is considered probable and reasonably estimable in the Consolidated Financial Statements. We do not believe there is a reasonable possibility that losses exceeding amounts already recognized have been incurred, but there can be no assurances that the amounts required to satisfy alleged liabilities from such matters will not impact future operating results. Other than as stated below, the Company does not currently expect to incur material capital expenditures related to such matters. However, there can be no assurances that the actual amounts required to satisfy alleged liabilities from various lawsuits, claims, legal proceedings and other matters, including, but not limited to the Fox River and Kalamazoo River environmental matters and other matters discussed below, and to comply with applicable laws and regulations, will not exceed the amounts reflected in NCR's Consolidated Financial Statements or will not have a material adverse effect on its consolidated results of operations, capital expenditures, competitive position, financial condition or cash flows.

In 2012, NCR received anonymous allegations from a purported whistleblower regarding certain aspects of the Company's business practices in China, the Middle East and Africa. The principal allegations received in 2012 related to the Company's compliance with the Foreign Corrupt Practices Act (FCPA) and federal regulations that prohibit U.S. persons from engaging in certain activities in Syria. As previously reported, the Company and its Board of Directors completed investigations with the assistance of experienced outside counsel and resolved a related shareholder derivative action.

With respect to the FCPA, the Company made a presentation to the staff of the Securities and Exchange Commission (SEC) and the U.S. Department of Justice (DOJ) providing the facts known to the Company related to the whistleblower's FCPA allegations, and advising the government that many of these allegations were unsubstantiated. With respect to the DOJ, the Company responded to its most recent requests for documents in 2014. On June 22, 2015, the SEC staff notified the Company that it did not intend to recommend an enforcement action against the Company with respect to these matters.

With respect to Syria, in 2012 NCR voluntarily notified the U.S. Treasury Department Office of Foreign Assets Control (OFAC) of potential violations and ceased operations in Syria, which were commercially insignificant. The notification related to confusion stemming from the Company's failure to register in Syria the transfer of the Company's Syrian branch to a foreign subsidiary and to deregister the Company's legacy Syrian branch, which was a branch of NCR Corporation. The Company applied for and received from OFAC various licenses that permitted the Company to take measures required to wind down its past operations in Syria. The last such license expired in April 2016, and in connection with that expiration the Company abandoned its remaining property in Syria, which was commercially insignificant, and ended the employment of its final two employees there, who had remained employed by the Company to assist with the execution of the Company's wind-down activities pursuant to authority granted by the OFAC licenses. The Company also submitted detailed reports to OFAC regarding this matter, including a description of the Company's comprehensive export control program and related remedial measures, and a description of the abandonment and related circumstances. In correspondence dated May 5, 2017, OFAC advised the Company it would not seek monetary penalties against the Company, and issued a so-called "cautionary letter" as a "final enforcement response."

In 2013 the Company entered into a subcontract with a prime contractor with respect to certain information technology components of two airport construction projects in Oman. In 2015 the prime contractor's contract with an Omani public agency was terminated for cause; the Company and the prime contractor (a joint venture) subsequently provided to each other notices of termination of

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Notes to Consolidated Financial Statements-(Continued)

the subcontract. The prime contractor subsequently filed liquidation proceedings in Oman. The Company had delivered and installed goods and services in the approximate amount of \$40 million as of 2015 when the various contracts were terminated, approximately half of which sum remains due and owing; under the terms of the subcontract, most of the payment obligations by the Omani public agency to the terminated prime contractor, and from the terminated prime contractor to the Company, had not at that time matured. The Company remains engaged in the construction projects, having been urged by the Omani public agency to enter into a new subcontract with a new prime contractor, which the Company did later in 2015. In 2016 the Company entered into a partial settlement agreement with the Omani public agency under which it was paid approximately half of the sums owed to it, in exchange for certain deliverables under the original subcontract. The Company has identified various avenues to pursue, against the prime contractor and others, including the parent of one of the joint venture partners in the terminated prime contractor, to obtain recoveries of the remaining amounts owed to it. Based on the status of negotiations and proceedings as of December 31, 2017, the Company continues to maintain a reserve of approximately \$20 million with respect to those portions of its claim that it considered did not meet the Company's standard for probable recovery.

In June 2014, one of the Company's Brazilian subsidiaries, NCR Manaus, was notified of a Brazilian federal tax assessment of R\$168 million, or approximately \$51 million as of December 31, 2017, including penalties and interest regarding certain federal indirect taxes for 2010 through 2012. The assessment alleges improper importation of certain components into Brazil's free trade zone that would nullify related indirect tax incentives. We have not recorded an accrual for the assessment, as the Company believes it has a valid position regarding indirect taxes in Brazil and, as such, has filed an appeal in 2014. In December 2017, the Company prevailed in this appeal regarding substantially all of the disputed amounts. However, the Brazilian federal tax authority has further appealed this dispute to the next procedural level, so the dispute is ongoing. The Company estimated the aggregate risk related to this matter to be between zero and \$75 million as of December 31, 2017. Although the Company has not recorded an accrual, it is possible that the Company could be required to pay taxes, penalties and interest related to this matter, which could be material to the Company's Consolidated Financial Statements.

Environmental Matters NCR's facilities and operations are subject to a wide range of environmental protection laws, and NCR has investigatory and remedial activities underway at a number of facilities that it currently owns or operates, or formerly owned or operated, to comply, or to determine compliance, with such laws. Also, NCR has been identified, either by a government agency or by a private party seeking contribution to site clean-up costs, as a potentially responsible party (PRP) at a number of sites pursuant to various state and federal laws, including the Federal Water Pollution Control Act, the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and comparable state statutes. Other than the Fox River matter and the Kalamazoo River matter detailed below, we currently do not anticipate material expenses and liabilities from these environmental matters.

Fox River NCR is one of eight entities that were formally notified by governmental and other entities, such as local Native American tribes, that they are PRPs for environmental claims (under CERCLA and other statutes) arising out of the presence of polychlorinated biphenyls (PCBs) in sediments in the lower Fox River and in the Bay of Green Bay in Wisconsin. The other Fox River PRPs that received notices are Appleton Papers Inc. (API; now known as Appvion, Inc.), P.H. Glatfelter Company ("Glatfelter"), Georgia-Pacific Consumer Products LP (GP, successor to Fort James Operating Company), WTM I Co. (formerly Wisconsin Tissue Mills, now owned by Canal Corporation, formerly known as Chesapeake Corporation), CBC Corporation (formerly Riverside Paper Corporation), U.S. Paper Mills Corp. (owned by Sonoco Products Company), and Menasha Corporation. NCR was identified as a PRP because of alleged PCB discharges from two carbonless copy paper manufacturing facilities it previously owned, which were located along the Fox River. NCR sold its facilities in 1978 to API. Some parties contended that NCR is also responsible for PCB discharges from paper mills owned by other companies because NCR carbonless copy paper "broke" was allegedly purchased by those other mills as a raw material.

The United States Environmental Protection Agency (USEPA) and Wisconsin Department of Natural Resources (together, the Governments) developed clean-up plans for the upper and lower parts of the Fox River and for portions of the Bay of Green Bay. On November 13, 2007, the Governments issued a unilateral administrative order (the 2007 Order) under CERCLA to the eight original PRPs, requiring them to perform remedial work under the Governments' clean-up plan for the lower parts of the river (operable units 2 through 5). In April 2009, NCR and API formed a limited liability company (the LLC), which entered into an agreement with an environmental remediation contractor to perform the work at the Fox River site. In-water dredging and remediation under the clean-up plan commenced shortly thereafter.

NCR and API, along with B.A.T Industries p.l.c. (BAT), share among themselves a portion of the cost of the Fox River clean-up and natural resource damages (NRD) based upon a 1998 agreement (the Cost Sharing Agreement), a 2005 arbitration award (subsequently confirmed as a judgment), and a September 30, 2014 Funding Agreement (the Funding Agreement). The Cost Sharing Agreement and the arbitration resolved disputes that arose out of the Company's 1978 sale of its Fox River facilities to API. The Cost Sharing Agreement and arbitration award resulted in a 45% share for NCR of the first \$75 million of such costs (a threshold

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Notes to Consolidated Financial Statements-(Continued)

that was reached in 2008), and a 40% share for amounts in excess of \$75 million. The Funding Agreement arose out of a 2012 to 2014 arbitration dispute between NCR and API, and provides for regular, ongoing funding of NCR incurred Fox River remediation costs via contributions, made to a new limited liability corporation created by the Funding Agreement, by BAT, API and, for 2014, API's indemnitor, Windward Prospects. The Funding Agreement creates an obligation on BAT and API to fund 50% of NCR's Fox River remediation costs from October 1, 2014 forward; (API's Fox River-related obligations under the Funding Agreement were fully satisfied in 2016); the Funding Agreement also provides NCR contractual avenues for payment of, via direct and third-party sources, (1) the difference between BAT's and API's 60% obligation under the Cost Sharing Agreement and arbitration award on the one hand and their ongoing (since September 2014) 50% payments under the Funding Agreement on the other, as well as (2) the difference between the amount NCR received under the Funding Agreement and the amount owed to it under the Cost Sharing Agreement and arbitration award for the period from April 2012 through September 2014. As of December 31, 2017, the receivable under the Funding Agreement was approximately \$38 million and was included in other assets in the Consolidated Balance Sheet. The Company anticipates that it will collect sums related to the receivable in 2019 or later, likely after the remediation efforts related to the Fox River matter, described below, are complete. This receivable is not taken into account in calculating the Company's Fox River net reserve.

The Company's litigation relating to contribution and enforcement claims concerning the Fox River have largely been concluded. A proposed consent decree settlement (the CD settlement) with respect to the contribution action (originally filed by NCR and API) and the government enforcement action (originally filed by the federal and state governments against several PRPs) was successfully negotiated by NCR and the federal and state governments. In January 2017 the government filed a motion for approval of the CD settlement with the federal district court in Wisconsin that had been overseeing those cases. Pending its decision on approval of the CD settlement, that court canceled a trial that had been scheduled for 2017. Following briefing on the CD settlement, the court approved it on August 22, 2017. A final order of dismissal as to the Company in the contribution and government enforcement actions was subsequently entered; one party, Glatfelter, has appealed the approval of the CD settlement.

The CD settlement is expected to resolve the remaining Fox River-related claims against the Company, subject to any appeals, including the Glatfelter appeal referenced above. The key components of the approved CD settlement include (1) the Company's commitment to complete the remediation of the Fox River, which is now expected to be completed in 2019 or 2020; (2) the Company's conditional agreement to waive its contribution claims against the two remaining defendants in the case, GP and Glatfelter; (3) the Company's agreement not to appeal the trial court's decision on divisibility of harm; (4) the Governments' agreement to include in the settlement so-called "contribution protection" in the Company's favor as to GP's and Glatfelter's contribution claims against the Company, the effect of which will be to extinguish those claims; (5) the Governments' agreement not to pursue the Company for the Governments' past oversight costs; and (6) the Governments' agreement to exercise prosecutorial discretion in pursuing other parties for future oversight costs and long-term monitoring and maintenance, with the Company retaining so-called "backstop" liability in the event that the other parties fail to pay future oversight costs or to perform long-term monitoring and maintenance. Additionally, although certain state law claims by GP and Glatfelter against the Company may not be affected directly by the CD settlement, the CD settlement provides that the Company's contribution claims against those two parties will revive if those parties attempt to assert any claims against the Company relating to the Fox River, including any state law claims.

In the quarter ending September 30, 2017, the remediation general contractor commenced an arbitration against the LLC, in a dispute over contract interpretation. That dispute is scheduled for a hearing in late 2018.

With respect to the Company's prior dispute with API, which was generally superseded by the Funding Agreement, the Company received timely payments as they came due under the Funding Agreement. Although API filed for bankruptcy protection in October 2017, it had made all of the payments to the Company required of it by the Funding Agreement.

NCR's eventual remediation liability, followed by long-term monitoring expected to be performed by others, will depend on a number of factors. In establishing the reserve, NCR attempts to estimate a range of reasonably possible outcomes for each of these factors, although each range is itself uncertain. NCR uses its best estimate within the range, if that is possible. Where there is a range of equally possible outcomes, and there is no amount within that range that is considered to be a better estimate than any other amount, NCR uses the low end of the range. The significant factors include: (1) the total remaining clean-up costs, including long-term monitoring following completion of the clean-up, and what parties are assigned to discharge the post-clean-up tasks (as noted, the Company no longer expects to bear long-term monitoring costs); (2) total NRD for the site and the share that NCR will bear (which is now resolved as to the Company); (3) the share of clean-up costs that NCR will bear (which is resolved under the CD settlement); (4) NCR's transaction and litigation costs to defend itself in this matter; and (5) the share of NCR's payments that API and/or BAT will bear (which is governed by the Cost Sharing Agreement and the Funding Agreement, as discussed above). With respect to NRD, in connection with a certain settlement entered into by other PRPs in 2015, the Government withdrew the NRD claims it had prosecuted on behalf of NRD trustees, including those NRD claims asserted against the Company.

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Notes to Consolidated Financial Statements-(Continued)

Calculation of the Company's Fox River reserve is subject to several complexities, and it is possible there could be additional changes to some elements of the reserve over upcoming periods, although the Company is unable to predict or estimate such changes at this time. There can be no assurance that the clean-up and related expenditures and liabilities will not have a material effect on NCR's capital expenditures, earnings, financial condition, cash flows, or competitive position. As of December 31, 2017 and 2016, the gross reserve for the Fox River matter was approximately \$36 million and \$58 million, respectively. As of December 31, 2017 and 2016, the net reserve for the Fox River matter was approximately \$35 million and \$27 million, respectively. The change in the net reserve is due primarily to changes in estimates and assumptions of the remaining cost previously discussed partially offset by payments for clean-up activities and litigation costs as well as cash payments received from indemnitors. NCR contributes to the LLC to fund remediation activities and generally, by contract, has funded certain amounts of remediation expenses in advance. As of December 31, 2017 and 2016, approximately zero remained from this funding. NCR's reserve for the Fox River matter is reduced as the LLC makes payments to the remediation contractor and other vendors with respect to remediation activities.

Under a 1996 agreement, AT&T Corp. (AT&T) and Nokia (as the successor to Lucent Technologies and Alcatel-Lucent USA) are responsible severally (not jointly) for indemnifying NCR for certain portions of the amounts paid by NCR for the Fox River matter over a defined threshold and subject to certain offsets. (The agreement governs certain aspects of AT&T's divestiture of NCR and of what was then known as Lucent Technologies.) Those companies have made the payments the Company has requested of them on an ongoing basis.

Kalamazoo River In November 2010, USEPA issued a "general notice letter" to NCR with respect to the Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site (Kalamazoo River site) in Michigan. Three other companies - International Paper, Mead Corporation, and Consumers Energy - also received general notice letters at or about the same time. USEPA asserts that the site is contaminated by various substances, primarily PCBs, as a result of discharges by various paper mills located along the river. USEPA does not claim that the Company made direct discharges into the Kalamazoo River, and NCR never had facilities at or near the Kalamazoo River site, but indicated that "NCR may be liable under Section 107 of CERCLA ... as an arranger, who by contract or agreement, arranged for the disposal, treatment and/or transportation of hazardous substances at the Site." USEPA stated that it "may issue special notice letters to [NCR] and other PRPs for future RI/FS [remedial investigation / feasibility studies] and RD/RA [remedial design / remedial action] negotiations."

In connection with the Kalamazoo River site, in December 2010 the Company, along with two other defendants, was sued in federal court by three GP affiliate corporations in a contribution and cost recovery action for alleged pollution. The suit, pending in Michigan, asks that the Company pay a "fair portion" of these companies' costs. Various removal and remedial actions remain to be performed at the Kalamazoo River site, the costs for which generally have not yet been determined. The suit alleges that the Company is liable as an "arranger" under CERCLA. The initial phase of the case was tried in a Michigan federal court in February 2013; on September 26, 2013 the court issued a decision that held NCR was liable as an "arranger" as of at least March 1969. (PCB-containing carbonless copy paper was produced from approximately 1954 to April 1971, and the majority of contamination had occurred prior to 1969). NCR has preserved its right to appeal the September 2013 decision.

The Court did not determine NCR's share of the overall liability, which the Company believes should be de minimis, or how NCR's liability relates to the liability of other liable or potentially liable parties at the site. Relative shares of liability were tried to the court in a subsequent phase of the case; the trial concluded in December 2015, and posttrial briefing concluded in March 2016. The parties are awaiting the court's judgment. Prior to trial, in response to a motion filed by the Company, the court dismissed several portions of GP's claims as time-barred, with the result that the past costs being tried total to approximately \$50 million. The court may or may not also rule on the allocation of future costs. If the Company is found liable for money damages or otherwise with respect to the Kalamazoo River site, it would have claims against BAT and API under the Cost Sharing Agreement, the arbitration award, the judgment and the Funding Agreement discussed above in connection with the Fox River matter (the Funding Agreement may provide partial reimbursement of such damages depending on the extent of certain recoveries, if any, against third parties under its terms). API filed for bankruptcy protection in October 2017, and thus payment of its potential share (up to a cap of \$25 million) under the Funding Agreement for so-called "future sites," which would include the Kalamazoo River site, may be at risk, but as liability under the Cost Sharing Agreement and the Funding Agreement is joint and several, the bankruptcy is not anticipated to affect the Company's ability to seek that amount from BAT. The Company would also have claims against AT&T and Nokia under the arrangement discussed above in connection with the Fox River matter.

Environmental-Related Insurance Recoveries In connection with the Fox River and other environmental sites, through December 31, 2017, NCR has received a combined gross total of approximately \$202 million in settlements reached with various of its insurance carriers. Portions of many of these settlements agreed in the 2010 through 2013 timeframe are payable to a law firm that litigated the claims on the Company's behalf. Some of the settlements cover not only the Fox River but also other environmental sites; some are limited to the Kalamazoo River site. Some of the settlements are directed to defense costs and some are directed to indemnity costs.

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Notes to Consolidated Financial Statements-(Continued)

Environmental Remediation Estimates It is difficult to estimate the future financial impact of environmental laws, including potential liabilities. NCR records environmental provisions when it is probable that a liability has been incurred and the amount or range of the liability is reasonably estimable. Provisions for estimated losses from environmental restoration and remediation are, depending on the site, based generally on internal and third-party environmental studies, estimates as to the number and participation level of other PRPs, the extent of contamination, estimated amounts for attorney and other fees, and the nature of required clean-up and restoration actions. Reserves are adjusted as further information develops or circumstances change. Management expects that the amounts reserved from time to time will be paid out over the period of investigation, negotiation, remediation and restoration for the applicable sites. The amounts provided for environmental matters in NCR's Consolidated Financial Statements are the estimated gross undiscounted amounts of such liabilities, without deductions for indemnity insurance, third-party indemnity claims or recoveries from other PRPs, except as qualified in the following sentences. In those cases where insurance carriers or third-party indemnitors have agreed to pay any amounts and management believes that collectability of such amounts is probable, the amounts are recorded in the Consolidated Financial Statements. For the Fox River site, as described above, assets relating to the AT&T and Nokia indemnities and to the API/BAT obligations are recorded as payment is supported by contractual agreements, public filings and/or payment history.

Guarantees and Product Warranties In the ordinary course of business, NCR may issue performance guarantees on behalf of its subsidiaries to certain of its customers and other parties. Some of those guarantees may be backed by standby letters of credit, surety bonds, or similar instruments. In general, under the guarantees, NCR would be obligated to perform, or cause performance, over the term of the underlying contract in the event of an unexcused, uncured breach by its subsidiary, or some other specified triggering event, in each case as defined by the applicable guarantee. NCR believes the likelihood of having to perform under any such guarantee is remote. As of December 31, 2017 and 2016, NCR had no material obligations related to such guarantees, and therefore its Consolidated Financial Statements do not have any associated liability balance.

NCR provides its customers a standard manufacturer's warranty and records, at the time of the sale, a corresponding estimated liability for potential warranty costs. Estimated future obligations due to warranty claims are based upon historical factors, such as labor rates, average repair time, travel time, number of service calls per machine and cost of replacement parts. When a sale is consummated, the total customer revenue is recognized, provided that all revenue recognition criteria are otherwise satisfied, and the associated warranty liability is recorded using pre-established warranty percentages for the respective product classes.

From time to time, product design or quality corrections are accomplished through modification programs. When identified, associated costs of labor and parts for such programs are estimated and accrued as part of the warranty reserve.

The Company recorded the activity related to the warranty reserve for the the years ended December 31 as follows:

In millions	2017	2016	2015
Warranty reserve liability			
Beginning balance as of January 1	\$ 27	\$ 24	\$ 22
Accruals for warranties issued	43	42	41
Settlements (in cash or in kind)	(44)	(39)	(39)
Ending balance as of December 31	<u>\$ 26</u>	<u>\$ 27</u>	<u>\$ 24</u>

In addition, NCR provides its customers with certain indemnification rights. In general, NCR agrees to indemnify the customer if a third party asserts patent or other infringement on the part of its customers for its use of the Company's products subject to certain conditions that are generally standard within the Company's industries. On limited occasions the Company will undertake additional indemnification obligations for business reasons. From time to time, NCR also enters into agreements in connection with its acquisition and divestiture activities that include indemnification obligations by the Company. The fair value of these indemnification obligations is not readily determinable due to the conditional nature of the Company's potential obligations and the specific facts and circumstances involved with each particular agreement. The Company has not recorded a liability in connection with these indemnifications, and no current indemnification instance is material to the Company's financial position. Historically, payments made by the Company under these types of agreements have not had a material effect on the Company's consolidated financial condition, results of operations or cash flows.

Purchase Commitments The Company has purchase commitments for materials, supplies, services, and property, plant and equipment as part of the normal course of business. This includes a long-term service agreement with Accenture under which many of NCR's key transaction processing activities and functions are performed.

NCR Corporation
Notes to Consolidated Financial Statements-(Continued)

Leases NCR conducts certain of its sales and manufacturing operations using leased facilities, and also operates certain equipment and vehicles under leases, the initial lease terms of which vary in length. Many of the leases contain renewal options and escalation clauses that are not material to the overall lease portfolio. Our lease obligations also include amounts owed for our future world headquarters in Atlanta. Due to ongoing construction, we assumed lease commencement in early 2018 and included assumptions regarding the total project cost, which will be used to determine our monthly rental expense. Future minimum lease payments under non-cancelable operating leases as of December 31, 2017, for the following fiscal years are:

In millions	2018	2019	2020	2021	2022
Minimum lease obligations	\$ 135	\$ 96	\$ 65	\$ 49	\$ 41

Total rental expense for operating leases was \$144 million in 2017, \$132 million in 2016, and \$148 million in 2015.

10. DERIVATIVES AND HEDGING INSTRUMENTS

NCR is exposed to risks associated with changes in foreign currency exchange rates and interest rates. NCR utilizes a variety of measures to monitor and manage these risks, including the use of derivative financial instruments. NCR has exposure to approximately 50 functional currencies. Since a substantial portion of our operations and revenue occur outside the U.S., and in currencies other than the U.S. Dollar, our results can be significantly impacted, both positively and negatively, by changes in foreign currency exchange rates.

Foreign Currency Exchange Risk The accounting guidance for derivatives and hedging requires companies to recognize all derivative instruments as either assets or liabilities at fair value in the Consolidated Balance Sheets. The Company designates foreign exchange contracts as cash flow hedges of forecasted transactions when they are determined to be highly effective at inception.

Our risk management strategy includes hedging, on behalf of certain subsidiaries, a portion of our forecasted, non-functional currency denominated cash flows for a period of up to 15 months. As a result, some of the impact of currency fluctuations on non-functional currency denominated transactions (and hence on subsidiary operating income, as stated in the functional currency), is mitigated in the near term. The amount we hedge and the duration of hedge contracts may vary significantly. In the longer term (greater than 15 months), the subsidiaries are still subject to the effect of translating the functional currency results to U.S. Dollars. To manage our exposures and mitigate the impact of currency fluctuations on the operations of our foreign subsidiaries, we hedge our main transactional exposures through the use of foreign exchange forward and option contracts. This is primarily done through the hedging of foreign currency denominated inter-company inventory purchases by NCR's marketing units and the foreign currency denominated inputs to our manufacturing units. The related foreign exchange contracts are designated as highly effective cash flow hedges. The gains or losses on these hedges are deferred in accumulated other comprehensive income (AOCI) and reclassified to income when the underlying hedged transaction is recorded in earnings. As of December 31, 2017, the balance in AOCI related to foreign exchange derivative transactions was a loss of \$1 million. The gains or losses from derivative contracts related to inventory purchases are recorded in cost of products when the inventory is sold to an unrelated third party.

We also utilize foreign exchange contracts to hedge our exposure of assets and liabilities denominated in non-functional currencies. We recognize the gains and losses on these types of hedges in earnings as exchange rates change. We do not enter into hedges for speculative purposes.

Interest Rate Risk The Company was party to an interest rate swap agreement that fixed the interest rate on a portion of the Company's LIBOR indexed floating rate borrowings under its Senior Secured Credit Facility through August 22, 2016. The Company designated the interest rate swap as a cash flow hedge of forecasted quarterly interest payments made on three-month LIBOR indexed borrowings under the Senior Secured Credit Facility. The interest rate swap was determined to be highly effective at inception.

NCR Corporation
Notes to Consolidated Financial Statements-(Continued)

The following tables provide information on the location and amounts of derivative fair values in the Consolidated Balance Sheets:

		Fair Values of Derivative Instruments				
		December 31, 2017				
In millions	Balance Sheet Location	Notional Amount	Fair Value	Balance Sheet Location	Notional Amount	Fair Value
Derivatives designated as hedging instruments						
Foreign exchange contracts	Other current assets	\$104	\$—	Other current liabilities	\$142	\$1
Total derivatives designated as hedging instruments			\$—			
Derivatives not designated as hedging instruments						
Foreign exchange contracts	Other current assets	\$101	\$1	Other current liabilities	\$292	\$1
Total derivatives not designated as hedging instruments			\$1			
Total derivatives			\$1			

		Fair Values of Derivative Instruments				
		December 31, 2016				
In millions	Balance Sheet Location	Notional Amount	Fair Value	Balance Sheet Location	Notional Amount	Fair Value
Derivatives designated as hedging instruments						
Foreign exchange contracts	Other current assets	\$251	\$18	Other current liabilities	\$56	\$1
Total derivatives designated as hedging instruments			\$18			
Derivatives not designated as hedging instruments						
Foreign exchange contracts	Other current assets	\$165	\$1	Other current liabilities	\$218	\$1
Total derivatives not designated as hedging instruments			\$1			
Total derivatives			\$19			

NCR Corporation
Notes to Consolidated Financial Statements-(Continued)

The effects of derivative instruments on the Consolidated Statement of Operations for the years ended December 31 were as follows:

In millions	Amount of Gain (Loss) Recognized in Other Comprehensive Income (OCI) on Derivative (Effective Portion)			Location of (Gain) Loss Reclassified from AOCI into the Consolidated Statement of Operations (Effective Portion)	Amount of (Gain) Loss Reclassified from AOCI into the Consolidated Statement of Operations (Effective Portion)			Location of (Gain) Loss Recognized in the Consolidated Statement of Operations (Ineffective Portion and Amount Excluded from Effectiveness Testing)	Amount of (Gain) Loss Recognized in the Consolidated Statement of Operations (Ineffective Portion and Amount Excluded from Effectiveness Testing)		
	For the year ended December 31, 2017	For the year ended December 31, 2016	For the year ended December 31, 2015		For the year ended December 31, 2017	For the year ended December 31, 2016	For the year ended December 31, 2015		For the year ended December 31, 2017	For the year ended December 31, 2016	For the year ended December 31, 2015
Derivatives in Cash Flow Hedging Relationships											
Interest rate swap	\$—	\$—	\$ (2)	Interest expense	\$—	\$ 2	\$ 5	Interest expense	\$—	\$—	\$—
Foreign exchange contracts	\$ (16)	\$ 19	\$ 12	Cost of products	\$ (1)	\$ (3)	\$ (12)	Other (expense), net	\$—	\$—	\$—

In millions	Derivatives not Designated as Hedging Instruments	Location of Gain (Loss) Recognized in the Consolidated Statement of Operations	Amount of Gain (Loss) Recognized in the Consolidated Statement of Operations		
			For the year ended December 31, 2017	For the year ended December 31, 2016	For the year ended December 31, 2015
	Foreign exchange contracts	Other (expense), net	\$ (4)	\$ (1)	\$ (5)

Refer to Note 11, "Fair Value of Assets and Liabilities" for further information on derivative assets and liabilities recorded at fair value on a recurring basis.

Concentration of Credit Risk

NCR is potentially subject to concentrations of credit risk on accounts receivable and financial instruments such as hedging instruments and cash and cash equivalents. Credit risk includes the risk of nonperformance by counterparties. The maximum potential loss may exceed the amount recognized on the Consolidated Balance Sheets. Exposure to credit risk is managed through credit approvals, credit limits, selecting major international financial institutions as counterparties to hedging transactions and monitoring procedures. NCR's business often involves large transactions with customers, and if one or more of those customers were to default on its obligations under applicable contractual arrangements, the Company could be exposed to potentially significant losses. However, management believes that the reserves for potential losses are adequate. As of December 31, 2017 and 2016, NCR did not have any major concentration of credit risk related to financial instruments.

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Notes to Consolidated Financial Statements-(Continued)

11. FAIR VALUE OF ASSETS AND LIABILITIES

Assets and Liabilities Measured at Fair Value on a Recurring Basis

Assets and liabilities recorded at fair value on a recurring basis as of December 31, 2017 and 2016 are set forth as follows:

In millions	December 31, 2017				December 31, 2016			
	Fair Value Measurements Using				Fair Value Measurements Using			
	December 31, 2017	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	December 31, 2016	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Assets:								
Deposits held in money market mutual funds ⁽¹⁾	\$90	\$90	\$—	\$—	\$5	\$5	\$—	\$—
Foreign exchange contracts ⁽²⁾	1	—	1	—	19	—	19	—
Total	\$91	\$90	\$1	\$—	\$24	\$5	\$19	\$—
Liabilities:								
Foreign exchange contracts ⁽³⁾	2	—	2	—	2	—	2	—
Total	\$2	\$—	\$2	\$—	\$2	\$—	\$2	\$—

⁽¹⁾ Included in Cash and cash equivalents in the Consolidated Balance Sheet.

⁽²⁾ Included in Other current assets in the Consolidated Balance Sheet.

⁽³⁾ Included in Other current liabilities in the Consolidated Balance Sheet.

Deposits Held in Money Market Mutual Funds A portion of the Company's excess cash is held in money market mutual funds which generate interest income based on prevailing market rates. Money market mutual fund holdings are measured at fair value using quoted market prices and are classified within Level 1 of the valuation hierarchy.

Foreign Exchange Contracts As a result of our global operating activities, we are exposed to risks from changes in foreign currency exchange rates, which may adversely affect our financial condition. To manage our exposures and mitigate the impact of currency fluctuations on our financial results, we hedge our primary transactional exposures through the use of foreign exchange forward and option contracts. The foreign exchange contracts are valued using the market approach based on observable market transactions of forward rates and are classified within Level 2 of the valuation hierarchy.

Assets Measured at Fair Value on a Non-recurring Basis

Certain assets have been measured at fair value on a nonrecurring basis using significant unobservable inputs (Level 3). NCR measures certain assets, including intangible assets and cost and equity method investments, at fair value on a non-recurring basis. These assets are recognized at fair value when initially valued and when deemed to be impaired. Additionally, NCR reviews the carrying values of investments when events and circumstances warrant and considers all available evidence in evaluating when declines in fair value are other-than-temporary declines. NCR carries equity investments in privately-held companies at cost or at fair value when NCR recognizes an other-than-temporary impairment charge.

No material impairment charges or material non-recurring fair value adjustments were recorded during the years ended December 31, 2017 and December 31, 2016.

As of December 31, 2015, we determined that it was probable that we would dispose of our IPS business, which triggered an impairment assessment of the related assets which include long-lived assets and goodwill. The assets related to the IPS business were valued using a market approach based on an independent third-party market price. Refer to Note 2, "Business Combinations and Divestitures" for additional discussion. On May 27, 2016, NCR completed the sale of all but the Middle East and Africa (MEA) assets of its Interactive Printer Solutions (IPS) business to Atlas Holdings LLC.

NCR Corporation
Notes to Consolidated Financial Statements-(Continued)

12. SEGMENT INFORMATION AND CONCENTRATIONS

The Company manages and reports the following three segments:

- **Software** - Our software offerings include industry-based software platforms, applications and application suites for the financial services, retail, hospitality and small business industries. We also offer a portfolio of other industry-oriented software applications including cash management software, video banking software, fraud and loss prevention applications, check and document imaging, remote-deposit capture and customer-facing mobile and digital banking applications for the financial services industry; and secure electronic and mobile payment solutions, sector-specific point of sale software applications, and back-office inventory and store and restaurant management applications for the retail and hospitality industries. Additionally, we provide ongoing software support and maintenance services, as well as consulting and implementation services for our software solutions.
- **Services** - Our global end-to-end services solutions include assessment and preparation, staging, installation, implementation, and maintenance and support for our solutions. We also provide systems management and complete managed services for our product offerings. In addition, we provide installation, maintenance and servicing for third party networking products and computer hardware from select manufacturers.
- **Hardware** - Our hardware solutions include our suite of financial-oriented self-service ATM-related hardware, and our retail- and hospitality-oriented point of sale terminal, self-checkout kiosk and related hardware. We also offer other self-service kiosks, such as self-check in/out kiosks for airlines, and wayfinding solutions for buildings and campuses.

These segments represent components of the Company for which separate financial information is available that is utilized on a regular basis by the chief operating decision maker in assessing segment performance and in allocating the Company's resources. Management evaluates the performance of the segments based on revenue and segment operating income. Assets are not allocated to segments, and thus are not included in the assessment of segment performance, and consequently, we do not disclose total assets by reportable segment.

The accounting policies used to determine the results of the operating segments are the same as those utilized for the consolidated financial statements as a whole. Intersegment sales and transfers are not material.

To maintain operating focus on business performance, non-operational items are excluded from the segment operating results utilized by our chief operating decision maker in evaluating segment performance and are separately delineated to reconcile back to total reported income from operations.

The following table presents revenue and operating income by segment for the years ended December 31:

In millions	2017	2016	2015
Revenue by segment			
Software	\$ 1,900	\$ 1,841	\$ 1,747
Services	2,373	2,306	2,218
Hardware ⁽¹⁾	2,243	2,396	2,408
Consolidated revenue	6,516	6,543	6,373
Operating income by segment			
Software	567	577	539
Services	288	201	194
Hardware ⁽¹⁾	(2)	62	87
Subtotal - segment operating income	853	840	820
Other adjustments ⁽²⁾	177	241	685
Income from operations	\$ 676	\$ 599	\$ 135

⁽¹⁾ On May 27, 2016, NCR completed the sale of substantially all of its IPS business to Atlas Holdings. The sale included all dedicated assets of the IPS division worldwide, other than in the MEA region. Accordingly, the revenue and operating income results exclude the results of the IPS operations, except for the IPS MEA operations, from May 27, 2016 through the end of the fourth quarter of 2016.

NCR Corporation
Notes to Consolidated Financial Statements-(Continued)

(2) The following table presents the other adjustments for NCR for the years ended December 31:

In millions	2017	2016	2015
Pension mark-to-market adjustments	\$ 28	\$ 85	\$ 454
Restructuring/transformation costs	29	26	74
Acquisition-related amortization of intangible assets	115	123	125
Acquisition-related costs	5	7	11
OFAC and FCPA investigations	—	—	1
Reserve related to subcontract in MEA	—	—	20
Total other adjustments	\$ 177	\$ 241	\$ 685

The following table presents revenue from products and services for NCR for the years ended December 31:

In millions	2017	2016	2015
Product revenue	\$ 2,579	\$ 2,737	\$ 2,711
Professional services and installation services revenue	1,055	1,011	944
Recurring revenue, including maintenance and cloud revenue	2,882	2,795	2,718
Total revenue	\$ 6,516	\$ 6,543	\$ 6,373

Revenue is attributed to the geographic area/country to which the product is delivered or in which the service is provided. The following table presents revenue by geographic area for NCR for the years ended December 31:

In millions	2017	%	2016	%	2015	%
Revenue by Geographic Area						
United States	\$ 3,224	50%	\$ 3,106	47%	\$ 2,909	46%
Americas (excluding United States)	585	9%	637	10%	590	9%
Europe, Middle East and Africa (EMEA)	1,786	27%	1,896	29%	1,964	31%
Asia Pacific (APJ)	921	14%	904	14%	910	14%
Consolidated revenue	\$ 6,516	100%	\$ 6,543	100%	\$ 6,373	100%

The following table presents property, plant and equipment by geographic area as of December 31:

In millions	2017	2016
Property, plant and equipment, net		
United States	\$ 204	\$ 139
Americas (excluding United States)	19	21
Europe, Middle East and Africa (EMEA)	75	70
Asia Pacific (APJ)	43	57
Consolidated property, plant and equipment, net	\$ 341	\$ 287

Concentrations No single customer accounts for more than 10% of NCR's consolidated revenue. As of December 31, 2017, NCR is not aware of any significant concentration of business transacted with a particular customer that could, if suddenly eliminated, have a material adverse effect on NCR's operations. NCR also lacks a concentration of available sources of labor, services, licenses or other rights that could, if suddenly eliminated, have a material adverse effect on its operations.

A number of NCR's products, systems and solutions rely primarily on specific suppliers for microprocessors and other component products, manufactured assemblies, operating systems, commercial software and other central components. NCR also utilizes contract manufacturers in order to complete manufacturing activities. There can be no assurances that any sudden impact to the availability or cost of these technologies or services would not have a material adverse effect on NCR's operations.

NCR Corporation
Notes to Consolidated Financial Statements-(Continued)

13. ACCUMULATED OTHER COMPREHENSIVE INCOME

Changes in Accumulated Other Comprehensive Income (AOCI) by Component

The changes in AOCI for the years ended December 31 are as follows:

In millions	Currency Translation Adjustments	Changes in Employee Benefit Plans	Changes in Fair Value of Effective Cash Flow Hedges	Total
Balance at December 31, 2014	\$ (125)	\$ (8)	\$ (3)	\$ (136)
Other comprehensive (loss) income before reclassifications	(47)	43	8	4
Amounts reclassified from AOCI	—	(12)	(6)	(18)
Net current period other comprehensive (loss) income	(47)	31	2	(14)
Balance at December 31, 2015	\$ (172)	\$ 23	\$ (1)	\$ (150)
Other comprehensive (loss) income before reclassifications	(52)	(1)	16	(37)
Amounts reclassified from AOCI	—	(16)	(2)	(18)
Net current period other comprehensive (loss) income	(52)	(17)	14	(55)
Balance at December 31, 2016	\$ (224)	\$ 6	\$ 13	\$ (205)
Other comprehensive (loss) income before reclassifications	41	(13)	(13)	15
Amounts reclassified from AOCI	—	(8)	(1)	(9)
Net current period other comprehensive (loss) income	41	(21)	(14)	6
Balance at December 31, 2017	\$ (183)	\$ (15)	\$ (1)	\$ (199)

Reclassifications Out of AOCI

The reclassifications out of AOCI for the years ended December 31 are as follows:

In millions	For the year ended December 31, 2017			
	Employee Benefit Plans		Effective Cash Flow Hedges	Total
	Actuarial Losses Recognized	Amortization of Prior Service Benefit		
Affected line in Consolidated Statement of Operations:				
Cost of products	\$ —	\$ —	\$ (1)	\$ (1)
Cost of services	(1)	(6)	—	(7)
Selling, general and administrative expenses	—	(4)	—	(4)
Research and development expenses	(1)	(1)	—	(2)
Total before tax	\$ (2)	\$ (11)	\$ (1)	\$ (14)
Tax expense				5
Total reclassifications, net of tax				\$ (9)

NCR Corporation
Notes to Consolidated Financial Statements-(Continued)

For the year ended December 31, 2016

In millions	Employee Benefit Plans			Effective Cash Flow Hedges	Total
	Actuarial Losses Recognized	Amortization of Prior Service Benefit			
Affected line in Consolidated Statement of Operations:					
Cost of products	\$ —	\$ —		\$ (3)	\$ (3)
Cost of services	(1)	(10)		—	(11)
Selling, general and administrative expenses	—	(6)		—	(6)
Research and development expenses	(1)	(3)		—	(4)
Interest expense	—	—		2	2
Total before tax	<u>\$ (2)</u>	<u>\$ (19)</u>		<u>\$ (1)</u>	<u>\$ (22)</u>
Tax expense					4
Total reclassifications, net of tax					<u>\$ (18)</u>

For the year ended December 31, 2015

In millions	Employee Benefit Plans			Effective Cash Flow Hedges	Total
	Actuarial Losses Recognized	Amortization of Prior Service Benefit			
Affected line in Consolidated Statement of Operations:					
Cost of products	\$ —	\$ (1)		\$ (12)	\$ (13)
Cost of services	1	(9)		—	(8)
Selling, general and administrative expenses	1	(7)		—	(6)
Research and development expenses	—	(4)		—	(4)
Interest expense	—	—		5	5
Total before tax	<u>\$ 2</u>	<u>\$ (21)</u>		<u>\$ (7)</u>	<u>\$ (26)</u>
Tax expense					8
Total reclassifications, net of tax					<u>\$ (18)</u>

14. RESTRUCTURING PLAN

In July 2014, we announced a restructuring plan to strategically reallocate resources so that we can focus on higher-growth, higher-margin opportunities in the software-driven omni-channel industry. The program is centered on ensuring that our people and processes are aligned with our continued transformation and includes: rationalizing our product portfolio to eliminate overlap and redundancy; taking steps to end-of-life older commodity product lines that are costly to maintain and provide low margins; moving lower productivity services positions to our new centers of excellence due to the positive impact of services innovation; and reducing layers of management and organizing around divisions to improve decision-making, accountability and strategic execution. As of March 31, 2017, this plan was complete.

NCR Corporation
Notes to Consolidated Financial Statements-(Continued)

Charges related to the restructuring plan for the years ended December 31 were as follows:

In millions	For the twelve months ended December 31		
	2017	2016	2015
<i>Severance and other employee-related costs</i>			
ASC 712 charges included in restructuring-related charges	\$ —	\$ 4	\$ 1
ASC 420 charges included in restructuring-related charges	—	—	19
<i>Inventory-related charges</i>			
Charges included in cost of products	—	—	5
Charges included in cost of services	—	4	7
<i>Asset-related charges</i>			
External and internal use software impairment charges included in restructuring-related charges	—	2	16
Impairment of long-lived assets included in restructuring-related charges	—	—	13
<i>Other exit costs</i>			
Other exit costs included in restructuring-related charges	—	9	13
Total restructuring-related charges	\$ —	\$ 19	\$ 74

In the year ended December 31, 2016, asset-related charges include the write-off of certain capitalized software for projects that have been abandoned. In the year ended December 31, 2015, asset-related charges include the write-off of certain capitalized software for projects that have been abandoned as well as an impairment of long-lived assets that are no longer considered strategic and were sold.

The results by segment, as disclosed in Note 12, “Segment Information and Concentrations” exclude the impact of these costs, which is consistent with the manner by which management assesses the performance and evaluates the results of each segment.

The following table summarizes the costs recorded in accordance with ASC 420, *Exit or Disposal Cost Obligations*, and ASC 712, *Employers’ Accounting for Postemployment Benefits*, and the remaining liabilities as of December 31, 2017 and 2016, which are included in the Consolidated Balance Sheet in other current liabilities.

In millions	2017	2016
Employee Severance and Other Exit Costs		
Beginning balance as of January 1	\$1	\$20
Cost recognized during the period	—	15
Change in estimated payments	—	(2)
Utilization	(1)	(32)
Ending balance as of December 31	\$—	\$1

15. SUPPLEMENTAL FINANCIAL INFORMATION

The components of other (expense), net are summarized as follows for the years ended December 31:

In millions	2017	2016	2015
Other (expense), net			
Interest income	\$ 3	\$ 4	\$ 5
Foreign currency fluctuations and foreign exchange contracts	(26)	(40)	(21)
Divestiture and liquidation losses	—	(6)	(34)
Other, net	(8)	(8)	(7)
Total other (expense), net	\$ (31)	\$ (50)	\$ (57)

NCR Corporation
Notes to Consolidated Financial Statements-(Continued)

The components of accounts receivable are summarized as follows:

In millions	December 31, 2017	December 31, 2016
Accounts receivable		
Trade	\$ 1,270	\$ 1,266
Other	37	57
Accounts receivable, gross	1,307	1,323
Less: allowance for doubtful accounts	(37)	(41)
Total accounts receivable, net	\$ 1,270	\$ 1,282

The components of inventory are summarized as follows:

In millions	December 31, 2017	December 31, 2016
Inventories		
Work in process and raw materials	\$ 185	\$ 154
Finished goods	190	149
Service parts	405	396
Total inventories	\$ 780	\$ 699

The components of property, plant and equipment are summarized as follows:

In millions	December 31, 2017	December 31, 2016
Property, plant and equipment		
Land and improvements	\$ 7	\$ 6
Buildings and improvements	278	198
Machinery and other equipment	633	598
Property, plant and equipment, gross	918	802
Less: accumulated depreciation	(577)	(515)
Total property, plant and equipment, net	\$ 341	\$ 287

16. GUARANTOR FINANCIAL STATEMENTS

The Company's 5.00% Notes, 4.625% Notes, 5.875% Notes and 6.375% Notes are guaranteed by the Company's subsidiary, NCR International, Inc. (Guarantor Subsidiary), which is 100% owned by the Company and has guaranteed fully and unconditionally the obligations to pay principal and interest for these senior unsecured notes. The guarantees are subject to release under certain circumstances as described below:

- the designation of the Guarantor Subsidiary as an unrestricted subsidiary under the indenture governing the notes;
- the release of the Guarantor Subsidiary from its guarantee under the Senior Secured Credit Facility;
- the release or discharge of the indebtedness that required the guarantee of the notes by the Guarantor Subsidiary;
- the permitted sale or other disposition of the Guarantor Subsidiary to a third party; and
- the Company's exercise of its legal defeasance option of its covenant defeasance option under the indenture governing the notes.

Refer to Note 5, "Debt Obligations" for additional information.

In connection with the previously completed exchange offers for the 5.00% Notes, 4.625% Notes, 5.875% Notes and 6.375% Notes, the Company is required to comply with Rule 3-10 of SEC Regulation S-X (Rule 3-10), and has therefore included the accompanying Condensed Consolidating Financial Statements in accordance with Rule 3-10(f) of SEC Regulation S-X.

The following supplemental information sets forth, on a consolidating basis, the condensed statements of operations and comprehensive income (loss), the condensed balance sheets and the condensed statements of cash flows for the parent issuer of

NCR Corporation
Notes to Consolidated Financial Statements-(Continued)

these senior unsecured notes, for the Guarantor Subsidiary and for the Company and all of its consolidated subsidiaries. As of October 1, 2017, certain non-guarantor subsidiaries were acquired by, and merged into, the parent issuer. Accordingly, all prior period condensed consolidating guarantor financial statements were updated to reflect the mergers.

Consolidating Statements of Operations and Comprehensive Income (Loss)
For the year ended December 31, 2017

(in millions)	Parent Issuer	Guarantor Subsidiary	Non-Guarantor Subsidiaries	Eliminations	Consolidated
Product revenue	\$ 1,329	\$ 91	\$ 1,454	\$ (295)	\$ 2,579
Service revenue	2,051	29	1,857	—	3,937
Total revenue	3,380	120	3,311	(295)	6,516
Cost of products	1,044	37	1,240	(295)	2,026
Cost of services	1,378	10	1,238	—	2,626
Selling, general and administrative expenses	502	3	427	—	932
Research and development expenses	192	—	64	—	256
Restructuring-related charges	—	—	—	—	—
Total operating expenses	3,116	50	2,969	(295)	5,840
Income (loss) from operations	264	70	342	—	676
Interest expense	(204)	—	(10)	51	(163)
Other (expense) income, net	11	1	8	(51)	(31)
Income (loss) from continuing operations before income taxes	71	71	340	—	482
Income tax expense (benefit)	113	107	22	—	242
Income (loss) from continuing operations before earnings in subsidiaries	(42)	(36)	318	—	240
Equity in earnings of consolidated subsidiaries	279	291	—	(570)	—
Income (loss) from continuing operations	237	255	318	(570)	240
Income (loss) from discontinued operations, net of tax	(5)	—	—	—	(5)
Net income (loss)	\$ 232	\$ 255	\$ 318	\$ (570)	\$ 235
Net income (loss) attributable to noncontrolling interests	—	—	3	—	3
Net income (loss) attributable to NCR	\$ 232	\$ 255	\$ 315	\$ (570)	\$ 232
Total comprehensive income (loss)	238	269	317	(585)	239
Less comprehensive income (loss) attributable to noncontrolling interests	—	—	1	—	1
Comprehensive income (loss) attributable to NCR common stockholders	\$ 238	\$ 269	\$ 316	\$ (585)	\$ 238

NCR Corporation
Notes to Consolidated Financial Statements-(Continued)

Consolidating Statements of Operations and Comprehensive Income (Loss)
For the year ended December 31, 2016

(in millions)	Parent Issuer	Guarantor Subsidiary	Non-Guarantor Subsidiaries	Eliminations	Consolidated
Product revenue	\$ 1,293	\$ 111	\$ 1,768	\$ (435)	\$ 2,737
Service revenue	1,962	36	1,808	—	3,806
Total revenue	3,255	147	3,576	(435)	6,543
Cost of products	1,028	50	1,459	(435)	2,102
Cost of services	1,369	12	1,278	—	2,659
Selling, general and administrative expenses	534	4	388	—	926
Research and development expenses	164	—	78	—	242
Restructuring-related charges	3	—	12	—	15
Total operating expenses	3,098	66	3,215	(435)	5,944
Income (loss) from operations	157	81	361	—	599
Interest expense	(165)	—	(10)	5	(170)
Other (expense) income, net	(20)	(23)	(2)	(5)	(50)
Income (loss) from continuing operations before income taxes	(28)	58	349	—	379
Income tax expense (benefit)	(20)	21	91	—	92
Income (loss) from continuing operations before earnings in subsidiaries	(8)	37	258	—	287
Equity in earnings of consolidated subsidiaries	291	304	—	(595)	—
Income (loss) from continuing operations	283	341	258	(595)	287
Income (loss) from discontinued operations, net of tax	(13)	—	—	—	(13)
Net income (loss)	\$ 270	\$ 341	\$ 258	\$ (595)	\$ 274
Net income (loss) attributable to noncontrolling interests	—	—	4	—	4
Net income (loss) attributable to NCR	\$ 270	\$ 341	\$ 254	\$ (595)	\$ 270
Total comprehensive income (loss)	215	277	195	(473)	214
Less comprehensive income (loss) attributable to noncontrolling interests	—	—	(1)	—	(1)
Comprehensive income (loss) attributable to NCR common stockholders	\$ 215	\$ 277	\$ 196	\$ (473)	\$ 215

NCR Corporation
Notes to Consolidated Financial Statements-(Continued)

Consolidating Statements of Operations and Comprehensive Income (Loss)
For the year ended December 31, 2015

(in millions)	Parent Issuer	Guarantor Subsidiary	Non-Guarantor Subsidiaries	Eliminations	Consolidated
Product revenue	\$ 1,189	\$ 105	\$ 2,339	\$ (922)	\$ 2,711
Service revenue	1,868	33	1,761	—	3,662
Total revenue	3,057	138	4,100	(922)	6,373
Cost of products	904	43	2,047	(922)	2,072
Cost of services	1,289	13	1,530	—	2,832
Selling, general and administrative expenses	567	4	471	—	1,042
Research and development expenses	133	—	97	—	230
Restructuring-related charges	36	—	26	—	62
Total operating expenses	2,929	60	4,171	(922)	6,238
Income (loss) from operations	128	78	(71)	—	135
Interest expense	(168)	—	(10)	5	(173)
Other (expense) income, net	(47)	4	(9)	(5)	(57)
Income (loss) from continuing operations before income taxes	(87)	82	(90)	—	(95)
Income tax expense (benefit)	(38)	52	41	—	55
Income (loss) from continuing operations before earnings in subsidiaries	(49)	30	(131)	—	(150)
Equity in earnings of consolidated subsidiaries	(104)	(161)	—	265	—
Income (loss) from continuing operations	(153)	(131)	(131)	265	(150)
Income (loss) from discontinued operations, net of tax	(25)	—	1	—	(24)
Net income (loss)	\$ (178)	\$ (131)	\$ (130)	\$ 265	\$ (174)
Net income (loss) attributable to noncontrolling interests	—	—	4	—	4
Net income (loss) attributable to NCR	\$ (178)	\$ (131)	\$ (134)	\$ 265	\$ (178)
Total comprehensive income (loss)	(192)	(154)	(145)	300	(191)
Less comprehensive income (loss) attributable to noncontrolling interests	—	—	1	—	1
Comprehensive income (loss) attributable to NCR common stockholders	\$ (192)	\$ (154)	\$ (146)	\$ 300	\$ (192)

NCR Corporation
Notes to Consolidated Financial Statements-(Continued)

Consolidating Balance Sheet
December 31, 2017

(in millions)	Parent Issuer	Guarantor Subsidiary	Non-Guarantor Subsidiaries	Eliminations	Consolidated
Assets					
Current assets					
Cash and cash equivalents	\$ 97	\$ 11	\$ 429	\$ —	\$ 537
Accounts receivable, net	62	12	1,196	—	1,270
Inventories	311	7	462	—	780
Due from affiliates	646	1,801	283	(2,730)	—
Other current assets	78	39	162	(36)	243
Total current assets	1,194	1,870	2,532	(2,766)	2,830
Property, plant and equipment, net	207	—	134	—	341
Goodwill	2,228	—	513	—	2,741
Intangibles, net	503	—	75	—	578
Prepaid pension cost	—	—	118	—	118
Deferred income taxes	334	—	157	(31)	460
Investments in subsidiaries	3,008	2,942	—	(5,950)	—
Due from affiliates	31	1	39	(71)	—
Other assets	472	63	51	—	586
Total assets	\$ 7,977	\$ 4,876	\$ 3,619	\$ (8,818)	\$ 7,654
Liabilities and stockholders' equity					
Current liabilities					
Short-term borrowings	\$ 52	\$ —	\$ —	\$ —	\$ 52
Accounts payable	382	—	380	—	762
Payroll and benefits liabilities	124	—	95	—	219
Deferred service revenue and customer deposits	216	6	236	—	458
Due to affiliates	1,884	130	716	(2,730)	—
Other current liabilities	204	5	225	(36)	398
Total current liabilities	2,862	141	1,652	(2,766)	1,889
Long-term debt	2,937	—	2	—	2,939
Pension and indemnity plan liabilities	515	—	283	—	798
Postretirement and postemployment benefits liabilities	20	3	110	—	133
Income tax accruals	20	5	123	—	148
Due to affiliates	—	39	32	(71)	—
Other liabilities	94	36	101	(31)	200
Total liabilities	6,448	224	2,303	(2,868)	6,107
Redeemable noncontrolling interest	—	—	15	—	15
Series A convertible preferred stock	810	—	—	—	810
Stockholders' equity					
Total NCR stockholders' equity	719	4,652	1,298	(5,950)	719
Noncontrolling interests in subsidiaries	—	—	3	—	3
Total stockholders' equity	719	4,652	1,301	(5,950)	722
Total liabilities and stockholders' equity	\$ 7,977	\$ 4,876	\$ 3,619	\$ (8,818)	\$ 7,654

NCR Corporation
Notes to Consolidated Financial Statements-(Continued)

Consolidating Balance Sheet
December 31, 2016

(in millions)	Parent Issuer	Guarantor Subsidiary	Non-Guarantor Subsidiaries	Eliminations	Consolidated
Assets					
Current assets					
Cash and cash equivalents	\$ 67	\$ 12	\$ 419	\$ —	\$ 498
Accounts receivable, net	107	25	1,150	—	1,282
Inventories	272	13	414	—	699
Due from affiliates	658	1,509	385	(2,552)	—
Other current assets	120	37	154	(33)	278
Total current assets	1,224	1,596	2,522	(2,585)	2,757
Property, plant and equipment, net	142	—	145	—	287
Goodwill	2,228	—	499	—	2,727
Intangibles, net	574	—	98	—	672
Prepaid pension cost	—	—	94	—	94
Deferred income taxes	360	98	82	35	575
Investments in subsidiaries	2,744	2,822	—	(5,566)	—
Due from affiliates	52	—	35	(87)	—
Other assets	443	56	62	—	561
Total assets	\$ 7,767	\$ 4,572	\$ 3,537	\$ (8,203)	\$ 7,673
Liabilities and stockholders' equity					
Current liabilities					
Short-term borrowings	\$ 46	\$ —	\$ 4	\$ —	\$ 50
Accounts payable	344	2	435	—	781
Payroll and benefits liabilities	140	—	94	—	234
Deferred service revenue and customer deposits	196	5	267	—	468
Due to affiliates	1,700	154	698	(2,552)	—
Other current liabilities	228	6	231	(33)	432
Total current liabilities	2,654	167	1,729	(2,585)	1,965
Long-term debt	2,998	—	3	—	3,001
Pension and indemnity plan liabilities	473	—	266	—	739
Postretirement and postemployment benefits liabilities	24	3	100	—	127
Income tax accruals	17	4	121	—	142
Due to affiliates	—	35	52	(87)	—
Other liabilities	59	5	39	35	138
Total liabilities	6,225	214	2,310	(2,637)	6,112
Redeemable noncontrolling interest	—	—	15	—	15
Series A Convertible Preferred Stock	847	—	—	—	847
Stockholders' equity					
Total NCR stockholders' equity	695	4,358	1,208	(5,566)	695
Noncontrolling interests in subsidiaries	—	—	4	—	4
Total stockholders' equity	695	4,358	1,212	(5,566)	699
Total liabilities and stockholders' equity	\$ 7,767	\$ 4,572	\$ 3,537	\$ (8,203)	\$ 7,673

NCR Corporation
Notes to Consolidated Financial Statements-(Continued)

Consolidating Statement of Cash Flows
For the year ended December 31, 2017

(in millions)	Parent Issuer	Guarantor Subsidiary	Non-Guarantor Subsidiaries	Eliminations	Consolidated
Net cash provided by (used in) operating activities	\$ 459	\$ (180)	\$ 486	\$ (10)	\$ 755
Investing activities					
Expenditures for property, plant and equipment	(87)	—	(41)	—	(128)
Proceeds from the sale of property, plant and equipment	—	—	6	—	6
Additions to capitalized software	(133)	—	(33)	—	(166)
Acquisitions	(8)	—	—	—	(8)
Proceeds from (payments of) intercompany notes	230	180	2	(412)	—
Proceeds from divestitures	3	—	—	—	3
Investments in equity affiliates	3	—	—	(3)	—
Other investing activities, net	(1)	—	4	—	3
Net cash provided by (used in) investing activities	7	180	(62)	(415)	(290)
Financing activities					
Short term borrowings, net	(5)	—	1	—	(4)
Payments on term credit facilities	(56)	—	(5)	—	(61)
Payments on revolving credit facilities	(1,700)	—	(240)	—	(1,940)
Borrowings on revolving credit facilities	1,700	—	240	—	1,940
Tax withholding payments on behalf of employees	(31)	—	—	—	(31)
Proceeds from employee stock plans	15	—	—	—	15
Other financing activities	(1)	—	(2)	—	(3)
Dividend distribution to consolidated subsidiaries	—	—	(10)	10	—
Repurchases of Company common stock	(350)	—	—	—	(350)
Equity contribution	—	—	(3)	3	—
Borrowings (repayments) of intercompany notes	—	(2)	(410)	412	—
Net cash provided by (used in) financing activities	(428)	(2)	(429)	425	(434)
Cash flows from discontinued operations					
Net cash used in discontinued operations operating activities	(8)	—	—	—	(8)
Effect of exchange rate changes on cash and cash equivalents	—	1	15	—	16
Increase (decrease) in cash and cash equivalents	30	(1)	10	—	39
Cash and cash equivalents at beginning of period	67	12	419	—	498
Cash and cash equivalents at end of period	\$ 97	\$ 11	\$ 429	\$ —	\$ 537

NCR Corporation
Notes to Consolidated Financial Statements-(Continued)

Consolidating Statement of Cash Flows
For the year ended December 31, 2016

(in millions)	Parent Issuer	Guarantor Subsidiary	Non-Guarantor Subsidiaries	Eliminations	Consolidated
Net cash provided by (used in) operating activities	\$ 336	\$ (160)	\$ 721	\$ (3)	\$ 894
Investing activities					
Expenditures for property, plant and equipment	(33)	—	(40)	—	(73)
Additions to capitalized software	(114)	—	(40)	—	(154)
Proceeds from (payments of) intercompany notes	365	115	—	(480)	—
Proceeds from divestitures	22	—	25	—	47
Investments in equity affiliates	(9)	50	—	(41)	—
Other investing activities, net	(9)	—	—	—	(9)
Net cash provided by (used in) investing activities	<u>222</u>	<u>165</u>	<u>(55)</u>	<u>(521)</u>	<u>(189)</u>
Financing activities					
Short term borrowings, net	(4)	—	(4)	—	(8)
Payments on term credit facilities	(89)	—	(8)	—	(97)
Payments on revolving credit facilities	(1,151)	—	(280)	—	(1,431)
Borrowings on revolving credit facilities	1,051	—	280	—	1,331
Debt issuance costs	(9)	—	—	—	(9)
Tax withholding payments on behalf of employees	(16)	—	—	—	(16)
Proceeds from employee stock plans	15	—	—	—	15
Other financing activities	—	—	(2)	—	(2)
Dividend distribution to consolidated subsidiaries	—	—	(53)	53	—
Repurchases of Company common stock	(250)	—	—	—	(250)
Equity contribution	—	—	9	(9)	—
Borrowings (repayments) of intercompany notes	(16)	—	(464)	480	—
Net cash provided by (used in) financing activities	<u>(469)</u>	<u>—</u>	<u>(522)</u>	<u>524</u>	<u>(467)</u>
Cash flows from discontinued operations					
Net cash used in discontinued operations operating activities	(39)	—	—	—	(39)
Effect of exchange rate changes on cash and cash equivalents	—	(13)	(16)	—	(29)
Increase (decrease) in cash and cash equivalents	50	(8)	128	—	170
Cash and cash equivalents at beginning of period	17	20	291	—	328
Cash and cash equivalents at end of period	<u>\$ 67</u>	<u>\$ 12</u>	<u>\$ 419</u>	<u>\$ —</u>	<u>\$ 498</u>

NCR Corporation
Notes to Consolidated Financial Statements-(Continued)

Consolidating Statement of Cash Flows
For the year ended December 31, 2015

(in millions)	Parent Issuer	Guarantor Subsidiary	Non-Guarantor Subsidiaries	Eliminations	Consolidated
Net cash provided by (used in) operating activities	\$ 423	\$ (335)	\$ 670	\$ (77)	\$ 681
Investing activities					
Expenditures for property, plant and equipment	(25)	—	(54)	—	(79)
Proceeds from sales of property, plant and equipment	—	—	19	—	19
Additions to capitalized software	(111)	—	(39)	—	(150)
Proceeds from (payments of) intercompany notes	217	347	—	(564)	—
Investments in equity affiliates	(1)	—	—	1	—
Other investing activities, net	(6)	—	7	—	1
Net cash provided by (used in) investing activities	74	347	(67)	(563)	(209)
Financing activities					
Short term borrowings, net	3	—	5	—	8
Payments on revolving credit facilities	(376)	—	(7)	—	(383)
Payments on revolving credit facilities	(729)	—	(965)	—	(1,694)
Borrowings on revolving credit facilities	829	—	869	—	1,698
Tax withholding payments on behalf of employees	(16)	—	—	—	(16)
Proceeds from employee stock plans	15	—	—	—	15
Dividend distribution to consolidated subsidiaries	—	—	(77)	77	—
Series A convertible preferred stock issuance	794	—	—	—	794
Equity contribution	—	—	1	(1)	—
Borrowings (repayments) of intercompany notes	—	—	(564)	564	—
Tender offer share repurchase	(1,005)	—	—	—	(1,005)
Net cash provided by (used in) financing activities	(485)	—	(738)	640	(583)
Cash flows from discontinued operations					
Net cash used in discontinued operations operating activities	(43)	—	—	—	(43)
Effect of exchange rate changes on cash and cash equivalents	—	(1)	(28)	—	(29)
Increase (decrease) in cash and cash equivalents	(31)	11	(163)	—	(183)
Cash and cash equivalents at beginning of period	48	9	454	—	511
Cash and cash equivalents at end of period	\$ 17	\$ 20	\$ 291	\$ —	\$ 328

NCR Corporation
Notes to Consolidated Financial Statements-(Continued)

17. QUARTERLY INFORMATION (UNAUDITED)

In millions, except per share amounts	First	Second	Third	Fourth
2017				
Total revenue	\$ 1,478	\$ 1,593	\$ 1,663	\$ 1,782
Gross margin	413	463	473	515
Operating income	117	178	200	181
Income (loss) from continuing operations (attributable to NCR)	57	97	118	(35)
Income (loss) from discontinued operations, net of tax	—	5	—	(10)
Net (loss) income attributable to NCR common stockholders	(17)	90	106	(56)
Income (loss) per share attributable to NCR common stockholders:				
Income (loss) per common share from continuing operations				
Basic	\$ (0.14)	\$ 0.70	\$ 0.87	\$ (0.38)
Diluted	\$ (0.14)	\$ 0.64	\$ 0.77	\$ (0.38)
Net (loss) income per common share:				
Basic	\$ (0.14)	\$ 0.74	\$ 0.87	\$ (0.46)
Diluted	\$ (0.14)	\$ 0.67	\$ 0.77	\$ (0.46)
2016				
Total revenue	\$ 1,444	\$ 1,620	\$ 1,677	\$ 1,802
Gross margin	380	446	477	479
Operating income	101	163	189	146
Income from continuing operations (attributable to NCR)	32	76	107	68
(Loss) from discontinued operations, net of tax	—	—	(2)	(11)
Net income attributable to NCR common stockholders	21	63	92	45
Income per share attributable to NCR common stockholders:				
Income per common share from continuing operations				
Basic	\$ 0.16	\$ 0.51	\$ 0.76	\$ 0.45
Diluted	\$ 0.16	\$ 0.49	\$ 0.69	\$ 0.43
Net income per common share:				
Basic	\$ 0.16	\$ 0.51	\$ 0.74	\$ 0.36
Diluted	\$ 0.16	\$ 0.49	\$ 0.68	\$ 0.35

Operating income for the quarter ended December 31, 2017 was impacted by actuarial losses related to the remeasurement of our pension plan assets and liabilities. The actuarial losses included in pension expense recognized in the quarter ended December 31, 2017 decreased operating income by \$28 million, net income attributable to NCR by \$25 million, basic earnings per share from continuing operations by \$0.21, and diluted earnings per share from continuing operations by \$0.21.

Operating income for the quarter ended December 31, 2016 was impacted by actuarial losses related to the remeasurement of our pension plan assets and liabilities. The actuarial losses included in pension expense recognized in the quarter ended December 31, 2016 decreased operating income by \$85 million, net income attributable to NCR by \$78 million, basic earnings per share from continuing operations by \$0.63, and diluted earnings per share from continuing operations by \$0.50.

Net income per share in each quarter is computed using the weighted-average number of shares outstanding during that quarter while net income per share for the full year is computed using the weighted-average number of shares outstanding during the year. Thus, the sum of the four quarters' net income per share will not necessarily equal the full-year net income per share.

NCR Corporation
Notes to Consolidated Financial Statements-(Continued)

18. SUBSEQUENT EVENTS

On February 8, 2018, NCR announced that, to accelerate its transformation journey, it would evaluate programs to prioritize driving sustainable margin improvement, higher productivity and process efficiencies focusing on investing in software products that accelerate growth, driving growth in services through structural improvements and optimizing its hardware production, sourcing and supply chain strategy.

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

NCR has established disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) of the Securities Exchange Act of 1934 (the Exchange Act)) to ensure that information required to be disclosed by NCR in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by NCR in the reports that it files or submits under the Exchange Act is accumulated and communicated to NCR's management, including its Chief Executive and Chief Financial Officers, as appropriate to allow timely decisions regarding required disclosure. Based on their evaluation as of the end of the period covered by this Report, conducted under their supervision and with the participation of management, the Company's Chief Executive and Chief Financial Officers have concluded that NCR's disclosure controls and procedures are effective to meet such objectives and that NCR's disclosure controls and procedures adequately alert them on a timely basis to material information relating to the Company (including its consolidated subsidiaries) required to be included in NCR's Exchange Act filings.

Changes in Internal Control over Financial Reporting

Throughout 2017, in order to facilitate our adoption of the new revenue recognition accounting standard on January 1, 2018, we implemented internal controls to help ensure we properly evaluated our customer contracts, executed key system changes, and assessed the impact to our consolidated financial statements. We expect to continue to implement additional internal controls related to the adoption of this standard in the first quarter of 2018. There have been no other changes in our internal control over financial reporting that occurred during the last fiscal quarter that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Management's Report on Internal Control over Financial Reporting

Management is responsible for establishing and maintaining effective internal control over financial reporting as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act. The Company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations due to, for example, the potential for human error or circumvention of controls, 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.

The Company's management assessed the effectiveness of the Company's internal control over financial reporting as of December 31, 2017. In making this assessment, we used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in the 2013 Internal Control-Integrated Framework. Based on our assessment, we determined that, as of December 31, 2017, the Company's internal control over financial reporting was effective based on those criteria.

PricewaterhouseCoopers LLP, our independent registered public accounting firm, has audited the effectiveness of the Company's internal control over financial reporting as of December 31, 2017 as stated in their report which appears in Item 8 of this Report.

Item 9B. OTHER INFORMATION

None.

PART III

Item 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

Except as set forth in the following paragraphs of this Item 10, the information required by this Item 10 will be set forth under the headings "Election of Directors," "Section 16(a) Beneficial Ownership Reporting Compliance," and "Committees of the Board" in the Definitive Proxy Statement for our 2018 Annual Meeting of Stockholders to be filed with the SEC within 120 days after the end of our fiscal 2017 year, and is incorporated herein by reference. The information required by this Item 10 regarding our executive officers is set forth under the heading "Executive Officers of the Registrant" in Part I of this Form 10-K and is incorporated herein by reference.

We have not materially changed the procedures by which stockholders may recommend nominees to the Company's Board of Directors.

We have a Code of Conduct that sets the standard for ethics and compliance for all of our directors and employees, including our chief executive officer, our chief financial officer and our chief accounting officer. Our Code of Conduct is available on the Corporate Governance page at our website at <http://www.ncr.com/company/corporate-governance/code-of-conduct> under the heading "Code of Conduct." We intend to disclose any amendments to or waivers of the Code of Conduct with respect to any director as well as our principal executive officer, principal financial officer, and principal accounting officer, on the Corporate Governance page of our website promptly following the date of such amendment or waiver.

Item 11. EXECUTIVE COMPENSATION

The information required by this Item 11 will be set forth under the headings "Executive Compensation - Compensation Discussion & Analysis," "Compensation and Human Resource Committee," and "Board Compensation and Human Resource Committee Report on Executive Compensation" in the Definitive Proxy Statement for our 2018 Annual Meeting of Stockholders to be filed with the SEC within 120 days after the end of our fiscal 2017 year, and is incorporated herein by reference.

Item 12. SECURITY OWNERSHIPS OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

The information required by this Item 12 will be set forth under the headings "NCR Stock Ownership" and "Equity Compensation Plan Information" in the Definitive Proxy Statement for our 2018 Annual Meeting of Stockholders to be filed with the SEC within 120 days after the end of our fiscal 2017 year, and is incorporated herein by reference.

Item 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS AND DIRECTOR INDEPENDENCE

The information required by this Item 13 will be set forth under the headings "Related Person Transactions" and "Corporate Governance" in the Definitive Proxy Statement for our 2018 Annual Meeting of Stockholders to be filed with the SEC within 120 days after the end of our fiscal 2017 year, and is incorporated herein by reference.

Item 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

The information required by this Item 14 will be set forth under the heading "Fees Paid to Independent Registered Public Accounting Firm" in the Definitive Proxy Statement for our 2018 Annual Meeting of Stockholders to be filed with the SEC within 120 days after the end of our fiscal 2017 year, and is incorporated herein by reference.

PART IV**Item 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULE**

(a)(1) *Financial Statements*: The following is an index of the consolidated financial statements of the Company and the Report of Independent Registered Public Accounting Firm filed as part of this Form 10-K:

	Page of Form 10-K
Report of Independent Registered Public Accounting Firm	47
Consolidated Statements of Operations for the years ended December 31, 2017, 2016, and 2015	49
Consolidated Statements of Comprehensive Income Operations for the years ended December 31, 2017, 2016, and 2015	50
Consolidated Balance Sheets at December 31, 2017 and 2016	51
Consolidated Statements of Cash Flows for the years ended December 31, 2017, 2016, and 2015	52
Consolidated Statements of Changes in Stockholders' Equity for the years ended December 31, 2017, 2016, and 2015	53
Notes to Consolidated Financial Statements	54

(2) *Financial Statement Schedule*: Financial Statement Schedule II—Valuation and Qualifying Accounts is included in this Form 10-K. All other schedules are not required under the related instructions or are not applicable.

(3) *Exhibits*: See Index of Exhibits below for a listing of all exhibits to this Form 10-K. The management contracts and compensatory plans or arrangements required to be filed as an exhibit to this Form 10-K are identified in the Index of Exhibits by an asterisk (*).

(b) The following is an index of all exhibits to this Form 10-K. Exhibits identified in parentheses in the index below, on file with the SEC, are incorporated herein by reference as exhibits hereto.

2.1	Separation and Distribution Agreement, dated as of August 27, 2007, between NCR Corporation and Teradata Corporation (Exhibit 10.1 to the Current Report on Form 8-K of Teradata Corporation dated September 6, 2007).
3.1	Articles of Amendment and Restatement of NCR Corporation (Exhibit 3.1 to the NCR Corporation Quarterly Report on Form 10-Q for the quarter ended June 30, 2016).
3.2	Bylaws of NCR Corporation, as amended and restated on February 20, 2018 (Exhibit 3.2 to the Current Report on Form 8-K of NCR Corporation dated February 23, 2018).
4.1	Common Stock Certificate of NCR Corporation (Exhibit 4.1 to the NCR Corporation Annual Report on Form 10-K for the year ended December 31, 1999).
4.2	Indenture, dated September 17, 2012, among NCR Corporation, as issuer, NCR International Inc. and Radiant Systems Inc. as subsidiary guarantors and U.S. Bank National Association, as trustee (Exhibit 4.01 to the Current Report on Form 8-K of NCR Corporation dated September 17, 2012).
4.3	Indenture, dated December 18, 2012, among NCR Corporation, as issuer, NCR International Inc. and Radiant Systems Inc. as subsidiary guarantors and U.S. Bank National Association, as trustee (Exhibit 4.01 to the Current Report on Form 8-K of NCR Corporation dated December 18, 2012).
4.4	Indenture, dated December 19, 2013, between NCR Escrow Corp. and U.S. Bank National Association relating to the \$400 million aggregate principal amount of 5.875% senior notes due 2021 (the “5.875% Notes”) (Exhibit 4.1 to the Current Report on Form 8-K of NCR Corporation dated December 19, 2013 (the “December 19, 2013 Form 8-K”)).

- [4.4.1](#) First Supplemental Indenture relating to the 5.875% Notes, dated January 10, 2014, among NCR Corporation, NCR International, Inc. and U.S. Bank National Association, as trustee (Exhibit 4.1 to the Current Report of NCR Corporation dated January 10, 2014 (the “January 10, 2014 Form 8-K”)).
- [4.5](#) Indenture, dated December 19, 2013, between NCR Escrow Corp. and U.S. Bank National Association relating to the \$700 million aggregate principal amount of 6.375% senior notes due 2023 (the “6.375% Notes”) (Exhibit 4.2 to the December 19, 2013 Form 8-K).
- [4.5.1](#) First Supplemental Indenture relating to the 6.375% Notes, dated January 10, 2014, among NCR Corporation, NCR International, Inc. and U.S. Bank National Association, as trustee (Exhibit 4.2 to the January 10, 2014 Form 8-K).
- 10.1 Separation and Distribution Agreement, dated as of February 1, 1996, and amended and restated as of March 29, 1996, by and among NCR Corporation, AT&T Corp. and Lucent Technologies Inc. (Exhibit 10.1 to Amendment No. 3 to the Lucent Technologies Inc. Registration Statement on Form S-1 (No. 333-00703) (the “Lucent Registration Statement Amendment No. 3”)).
- 10.2 Employee Benefits Agreement, dated as of November 20, 1996, by and between AT&T Corp. and NCR Corporation (Exhibit 10.2 to the NCR Corporation Annual Report on Form 10-K for the year ended December 31, 1996 (the “1996 Annual Report”)).
- 10.3 Patent License Agreement, effective as of March 29, 1996, by and among AT&T Corp., NCR Corporation, and Lucent Technologies Inc. (Exhibit 10.7 to Amendment No. 4 to the Lucent Technologies Inc. Registration Statement on Form S-1 (No. 333-0073) (the “Lucent Registration Statement Amendment No. 4”)).
- 10.4 Amended and Restated Technology License Agreement, effective as of March 29, 1996, by and among AT&T Corp., NCR Corporation, and Lucent Technologies Inc. (Exhibit 10.8 to the Lucent Registration Statement Amendment No. 4).
- 10.5 Tax Sharing Agreement, dated as of February 1, 1996, and amended and restated as of March 29, 1996, by and among AT&T Corp., NCR Corporation, and Lucent Technologies Inc. (Exhibit 10.6 to the Lucent Registration Statement Amendment No. 3).
- [10.6](#) Tax Sharing Agreement, dated as of September 21, 2007, between NCR Corporation and Teradata Corporation (Exhibit 10.1 to the Current Report on Form 8-K of NCR Corporation dated September 21, 2007).
- 10.7 NCR Management Stock Plan (Exhibit 10.8 to the 1996 Annual Report). *
- [10.7.1](#) First Amendment to the NCR Management Stock Plan dated April 30, 2003 (Exhibit 10.4 to the NCR Corporation Quarterly Report on Form 10-Q for the quarter ended March 31, 2003). *
- [10.7.2](#) Amendment to NCR Management Stock Plan effective as of December 31, 2008 (Exhibit 10.17.2 to the NCR Corporation Annual Report on Form 10-K for the year ended December 31, 2008 (the “2008 Annual Report”)). *
- [10.7.3](#) Form of Stock Option Agreement under the NCR Management Stock Plan (Exhibit 10.6.3 to the NCR Corporation Annual Report on Form 10-K for the year ended December 31, 2005 (the “2005 Annual Report”)). *
- [10.7.4](#) Form of Restricted Stock Agreement under the NCR Management Stock Plan (Exhibit 10.6.4 to the 2005 Annual Report). *
- [10.8](#) NCR Corporation 2011 Amended and Restated Stock Incentive Plan (formerly the NCR 2006 Stock Incentive Plan, as amended and restated effective as of December 31, 2008) (the “2011 Stock Incentive Plan”) (Exhibit 10.1 to the Current Report on Form 8-K of NCR Corporation dated April 27, 2011). *
- [10.8.1](#) Form of 2009 Stock Option Agreement under the NCR Corporation 2011 Stock Incentive Plan (Exhibit 10.5 to the Current Report on Form 8-K of NCR Corporation dated December 12, 2008). *

10.8.2	Form of 2010 Stock Option Agreement under the 2011 Stock Incentive Plan (Exhibit 10.2 to the NCR Corporation Quarterly Report on Form 10-Q for the quarter ended March 31, 2010 (the "First Quarter 2010 Quarterly Report")).*
10.8.3	Form of 2011 Stock Option Agreement under the 2011 Stock Incentive Plan (Exhibit 10.1 to the NCR Corporation Quarterly Report on Form 10-Q for the quarter ended March 31, 2011). *
10.9	Amended and Restated NCR Management Incentive Plan (Exhibit 10.2 to the Current Report on Form 8-K of NCR Corporation dated April 27, 2011). *
10.10	NCR Director Compensation Program effective April 21, 2009 (the "2009 NCR Director Compensation Program") (Exhibit 10.7 to the NCR Corporation Quarterly Report on Form 10-Q for the quarter ended March 31, 2009 (the "First Quarter 2009 Form 10-Q")). *
10.10.1	2009 Director Option Grant Statement under the 2009 NCR Director Compensation Program (Exhibit 10.8 to the First Quarter 2009 Form 10-Q). *
10.10.2	2009 Director Restricted Stock Unit Grant Statement under the 2009 NCR Director Compensation Program (Exhibit 10.9 to the First Quarter 2009 Form 10-Q). *
10.11	Amended and Restated NCR Change in Control Severance Plan effective December 31, 2008 (Exhibit 10.24.2 to the 2008 Annual Report). *
10.11.1	First Amendment to the Amended and Restated NCR Change in Control Severance Plan (Exhibit 10.6 to the NCR Corporation Quarterly Report on Form 10-Q for the quarter ended September 30, 2011). *
10.11.2	Second Amendment to the Amended and Restated NCR Change in Control Severance Plan. *
10.12	Employment Agreement with William Nuti, dated July 29, 2005 (Exhibit 10.1 to the Current Report on Form 8-K of NCR Corporation dated July 27, 2005). *
10.12.1	Letter Agreement, dated July 26, 2006, with William Nuti (Exhibit 10.4 to the Current Report on Form 8-K of NCR Corporation dated July 25, 2006). *
10.12.2	Second Amendment, effective as of December 12, 2008, to Letter Agreement with William Nuti dated July 29, 2005, as amended July 26, 2006 (Exhibit 10.30.2 to the 2008 Annual Report). *
10.12.3	Letter Agreement, dated March 11, 2015, between NCR Corporation and William Nuti (Exhibit 10.5 to the NCR Corporation Quarterly Report on Form 10-Q for the quarter ended March 31, 2015 (the "First Quarter 2015 Quarterly Report")).*
10.13	NCR Director Compensation Program Effective April 27, 2010 (Exhibit 10.1 to the NCR Corporation Quarterly Report on Form 10-Q for the quarter ended June 30, 2010 (the "Second Quarter 2010 Quarterly Report")). *
10.13.1	Form of 2010 Director Option Grant Statement (Exhibit 10.2 to the Second Quarter 2010 Quarterly Report). *
10.13.2	Form of 2010 Director Restricted Stock Unit Grant Statement (Exhibit 10.3 to the Second Quarter 2010 Quarterly Report). *
10.14	Letter Agreement with Robert Fishman dated March 17, 2010 (Exhibit 10.7 to the First Quarter 2010 Quarterly Report). *
10.15	NCR Corporation 2011 Economic Profit Plan (Exhibit 10.3 to the Current Report on Form 8-K of NCR Corporation dated April 27, 2011). *

- [10.15.1](#) First Amendment to NCR Corporation 2011 Economic Profit Plan (Exhibit 10.29.1 to the NCR Corporation Annual Report on Form 10-K for the year ended December 31, 2011). *
- [10.15.2](#) Second Amendment to NCR Corporation 2011 Economic Profit Plan, dated January 25, 2012 (Exhibit 10.1 to the First Quarter 2012 Quarterly Report).
- [10.15.3](#) Third Amendment to NCR Corporation 2011 Economic Profit Plan (Exhibit 10.1 to the Current Report on Form 8-K of NCR Corporation dated October 1, 2013). *
- [10.15.4](#) Fourth Amendment to NCR Corporation 2011 Economic Profit Plan (Exhibit 10.18.4 to the NCR Corporation Annual Report on Form 10-K for the year ended December 31, 2014 (the “2014 Annual Report”)). *
- [10.15.5](#) Amended and Restated NCR Corporation Economic Profit Plan (Exhibit 10.2 to the NCR Corporation Quarterly Report on Form 10-Q for the quarter ended June 30, 2015 (the “Second Quarter 2015 Quarterly Report”)).*
- [10.16](#) Equity Subscription Agreement, dated July 26, 2011, among NCR Corporation, Scopus Industrial S.A., Scopus Tecnologia Ltda. and NCR Brasil - Indústria de Equipamentos Para Automação Ltda., including Schedule I - The form of Shareholders' Agreement (Exhibit 10.1 to the Current Report on Form 8-K of NCR Corporation dated July 26, 2011).
- [10.17](#) NCR Corporation 2013 Stock Incentive Plan (the “2013 Stock Incentive Plan”) (Appendix A to the NCR Corporation Proxy Statement on Schedule 14A for the NCR Corporation 2013 Annual Meeting of Stockholders). *
- [10.17.1](#) Form of 2015 Performance Based Restricted Stock Unit Award Agreement under the 2013 Stock Incentive Plan (Exhibit 10.1 to the First Quarter 2015 Quarterly Report).*
- [10.17.2](#) Form of 2015 Time Based Restricted Stock Unit Award Agreement under the 2013 Stock Incentive Plan (Exhibit 10.2 to the First Quarter 2015 Quarterly Report).*
- [10.17.3](#) Form of 2015 Single-Metric Performance-Based Restricted Stock Unit Award Agreement under the 2013 Stock Incentive Plan (Exhibit 10.3 to the First Quarter 2015 Quarterly Report).*
- [10.17.4](#) Form of 2016 Time Based Restricted Stock Unit Award Agreement under the 2013 Stock Incentive Plan (Exhibit 10.1 to the Quarterly Report on Form 10-Q of NCR Corporation for the quarter ended March 31, 2016 (the “First Quarter 2016 Quarterly Report”)). *
- [10.17.5](#) Form of 2016 Performance Based Restricted Stock Unit Award Agreement under the 2013 Stock Incentive Plan (Exhibit 10.2 to the First Quarter 2016 Quarterly Report). *
- [10.17.6](#) Form of 2016 Single-Metric Performance Based Restricted Stock Unit Award Agreement under the 2013 Stock Incentive Plan (Exhibit 10.3 to the First Quarter 2016 Quarterly Report). *
- [10.17.7](#) Form of Vision 2020 Award (for Awardees Other than the Chief Executive Officer): 2016 Price-Contingent Restricted Stock Unit Agreement - \$35 Price Target - under the 2013 Stock Incentive Plan (Exhibit 10.5 to the First Quarter 2016 Quarterly Report). *
- [10.17.8](#) Form of Vision 2020 Award (for Awardees Other than the Chief Executive Officer): 2016 Price-Contingent Restricted Stock Unit Agreement - \$40 Price Target - under the 2013 Stock Incentive Plan (Exhibit 10.6 to the First Quarter 2016 Quarterly Report). *
- [10.18](#) Agreement between NCR and the Trustees of the NCR Pension Plan (UK), dated November 14, 2013 (Exhibit 10.1 to the Current Report on Form 8-K of NCR Corporation dated November 14, 2013).
- [10.19](#) Receivables Financing Agreement, dated as of November 21, 2014, by and among NCR Receivables LLC, as borrower, NCR Corporation, as servicer, PNC Bank, National Association, as administrative agent, and PNC Bank, National Association, The Bank of Tokyo-Mitsubishi UFJ, Ltd., New York Branch, Victory Receivables Corporation and the other lender parties from time to time party thereto (Exhibit 10.1 to the Current Report on Form 8-K of NCR Corporation dated November 21, 2014 (the “November 21, 2014 Form 8-K”)).

- [10.19.1](#) First Amendment to Receivables Financing Agreement, dated as of November 21, 2016, by and among NCR Receivables LLC, as borrower, NCR Corporation, as servicer, PNC Bank, National Association, as administrative agent, and PNC Bank, National Association, The Bank of Tokyo-Mitsubishi UFJ, Ltd., New York Branch, Victory Receivables Corporation and the other lender parties from time to time party thereto (Exhibit 10.1 to the Current Report on Form 8-K of NCR Corporation dated November 23, 2016).
- [10.20](#) Purchase and Sale Agreement, dated as of November 21, 2014, among NCR Receivables LLC, as buyer, and NCR Corporation and the other originator parties from time to time party thereto (Exhibit 10.2 to the November 21, 2014 Form 8-K).
- [10.21](#) Amended and Restated NCR Executive Severance Plan (Exhibit 10.1 to the Second Quarter 2015 Quarterly Report).*
- [10.21.1](#) First Amendment to the Amended and Restated NCR Executive Severance Plan.*
- [10.22](#) Employment Letter of Frederick Marquardt dated April 4, 2014 (as amended May 1, 2014). (Exhibit 10.40 to the 2014 Annual Report). *
- [10.23](#) Employment Contract, dated June 23, 2014, between NCR GmbH and Michael Bayer (Exhibit 10.41 to the 2014 Annual Report). *
- [10.23.1](#) Letter regarding additional terms of employment of Michael Bayer, dated June 23, 2014 (Exhibit 10.41.1 to the 2014 Annual Report). *
- [10.23.2](#) Employment Transfer Letter (revised) of Michael Bayer, dated July 30, 2015 (Exhibit 10.4 to the Second Quarter 2015 Quarterly Report).*
- [10.24](#) NCR Director Compensation Program effective April 23, 2013, as amended effective February 24, 2014 (the “2013 NCR Director Compensation Program”) (Exhibit 10.42 to the 2014 Annual Report). *
- [10.24.1](#) 2014 Director Restricted Stock Unit Grant Statement under the 2013 NCR Director Compensation Program (Exhibit 10.42.1 to the 2014 Annual Report). *
- [10.24.2](#) 2015 Director Restricted Stock Unit Grant Statement under the 2013 NCR Director Compensation Program (Exhibit 10.3 to the Second Quarter 2015 Quarterly Report).*
- [10.24.3](#) 2016 Director Restricted Stock Unit Grant Statement under the 2013 NCR Director Compensation Program (Exhibit 10.2 to the Quarterly Report on Form 10-Q of NCR Corporation for the quarter ended June 30, 2016 (the “Second Quarter 2016 Quarterly Report”)). *
- [10.25](#) Investment Agreement dated as of November 11, 2015, by and between NCR Corporation and the affiliates of Blackstone Capital Partners VI, L.P. and Blackstone Tactical Opportunities L.L.C. named therein (Exhibit 10.1 to the Current Report on Form 8-K of NCR Corporation dated November 11, 2015).
- [10.26](#) Registration Rights Agreement, dated as of December 4, 2015, by and between NCR Corporation and the affiliates of Blackstone Capital Partners VI, L.P. and Blackstone Tactical Opportunities L.L.C. named therein (Exhibit 10.1 to the December 2, 2015 Form 8-K).
- 10.27 NCR Employee Stock Purchase Plan, as amended and restated effective January 1, 2017 (Appendix A to the NCR Corporation Proxy Statement on Schedule 14A for the NCR Corporation 2016 Annual Meeting of Stockholders). *
- [10.28](#) Credit Agreement, dated as of August 22, 2011, as amended and restated as of July 25, 2013, as further amended and restated as of March 31, 2016, by and among NCR Corporation, the Foreign Borrowers party thereto, the Lenders party thereto and JPMorgan Chase Bank, N.A., as Administrative Agent (Exhibit 10.1 to the Current Report on Form 8-K of NCR Corporation dated April 4, 2016 (the “April 4, 2016 Form 8-K”)).

10.28.1	Amended and Restated Guarantee and Collateral Agreement, dated as of August 22, 2011, as amended and restated as of January 6, 2014, as further amended and restated as of March 31, 2016, by and among NCR Corporation, the Foreign Borrowers party thereto, the subsidiaries of NCR Corporation identified therein and JPMorgan Chase Bank, N.A., as Administrative Agent (Exhibit 10.2 to the April 4, 2016 Form 8-K).
10.28.2	Annex A to Credit Agreement dated as of August 22, 2011, as amended and restated as of July 25, 2013, as further amended and restated as of March 31, 2016, among NCR Corporation, the Foreign Borrowers party thereto, the Lenders party thereto and JPMorgan Chase Bank, N.A. (Exhibit 10.1 to the Second Quarter 2016 Quarterly Report).
10.29	Employment Contract, dated September 15, 2016, between NCR Corporation and Mark D. Benjamin (Exhibit 10.1 to the Quarterly Report on Form 10-Q of NCR Corporation for the quarter ended September 30, 2016). *
10.30	Underwriting Agreement, dated March 13, 2017, among NCR Corporation, Merrill Lynch, Pierce, Fenner & Smith Incorporated, J.P. Morgan Securities LLC and the selling stockholders party thereto (Exhibit 1.1 to the Current Report on Form 8-K of NCR Corporation dated March 10, 2017).
10.31	Second Amended and Restated NCR Management Incentive Plan (Appendix A to the NCR Corporation Proxy Statement on Schedule 14A for the NCR Corporation 2017 Annual Meeting of Stockholders (the “2017 Proxy Statement”). *
10.32	Stock Repurchase Agreement, dated as of March 10, 2017, by and between NCR Corporation, Blackstone BCP VI SBS ESC Holdco L.P., Blackstone NCR Holdco L.P., BTO NCR Holdings - ESC L.P., and BTO NCR Holdings L.P. (Exhibit 10.1 to the Quarterly Report on Form 10-Q of NCR Corporation for the quarter ended March 31, 2017 (the “First Quarter 2017 Quarterly Report”)).
10.33	Waiver and Amendment of Investment Agreement, dated as of March 13 2017, by and between NCR Corporation, Blackstone BCP VI SBS ESC Holdco L.P., Blackstone NCR Holdco L.P., BTO NCR Holdings - ESC L.P. and BTG NCR Holdings L.P. (Exhibit 10.2 to the First Quarter 2017 Quarterly Report).
10.34	NCR Corporation 2017 Stock Incentive Plan (the “2017 Stock Incentive Plan”) (Appendix B to the 2017 Proxy Statement). *
10.34.1	Form of 2017 Performance-Based Restricted Stock Unit Award Agreement under the 2013 Stock Incentive Plan and 2017 Stock Incentive Plan (Exhibit 10.3 to the First Quarter 2017 Quarterly Report). *
10.34.2	Form of 2017 Performance-Vesting Restricted Stock Unit Award Agreement under the 2013 Stock Incentive Plan and 2017 Stock Incentive Plan (Exhibit 10.4 to the First Quarter 2017 Quarterly Report). *
10.34.3	Form of 2017 Time-Based Restricted Stock Unit Award Agreement under the 2013 Stock Incentive Plan and 2017 Stock Incentive Plan (Exhibit 10.5 to the First Quarter 2017 Quarterly Report). *
10.34.4	Form of 2017 Single-Metric Performance-Based Restricted Stock Unit Award Agreement under the 2013 Stock Incentive Plan and 2017 Stock Incentive Plan (Exhibit 10.6 to the First Quarter 2017 Quarterly Report). *
10.34.5	Form of 2017 Director Restricted Stock Unit Grant Statement under the 2013 Stock Incentive Plan and 2017 Stock Incentive Plan (Exhibit 10.1 to the Quarterly Report on Form 10-Q of NCR Corporation for the quarter ended June 30, 2017 (the “Second Quarter 2017 Quarterly Report”)). *
10.34.6	Form of 2017 Stock Option Award Agreement under the 2013 Stock Incentive Plan and 2017 Stock Incentive Plan (Exhibit 10.2 to the Second Quarter 2017 Quarterly Report). *
10.35	NCR Director Compensation Program effective May 1, 2017 (Exhibit 10.1 to the Quarterly Report on Form 10-Q of NCR Corporation for the quarter ended September 30, 2017). *
12.1	Statement Regarding Computation of Ratio of Earnings to Fixed Charges and Preferred Stock Dividends.
21	Subsidiaries of NCR Corporation.
23.1	Consent of Independent Registered Public Accounting Firm.

31.1	Certification pursuant to Rule 13a-14(a) and Rule 15d-14(a) of the Securities Exchange Act of 1934.
31.2	Certification pursuant to Rule 13a-14(a) and Rule 15d-14(a) of the Securities Exchange Act of 1934.
32	Certification pursuant to 18 U.S.C. Section 1350 as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
99.1	Tax Opinion of Wachtell, Lipton, Rosen & Katz in connection with the Spin off of Teradata, dated August 27, 2007 (Exhibit 99.2 to the Current Report on Form 8-K of NCR Corporation dated September 30, 2007).
101	Financials in XBRL Format.

* Management contracts or compensatory plans/arrangements

Item 16. FORM 10-K SUMMARY

None.

NCR Corporation**SCHEDULE II--VALUATION AND QUALIFYING ACCOUNTS
(In millions)**

<u>Column A</u>	<u>Column B</u>	<u>Column C</u>		<u>Column D</u>	<u>Column E</u>
<u>Description</u>	<u>Balance at Beginning of Period</u>	<u>Additions</u>		<u>Deductions</u>	<u>Balance at End of Period</u>
		<u>Charged to Costs & Expenses</u>	<u>Charged to Other Accounts</u>		
Year Ended December 31, 2017					
Allowance for doubtful accounts	\$41	\$10	\$—	\$14	\$37
Deferred tax asset valuation allowance	\$445	\$—	\$—	\$30	\$415
Year Ended December 31, 2016					
Allowance for doubtful accounts	\$47	\$9	\$—	\$15	\$41
Deferred tax asset valuation allowance	\$346	\$—	\$99	\$—	\$445
Year Ended December 31, 2015					
Allowance for doubtful accounts	\$19	\$32	\$—	\$4	\$47
Deferred tax asset valuation allowance	\$294	\$—	\$52	\$—	\$346

**SECOND AMENDMENT TO THE AMENDED AND RESTATED
NCR CHANGE IN CONTROL SEVERANCE PLAN**

WHEREAS, NCR Corporation (the “Company”) previously adopted the Amended and Restated NCR Change in Control Severance Plan (the “CIC Severance Plan”), as amended and restated effective December 31, 2008, and as further amended effective January 27, 2010;

WHEREAS, the Compensation and Human Resource Committee (the “Compensation Committee”) of the Board of Directors of the Company (the “Board”) desires to further amend the CIC Severance Plan, as provided below, to update Exhibit A to the CIC Severance Plan, which identifies the positions of executives eligible to participate in the CIC Severance Plan and their respective benefit Tier Levels; and

WHEREAS, the Compensation Committee has determined that, in furtherance of these objectives, it is desirable to amend the CIC Severance Plan as described below, as permitted by Articles III and VI of the CIC Severance Plan, and in accordance with the Board’s delegation of amendment authority to the Compensation Committee on October 21, 2015.

NOW THEREFORE, effective October 24, 2017, the CIC Severance Plan is hereby amended as follows:

Exhibit A is amended to read:

Exhibit A

Participants and Tier Levels
(Revised October 24, 2017)

The following positions are the Participants, and their respective Tier Levels, under this Plan:

<i>Position</i>	<i>Tier Level</i>
Chairman and Chief Executive Officer	I
President and Chief Operating Officer	I
Executive Vice President	II
Senior Vice President and Chief Financial Officer	II
Senior Vice President, General Counsel and Secretary	II
Senior Vice President, Human Resources	II

**FIRST AMENDMENT TO THE AMENDED AND RESTATED
NCR EXECUTIVE SEVERANCE PLAN**

WHEREAS, NCR Corporation (the “Company”) previously adopted the NCR Executive Severance Plan (the “Executive Severance Plan”) effective December 12, 2014, as amended and restated effective April 22, 2015;

WHEREAS, the Compensation and Human Resource Committee (the “Committee”) of the Board of Directors of the Company desires to further amend the Executive Severance Plan to exclude target bonus amounts under the Software & Cloud Plan established by the Committee; and

WHEREAS, the Committee has determined that, in furtherance of this objective, it is desirable to amend the Executive Severance Plan as described below, as permitted by Section 6.3 thereof.

NOW THEREFORE, effective October 24, 2017, Article II(q) of the Executive Severance Plan is hereby amended to read as follows:

(q) Target Bonus. With respect to any Participant, the Participant’s target annual cash bonus under the Company’s annual bonus plan applicable to the Participant for the year immediately prior to the year of such Participant’s termination of employment. As used in this definition, the reference to “target bonus” shall mean the dollar amount determined by multiplying the Participant’s target bonus percentage as in effect on December 31st of such prior year by the Participant’s actual base salary as in effect on December 31st of such prior year; provided that such “target bonus” reference shall exclude any target bonus “uplift” amount established for the Participant solely with respect to stretch performance goals under any bonus “uplift” program established by the Committee, as may be amended from time to time.

NCR Corporation
COMPUTATION OF RATIO OF EARNINGS TO FIXED CHARGES AND PREFERRED STOCK DIVIDENDS
(in millions)

	Year ended December 31, 2017	Year ended December 31, 2016	Year ended December 31, 2015	Year ended December 31, 2014	Year ended December 31, 2013
Earnings					
Income (loss) before income taxes, non-controlling interest, discontinued operations ⁽¹⁾	\$ 482	\$ 379	\$ (95)	\$ 137	\$ 554
Fixed charges	211	214	222	224	142
Non-controlling interest in pre-tax income of subsidiaries that have not incurred fixed charges	(4)	(4)	(4)	(4)	(4)
Adjusted earnings	\$ 689	\$ 589	\$ 123	\$ 357	\$ 692
Fixed charges					
Interest expense	\$ 163	\$ 170	\$ 173	\$ 181	\$ 103
Portion of rental expense representative of the interest factor ⁽²⁾	48	44	49	43	39
Fixed charges added to earnings	\$ 211	\$ 214	\$ 222	\$ 224	\$ 142
Ratio of earnings to fixed charges	3.27	2.75	N/A*	1.59	4.87
Preferred stock dividends and preferred stock accretion	109	49	4	—	—
Ratio of earnings before provision for income taxes to earnings from continuing operations ⁽³⁾	2.01	1.32	1.00	—	—
Preferred stock dividend factor	219	65	4	—	—
Fixed charges and preferred stock dividends	\$ 430	\$ 279	\$ 226	\$ 224	\$ 142
Ratio of earnings to fixed charges and preferred stock dividends	1.60	2.11	N/A**	1.59	4.87

* For the year ended December 31, 2015, the ratio of earnings to fixed charges coverage is less than 1:1. We would have needed to generate additional earnings of \$99 million to achieve a coverage of 1:1 in the year ended December 31, 2015.

** For the year ended December 31, 2015, the ratio of earnings to fixed charges and preferred stock dividends coverage is less than 1:1. We would have needed to generate additional earnings of \$103 million to achieve a coverage of 1:1 in the year ended December 31, 2015.

⁽¹⁾ The preferred stock dividends are included in fixed charges (i.e. the denominator of the ratio calculation) but excluded from the numerator of the ratio calculation as such amount was not deducted in arriving at the pre-tax income (loss) from continuing operations, as defined.

⁽²⁾ Interest portion of rental expense is estimated to equal 1/3 of such expense, which is considered a reasonable approximation of the interest factor.

⁽³⁾ For the year ended December 31, 2015, given the tax expense on income before income taxes, non-controlling interest, and discontinued operations, the ratio of earnings before provision for income taxes to earnings from continuing operations was less than 1. As such, there was no gross up adjustment for the preferred stock dividends and preferred stock accretion.

SUBSIDIARIES OF NCR CORPORATION
as of February 20, 2018

	Organized under the Laws of
Data Pathing Holding LLC	Delaware
NCR EasyPoint LLC	Delaware
NCR European and South American Holdings LLC	Delaware
NCR Government Systems LLC	Delaware
NCR Indonesia LLC	Delaware
NCR International, Inc.	Delaware
NCR Italia Holdings LLC	Delaware
NCR Latin American Holdings LLC	Delaware
NCR Middle East Holdings, LLC	Delaware
NCR Poland LLC	Delaware
NCR Solutions (Middle East) LLC	Delaware
NCR Receivables LLC	Delaware
North American Research Corporation	Delaware
Quantor Holding LLC	Delaware
NCR Foreign Investco, LLC	Delaware
NCR Foreign Investco 1, LLC	Delaware
Radiant Payment Services, LLC	Georgia
The National Cash Register Company	Maryland
TCR Business Systems, Inc.	Texas
Texas Digital Systems, Inc.	Texas
NCR Argentina S.R.L.	Argentina
NCR Australia Pty, Ltd.	Australia
Quest Retail Technology Pty Ltd	Australia
Radiant Systems Asia-Pacific Pty Ltd.	Australia
Retalix Australia PTY Ltd.	Australia
RADS Australia Holdings Pty Ltd	Australia
NCR Oesterreich Ges.m.b.H.	Austria
Orderman GmbH	Austria
Radiant Systems GmbH	Austria
NCR (Bahrain) W.L.L.	Bahrain
NCR Hospitality Bahrain SPC	Bahrain
NCR Belgium & Co. SNC	Belgium
Global Assurance Limited	Bermuda
NCR (Bermuda) Holdings Limited	Bermuda
NCR Bermuda (2006) Limited	Bermuda
NCR Services Limited	Bermuda
NCR Treasury Finance Limited	Bermuda
NCR Treasury Financing Limited	Bermuda

**Organized under the
Laws of**

NCR d.o.o. Banja Luka	Bosnia
NCR Brasil – Industria de Equipamentos para Automacao S.A.	Brazil
NCR Brasil Ltda	Brazil
Wyse Sistemas de Informatica Ltda	Brazil
NCR Canada Corp.	Canada
NCR Chile Industrial y Comercial Limitada	Chile
NCR Comercial E Inversiones Limitada	Chile
NCR (Beijing) Financial Equipment System Co., Ltd.	China
NCR (Guangzhou) Technology Co., Ltd.	China
NCR (Shanghai) Technology Services Ltd.	China
Retalix Technology (Beijing) Co. Ltd.	China
NCR Columbia Ltda	Columbia
Papeles y Suministros del Cuaca S.A. (Joint Venture)	Columbia
NCR (Cyprus) Limited	Cyprus
NCR (IRI) Ltd.	Cyprus
NCR (Middle East) Limited	Cyprus
NCR (North Africa) Limited	Cyprus
NCR Ceska Republika spol. S.r.o.	Czech Republic
NCR Danmark A/S	Denmark
NCR Dominicana SRL	Dominican Republic
NCR Finland OY	Finland
4Front Technologies SA France	France
NCR France, SNC	France
NCR Antilles S.A.R.L.	French W.I.
NCR GmbH	Germany
NCR Ghana Limited	Ghana
NCR (Hellas) S.A.	Greece
NCR (Hong Kong) Limited	Hong Kong
NCR Magyarorszag Kft.	Hungary
NCR Corporation India Private Limited	India
Digital Insight India Products Private Limited	India
Radiant Systems Retail Solutions Private Limited	India
PT. NCR Indonesia	Indonesia
NCR Airside Ireland Limited	Ireland
NCR Global Holdings Limited	Ireland
NCR Global Solutions Limited	Ireland
NCR Israel Ltd.	Israel
NCR Global Ltd.	Israel
Moon Holdings S.P.V Ltd.	Israel
Tamar Industries M.R. Electronic Ltd.	Israel
NCR Italia S.r.l.	Italy
NCR Japan, Ltd.	Japan
NCR (Kenya) Limited	Kenya
NCR Korea Co Ltd.	Korea

**Organized under the
Laws of**

NCR International SNC	Luxembourg
NCR International 2 SNC	Luxembourg
RADS International SARL	Luxembourg
Orderman S.Á.R.L.	Luxembourg
NCR (Macau) Limited	Macau
NCR Payments and Services Malaysia Sdn Bhd	Malaysia
NCR (Malaysia) Sdn Bhd	Malaysia
Radiant Systems Retail Solutions Sdn Bhd	Malaysia
Tricubes NCR JV Sdn Bhd	Malaysia
NCR de Mexico S. de R.L. de C.V.	Mexico
NCR Solutions de Mexico S. de R.L. de C.V.	Mexico
Global Acquisition C.V.	Netherlands
Keynesplein Holding C.V.	Netherlands
NCR Dutch Holdings B.V.	Netherlands
NCR Dutch Holdings C.V.	Netherlands
NCR Nederland B.V.	Netherlands
NCR (NZ) Corporation	New Zealand
NCR (Nigeria) PLC	Nigeria
NCR Norge AS	Norway
NCR Corporation de Centroamerica S.A.	Panama
NCR del Peru S.A.	Peru
NCR Cebu Development Center, Inc.	Philippines
NCR Corporation (Philippines)	Philippines
NCR Polska Sp.z.o.o.	Poland
NCR Iberia Unipessoal, Lda	Portugal
NCR Qatar LLC	Qatar
NCR A/O	Russia
NCR d.o.o. Beograd	Serbia
NCR Asia Pacific Pte Limited	Singapore
NCR Singapore Pte Ltd	Singapore
Radiant Systems Retail Solutions Pte Ltd.	Singapore
NCR International (South Africa) (Pty) Ltd.	South Africa
NCR Espana, S.L.	Spain
Orderman Iberica S.L.	Spain
Iber Aloha S.L.	Spain
National Registrierkassen AG	Switzerland
NCR (Switzerland) GmbH	Switzerland
NCR Systems Taiwan Ltd.	Taiwan
NCR (Thailand) Limited	Thailand
Radiant Systems Ltd.	Thailand
NCR Bilisim Sistemleri, LS	Turkey
NCR Ukraine Limited	Ukraine
NCR Financial Solutions Group Limited	United Kingdom
NCR Limited	United Kingdom

**Organized under the
Laws of**

NCR UK Group Limited
Radiant Systems UK (II) Limited
Radiant Systems Limited
N. Timms & Co (Private) Ltd
NCR Zimbabwe (Private) Ltd

United Kingdom
United Kingdom
United Kingdom
Zimbabwe
Zimbabwe

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the Registration Statements on Form S-3 (No. 333-210457) and S-8 (Nos. 333-18797, 333-188167, 333-139553, 333-215248 and 333-217574) of NCR Corporation of our report dated February 23, 2018 relating to the financial statements, financial statement schedule and the effectiveness of internal control over financial reporting, which appears in this Form 10-K.

/s/ PricewaterhouseCoopers LLP
Atlanta, GA
February 26, 2018

CERTIFICATION

I, William Nuti, certify that:

1. I have reviewed this Annual Report on Form 10-K of NCR Corporation;
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: February 26, 2018

/s/ William Nuti

William Nuti

Chairman of the Board and Chief Executive Officer

CERTIFICATION

I, Robert Fishman, certify that:

1. I have reviewed this Annual Report on Form 10-K of NCR Corporation;
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: February 26, 2018

/s/ Robert Fishman

Robert Fishman
Executive Vice President and Chief Financial Officer

CERTIFICATION PURSUANT TO**18 U.S.C. SECTION 1350****AS ADOPTED PURSUANT TO****SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Annual Report on Form 10-K of NCR Corporation, a Maryland corporation (the "Company") for the period ending December 31, 2017 as filed with the U.S. Securities and Exchange Commission on the date hereof (the "Report"), each of the undersigned officers of the Company does hereby certify, pursuant to 18 U.S.C. § 1350 (section 906 of the Sarbanes-Oxley Act of 2002), that:

- (1) the Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) the information contained in the Report fairly presents, in all material respects, the financial condition and result of operations of the Company.

The foregoing certification (i) is given to such officers' knowledge, based upon such officers' investigation as such officers reasonably deem appropriate; and (ii) is being furnished solely pursuant to 18 U.S.C. § 1350 (section 906 of the Sarbanes-Oxley Act of 2002) and is not being filed as part of the Report or as a separate disclosure document.

Dated: February 26, 2018

/s/ William Nuti

William Nuti

Chairman of the Board and Chief Executive Officer

Dated: February 26, 2018

/s/ Robert Fishman

Robert Fishman

Executive Vice President and Chief Financial Officer

A signed original of this written statement required by Section 906, or other document authenticating, acknowledging, or otherwise adopting the signatures that appear in typed form within the electronic version of this written statement required by Section 906, has been provided to NCR Corporation and will be retained by NCR Corporation and furnished to the United States Securities and Exchange Commission or its staff upon request.