BAXTER INTERNATIONAL INC
Form 10-K
February 21, 2019

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K

(Mark One)

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the fiscal year ended December 31, 2018

OR

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the transition period from to

Commission file number 1-4448

Baxter International Inc.

(Exact Name of Registrant as Specified in its Charter)

Delaware	36-0781620
(State or Other Jurisdiction of Incorporation or Organization)	(I.R.S. Employer Identification No.)
One Baxter Parkway, Deerfield, Illinois	60015
(Address of Principal Executive Offices)	(Zip Code)

Registrant's telephone number, including area code 224.948.2000

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

Title of Each Class	Name of Each Exchange on Which Registered
Common stock, $1.00 par value	New York Stock Exchange Chicago Stock Exchange
1.3% Senior Notes due 2025	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 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 registrant has submitted electronically every Interactive Data File required to be submitted and pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit such files) Yes No

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

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

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

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

Exchange Act.

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

The aggregate market value of the voting common equity held by non-affiliates of the registrant as of June 29, 2018 (the last business day of the registrant's most recently completed second fiscal quarter), based on the per share closing sale price of $73.84 on that date and the assumption for the purpose of this computation only that all of the registrant's directors and executive officers are affiliates, was approximately $40 billion. The number of shares of the registrant's common stock, $1.00 par value, outstanding as of January 31, 2019 was 512,538,202.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's definitive 2019 proxy statement for use in connection with its Annual Meeting of Stockholders to be held on May 7, 2019 are incorporated by reference into Part III of this report.

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PART I

Item 1. Business.

Company Overview

Baxter International Inc., through its subsidiaries, provides a broad portfolio of essential healthcare products, including acute and chronic dialysis therapies; sterile intravenous (IV) solutions; infusion systems and devices; parenteral nutrition therapies; inhaled anesthetics; generic injectable pharmaceuticals; and surgical hemostat and sealant products. In 2017, Baxter added capabilities in the production of essential generic injectable medicines with the acquisition of Claris Injectables Limited (Claris). The company's global footprint and critical nature of its products and services play a key role in expanding access to healthcare in emerging and developed countries. These products are used by hospitals, kidney dialysis centers, nursing homes, rehabilitation centers, doctors' offices and by patients at home under physician supervision. As of December 31, 2018, Baxter manufactured products in over 20 countries and sold them in over 100 countries.

Baxter International Inc. was incorporated under Delaware law in 1931. As used in this report, "Baxter International" means Baxter International Inc. and "Baxter," the "company" or the "Company" means Baxter International and its consolidated subsidiaries (after giving effect to the separation and distribution of Baxalta Incorporated (Baxalta), as further described below), unless the context otherwise requires.

Business Segments and Products

The company manages its business based on three geographic segments: Americas (North and South America), EMEA (Europe, Middle East and Africa) and APAC (Asia-Pacific).

Each of the company's segments provide a broad portfolio of essential healthcare products, including acute and chronic dialysis therapies; sterile IV solutions; infusion systems and devices; parenteral nutrition therapies; inhaled anesthetics; generic injectable pharmaceuticals; and surgical hemostat and sealant products.

For financial information about Baxter's segments, see Note 18 in Item 8 of this Annual Report on Form 10-K.

Sales and Distribution

The company has its own direct sales force and also makes sales to and through independent distributors, drug wholesalers acting as sales agents and specialty pharmacy or other alternate site providers. In the United States, third parties such as Cardinal Health, Inc. warehouse and ship a significant portion of the company's products through their distribution centers. These centers are generally stocked with adequate inventories to facilitate prompt customer service. Sales and distribution methods include frequent contact by sales and customer service representatives, automated communications via various electronic purchasing systems, circulation of catalogs and merchandising bulletins, direct-mail campaigns, trade publication presence and advertising.

Sales are made and products are distributed on a direct basis or through independent distributors or sales agents in more than 100 countries as of December 31, 2018.

International Operations

The majority of the company's revenues are generated outside of the United States and geographic expansion remains a component of the company's strategy. Baxter's international presence includes operations in Europe (including Eastern and Central Europe), the Middle East, Africa, Asia-Pacific, Latin America and Canada. The company is subject to certain risks inherent in conducting business outside the United States. For more information on these risks, see the information under the captions "Risks Related to Baxter's Business —We are subject to risks associated with doing business globally" and "— Changes in foreign currency exchange rates and interest rates could have a material adverse effect on our operating results and liquidity" in Item 1A of this Annual Report on Form 10-K.

For financial information about foreign and domestic operations and geographic information, see Note 18 in Item 8 of this Annual Report on Form 10-K. For more information regarding foreign currency exchange risk, refer to the discussion under the caption entitled "Financial Instrument Market Risk" in Item 7 of this Annual Report on Form 10-K.

Contractual Arrangements

The company's products are sold through contracts with customers, both within and outside the United States. Some of these contracts have terms of more than one year and place limits on the company's ability to increase prices. In the case of hospitals, governments and other facilities, these contracts may specify minimum quantities of a particular product or categories of products to be purchased by the customer.

In keeping with the increased emphasis on cost-effectiveness in healthcare delivery, many hospitals and other customers of medical products in the United States have joined group purchasing organizations (GPOs), or formed integrated delivery networks (IDNs), to enhance purchasing power. GPOs and IDNs negotiate pricing arrangements with manufacturers and distributors and the negotiated prices are made available to members. Baxter has purchasing agreements with several of the major GPOs in the United States. GPOs may have agreements with more than one supplier for certain products. Accordingly, in these cases, Baxter faces competition from other suppliers even where a customer is a member of a GPO under contract with Baxter. Purchasing power is similarly consolidated in many other countries. For example, public contracting authorities act as the purchasing entities for the hospitals and other customers of medical products in their region and many hospitals and other customers have joined joint procurement entities and buying consortia. The result is that demand for healthcare products is increasingly concentrated across the company's markets globally.

Raw Materials

Raw materials essential to Baxter's business are purchased from numerous suppliers worldwide in the ordinary course of business. Although most of these materials are generally available, Baxter at times may experience shortages of supply. In an effort to manage risk associated with raw materials supply, Baxter works closely with its suppliers to help ensure availability and continuity of supply while maintaining high quality and reliability. The company also seeks to develop new and alternative sources of supply where beneficial to its overall raw materials procurement strategy.

The company also utilizes long-term supply contracts with some suppliers to help maintain continuity of supply and manage the risk of price increases. Baxter is not always able to recover cost increases for raw materials through customer pricing due to contractual limits and market forces.

In connection with the separation and distribution of Baxalta, Baxter entered into a long-term manufacturing and supply agreement with Baxalta. Baxalta manufactures and supplies Baxter with ARTISS, TISSEEL, FLOSEAL and stand-alone thrombin under the manufacturing and supply agreement, on a cost-plus basis.

Competition and Healthcare Cost Containment

Baxter's businesses benefit from a number of competitive advantages, including the breadth and depth of their product offerings, as well as strong relationships with customers, including hospitals and clinics, GPOs, physicians, and patients, many who self-administer the home-based therapies supplied by Baxter. Baxter as a whole benefits from efficiencies and cost advantages resulting from shared manufacturing facilities and the technological advantages of its products.

Although no single company competes with Baxter in all of its businesses, Baxter faces substantial competition in each of its segments from international and domestic healthcare and pharmaceutical companies and providers of all sizes, and these competitors often differ across our businesses. In addition, global and regional competitors continue to expand their manufacturing capacity and sales and marketing channels. Competition is primarily focused on cost-effectiveness, price, service, product performance, and technological innovation. There has been increasing

consolidation in the company's customer base and by its competitors, which continues to result in pricing and market pressures.

Global efforts toward healthcare cost containment continue to exert pressure on product pricing. Governments around the world use various mechanisms to control healthcare expenditures, such as price controls, the formation of public contracting authorities, product formularies (lists of recommended or approved products), and competitive tenders which require the submission of a bid to sell products. Sales of Baxter's products are dependent, in part, on the availability of reimbursement by government agencies and healthcare programs, as well as insurance companies and other private payers. In the United States, the federal and many state governments have adopted or proposed initiatives relating to Medicaid and other health programs that may limit reimbursement or increase rebates that Baxter and other providers are required to pay to the state. In addition to government regulation, managed care organizations in the United States, which include medical insurance companies, medical plan administrators, health-maintenance organizations, hospital and physician alliances and pharmacy benefit managers, continue to put pressure on the price and usage of healthcare products. Managed care organizations seek to contain healthcare expenditures, and their purchasing strength has been increasing due to their consolidation into fewer, larger organizations and a growing number of enrolled patients. Baxter faces similar issues outside of the United States. In Europe and Latin America, for example, the government provides healthcare at low cost to

patients, and controls its expenditures by purchasing products through public tenders, collective purchasing, regulating prices, setting reference prices in public tenders or limiting reimbursement or patient access to certain products.

Intellectual Property

Patents and other proprietary rights are essential to Baxter's business. Baxter relies on patents, trademarks, copyrights, trade secrets, know-how and confidentiality agreements to develop, maintain and strengthen its competitive position. Baxter owns a number of patents and trademarks throughout the world and has entered into license arrangements relating to various third-party patents and technologies. Products manufactured by Baxter are sold primarily under its own trademarks and trade names. Some products distributed by the company are sold under the company's trade names, while others are sold under trade names owned by its suppliers or partners. Trade secret protection of unpatented confidential and proprietary information is also important to Baxter. The company maintains certain details about its processes, products and technology as trade secrets and generally requires employees, consultants, and business partners to enter into confidentiality agreements. These agreements may be breached and Baxter may not have adequate remedies for any breach. In addition, Baxter's trade secrets may otherwise become known or be independently discovered by competitors. To the extent that Baxter's employees, consultants, and business partners use intellectual property owned by others in their work for the company, disputes may arise as to the rights in related or resulting know-how and inventions.

Baxter's policy is to protect its products and technology through patents and trademarks on a worldwide basis. This protection is sought in a manner that balances the cost of such protection against obtaining the greatest value for the company. Baxter also recognizes the need to promote the enforcement of its patents and trademarks and takes commercially reasonable steps to enforce its patents and trademarks around the world against potential infringers, including judicial or administrative action where appropriate.

Baxter operates in an industry susceptible to significant patent litigation. At any given time, the company is involved as either a plaintiff or defendant in a number of patent infringement and other intellectual property-related actions. Such litigation can result in significant royalty or other payments or result in injunctions that can prevent the sale of products. For more information on patent and other litigation, see Note 17 in Item 8 of this Annual Report on Form 10-K.

Research and Development

Baxter's investment in research and development (R&D), consistent with the company's portfolio optimization and capital allocation strategies, helps fuel its future growth and its ability to remain competitive in each of its product categories. Accordingly, Baxter continues to focus its investment on select R&D programs to enhance future growth through clinical differentiation. Expenditures for Baxter's R&D activities were $655 million in 2018, $613 million in 2017, and $646 million in 2016. These expenditures include costs associated with R&D activities performed at the company's R&D centers located around the world, which include facilities in Belgium, Sweden, India, Italy, Germany, China, Japan and the United States, as well as in-licensing, milestone and reimbursement payments made to partners for R&D work performed at non-Baxter locations.

For more information on the company's R&D activities, refer to the discussion under the caption entitled "Strategic Objectives" in Item 7 of this Annual Report on Form 10-K.

Quality Management

Baxter's continued success depends upon the quality of its products. Quality management plays an essential role in determining and meeting customer requirements, preventing defects, facilitating continuous improvement of the

company's processes, products and services, and assuring the safety and efficacy of the company's products. Baxter's quality system enables the design, development, manufacturing, packaging, sterilization, handling, distribution and labeling of the company's products to ensure they conform to customer requirements. In order to continually improve the effectiveness and efficiency of the quality system, various measurements, monitoring and analysis methods such as management reviews and internal, external and vendor audits are employed at local and central levels.

Each product that Baxter markets is required to meet specific quality standards, both in packaging and in product integrity and quality. If any of those is determined to be compromised at any time, Baxter endeavors to take corrective and preventive actions designed to ensure compliance with regulatory requirements and to meet customer expectations. For more information on corrective actions taken by Baxter, refer to the discussion under the caption entitled "Certain Regulatory Matters" in Item 7 of this Annual Report on Form 10-K.

Government Regulation

The operations of Baxter and many of the products manufactured or sold by the company are subject to extensive regulation by numerous government agencies, both within and outside the United States. The Food and Drug Administration (FDA) in the United States, the European Medicines Agency (EMA) in Europe, the China Food and Drug Administration (CFDA) in China and other government agencies inside and outside of the United States, administer requirements covering the testing, safety, effectiveness, manufacturing, labeling, promotion and advertising, distribution and post-market surveillance of Baxter's products. The company must obtain specific approval from FDA and non-U.S. regulatory authorities before it can market and sell most of its products in a particular country. Even after the company obtains regulatory approval to market a product, the product and the company's manufacturing processes and quality systems are subject to continued review by FDA and other regulatory authorities globally. State agencies in the United States also regulate the facilities, operations, employees, products and services of the company within their respective states. The company and its facilities are subject to periodic inspections and possible administrative and legal actions by FDA and other regulatory agencies inside and outside the United States. Such actions may include warning letters, product recalls or seizures, monetary sanctions, injunctions to halt manufacture and distribution of products, civil or criminal sanctions, refusal of a government to grant approvals or licenses, restrictions on operations or withdrawal of existing approvals and licenses. As situations require, the company takes steps to ensure safety and efficacy of its products, such as removing products found not to meet applicable requirements from the market and improving the effectiveness of quality systems. For more information on compliance actions taken by the company, refer to the discussion under the caption entitled "Certain Regulatory Matters" in Item 7 of this Annual Report on Form 10-K.

The company is also subject to various laws inside and outside the United States concerning its relationships with healthcare professionals and government officials, price reporting and regulation, the promotion, sales and marketing of its products and services, the importation and exportation of products, the operation of its facilities and distribution of products. In the United States, the company is subject to the oversight of FDA, Office of the Inspector General within the Department of Health and Human Services (OIG), the Center for Medicare/Medicaid Services (CMS), the Department of Justice (DOJ), Environmental Protection Agency, Department of Defense and Customs and Border Protection in addition to others. The company supplies products and services to healthcare providers that are reimbursed by federally funded programs such as Medicare. As a result, the company's activities are subject to regulation by CMS and enforcement by OIG and DOJ. In each jurisdiction outside the United States, the company's activities are subject to regulation by government agencies including the EMA in Europe, CFDA in China and other agencies in other jurisdictions. Many of the agencies enforcing these laws have increased their enforcement activities with respect to healthcare companies in recent years. These actions appear to be part of a general trend toward increased enforcement activity globally.

Environmental policies of the company require compliance with all applicable environmental regulations and contemplate, among other things, appropriate capital expenditures for environmental protection.

Separation of Baxalta

On July 1, 2015, Baxter completed the distribution of approximately 80.5% of the outstanding common stock of Baxalta to Baxter stockholders (the Distribution). The Distribution was made to Baxter's stockholders of record as of the close of business on June 17, 2015 (the Record Date), who received one share of Baxalta common stock for each Baxter common share held as of the Record Date. As a result of the distribution, Baxalta became an independent public company.

In 2016, Baxter disposed of its remaining 19.5% interest in Baxalta through a series of transactions including debt-for-equity exchanges, an equity-for-equity exchange and a contribution to its U.S. pension plan. As a result of

these transactions, the company extinguished approximately $3.65 billion in company indebtedness, repurchased 11,526,638 Baxter shares and contributed 17,145,570 Baxalta shares to its U.S. pension plan. On June 3, 2016, Baxalta became a wholly-owned subsidiary of Shire plc (Shire). In January 2019, Takeda Pharmaceutical Company Limited (Takeda) acquired Shire.

As a result of the separation, the consolidated statements of income, consolidated balance sheets, consolidated statements of cash flow, and related financial information reflect Baxalta's operations, assets and liabilities, and cash flows as discontinued operations for all periods presented.

Refer to Note 2 in Item 8 of this Annual Report on Form 10-K for additional information regarding the separation of Baxalta.

Employees

As of December 31, 2018, Baxter employed approximately 50,000 people.

Available Information

Baxter makes available free of charge on its website at www.baxter.com its Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended (Exchange Act), as soon as reasonably practicable after electronically filing or furnishing such material with the Securities and Exchange Commission. These reports are also available free of charge via EDGAR through the Securities and Exchange Commission website (www.sec.gov). In addition, Baxter's Corporate Governance Guidelines, Code of Conduct, and the charters for the committees of Baxter's Board of Directors are available on Baxter's website at www.baxter.com under "About Baxter—About us — Governance." All the foregoing materials will be made available to stockholders in print upon request by writing to: Corporate Secretary, Baxter International Inc., One Baxter Parkway, Deerfield, Illinois 60015. Information contained on Baxter's website shall not be deemed incorporated into, or to be a part of, this Annual Report on Form 10-K.

Item 1A.Risk Factors.

In addition to the other information in this Annual Report on Form 10-K, stockholders or prospective investors should carefully consider the following risk factors. If any of the events described below occurs, our business, financial condition, results of operations, future growth prospects and stock price could suffer.

We may not achieve our long-term financial improvement goals.

We have been implementing plans to enhance profitability and returns for our stockholders. These plans include the achievement of certain financial goals in 2019 and beyond. While we are continuing to refine these goals, our plan contemplates significant margin expansion over our long-range plan, which runs through 2023. We have identified certain key strategies to help achieve these targets. These strategies include optimizing our core product portfolio globally, driving operational excellence through the realignment of our cost structure and various restructuring activities and maximizing the value derived from the allocation of our capital.

As part of these strategies, we continue to evaluate the performance of all of our businesses and may sell or acquire a business or product line or exit a particular market. We are also evaluating our corporate and commercial infrastructure in the interest of streamlining costs while maintaining our commitment to quality and safety. Future divestitures may result in significant write-offs, including those related to goodwill and other intangible assets. Future acquisitions may fail to achieve the desired financial results (including return on investment) and synergies and may not provide the desired market access. The restructuring of our operations may not generate targeted savings or may cause unexpected disruptions to our business. As a result, we may not achieve our targeted financial results, which could have a material adverse effect on our business, financial condition and results of operations.

If we are unable to successfully introduce new products or fail to keep pace with advances in technology, our business, financial condition and results of operations could be adversely affected.

We need to successfully introduce new products to achieve our strategic business objectives. Product development requires substantial investment and there is inherent risk in the R&D process. A successful product development process depends on many factors, including our ability to properly anticipate and satisfy customer needs, adapt to new technologies, obtain regulatory approvals on a timely basis, demonstrate satisfactory clinical results, manufacture products in an economical and timely manner and differentiate our products from those of our competitors. If we cannot successfully introduce new products or adapt to changing technologies, our products may become obsolete and

our revenue and profitability could suffer.

Issues with product supply or quality could have an adverse effect on our business, subject us to regulatory actions, or cause a loss of customer confidence in us or our products, among other negative consequences.

Our success depends upon the availability and quality of our products. The pharmaceutical and medical products industries are competitive and subject to complex market dynamics and varying demand levels. These levels vary in response to macro-economic conditions, regulatory requirements (including the availability of private or public reimbursement), seasonality, natural disasters, epidemics and other matters. Additionally, the development of new or enhanced products involves a lengthy regulatory process and is capital intensive. As a result, our ability to match our production levels and capacity to market demand is imprecise and may result in a failure to meet market demand or satisfy customer requirements for our products or, alternatively, an oversupply of inventory. Failure to meet market demand may result in customers transitioning to available competitive products, loss of market share, negative publicity, reputational damage, loss of customer confidence or other negative consequences (including a decline in stock price). In the event of an oversupply, we may be forced to lower our prices, record asset impairment charges or take other actions, which may adversely affect our business, financial condition and results of operations.

Additionally, quality management plays an essential role in determining and meeting customer requirements, preventing defects, improving our products and services and assuring the safety and efficacy of our products. Our future success depends on our ability to maintain and continuously improve our quality management program. While we have a quality system that covers the lifecycle of our

products, quality and safety issues may occur with respect to any of our products. A quality or safety issue may result in adverse inspection reports, voluntary or official action indicated, warning letters, import bans, product recalls (either voluntary or required by FDA or similar governmental authorities in other countries) or seizures, monetary sanctions, injunctions to halt manufacture and distribution of products, civil or criminal sanctions, costly litigation, refusal of a government to grant approvals and licenses, restrictions on operations or withdrawal of existing approvals and licenses. An inability to address a quality or safety issue in an effective and timely manner may also cause negative publicity, a loss of customer confidence in us or our current or future products, which may result in the loss of sales and difficulty in successfully launching new products. Additionally, Baxter has made and continues to make significant investments in assets, including inventory and property, plant and equipment, which relate to potential new products or modifications to existing products. Product quality or safety issues may restrict us from being able to realize the expected returns from these investments, potentially resulting in asset impairments in the future.

Unaffiliated third party suppliers provide a number of goods and services to our R&D, clinical and manufacturing organizations. Third party suppliers are required to comply with our quality standards. Failure of a third party supplier to provide compliant raw materials or supplies could result in delays, service interruptions or other quality related issues that may negatively impact our business results.

For more information on regulatory matters currently affecting us, refer to the discussion under the caption entitled “Certain Regulatory Matters” in Item 7 of this Annual Report on Form 10-K.

If we are unable to obtain sufficient components or raw materials on a timely basis or for a cost-effective price or if we experience other manufacturing or supply difficulties, our business and results of operations may be adversely affected.

The manufacture of our products requires, among other things, the timely supply or delivery of sufficient amounts of quality components and materials. We manufacture our products in approximately 50 manufacturing facilities around the world. We acquire our components, materials and other requirements for manufacturing from many suppliers and vendors in various countries, including sometimes from ourselves for self-supplied requirements. We endeavor, either alone or working closely with our suppliers, to ensure the continuity of our inputs and supplies but we cannot guarantee these efforts will always be successful. Further, while efforts are made to diversify certain of our sources of components and materials, in certain instances there is only a sole source or supplier with no alternatives yet identified. For most of our components and materials for which a single source or supplier is used, alternative sources or suppliers may exist, but we have made a strategic determination to use the single source or supplier. Although we do carry strategic inventory and maintain insurance to help mitigate the potential risk related to any related supply disruption, there can be no assurance that such measures will be sufficient or effective. A reduction or interruption in supply and an inability to quickly develop acceptable alternative sources for such supply, could adversely affect our ability to manufacture and distribute our products in a timely or cost-effective manner, and our ability to make product sales. Additionally, volatility in our costs of energy, transportation/freight, components, raw materials and other supply, manufacturing and distribution costs could adversely affect our results of operations. Climate change (including laws or regulations passed in response thereto) could increase our costs, in particular our costs of supply, energy and transportation/freight. Material or sustained increases in the price of oil could have an adverse impact on the cost of many of the plastic materials we use to make and package our products, as well as our transportation/freight costs. These outcomes may in turn result in customers transitioning to available competitive products, loss of market share, negative publicity, reputational damage, loss of customer confidence or other negative consequences (including a decline in stock price).

Many of our products are difficult to manufacture. This is due to the complex nature of manufacturing pharmaceuticals, including biologics, and devices, as well as the strict regulatory regime governing our manufacturing operations. Variations in the manufacturing process may result in production failures which could lead to launch

delays, product shortage, unanticipated costs, lost revenues and damage to our reputation. A failure to identify and address manufacturing problems prior to the release of products to our customers may also result in a quality or safety issue of the type discussed above.

Some of our products are manufactured at a single manufacturing facility or stored at a single storage site. Loss or damage to a manufacturing facility or storage site due to a natural disaster, such as we experienced as a result of Hurricane Maria, or otherwise could adversely affect our ability to manufacture sufficient quantities of key products or otherwise deliver products to meet customer demand or contractual requirements which may result in a loss of revenue and other adverse business consequences (including those identified in the paragraph above). Because of the time required to approve and license a manufacturing facility, a third party manufacturer may not be available on a timely basis (if at all) to replace production capacity in the event we lose manufacturing capacity or products are otherwise unavailable due to natural disaster, regulatory action or otherwise.

We are increasingly dependent on information technology systems and subject to privacy and security laws, and our systems and infrastructure face certain risks, including from cyber security breaches and data leakage.

We increasingly rely upon technology systems and infrastructure, including support provided by our partners and third parties, to support our business, our products and our customers. For example, we routinely rely on our technology systems and infrastructure to aid us in the collection, use, storage and transfer, disclosure and other processing of voluminous amounts of data including confidential, business, financial, personal and other sensitive information (collectively, Confidential Information). We also rely on systems for manufacturing, customer orders, shipping, regulatory compliance and various other matters. Certain of our products and systems collect data regarding patients and their therapy and some connect to our systems for maintenance and other purposes.

Additionally, the legal and regulatory environment surrounding information security and privacy is increasingly demanding, with the imposition of new and changing requirements across businesses. We are required to comply with increasingly complex and changing legal and regulatory requirements that govern the collection, use, storage, security, transfer, disclosure and other processing of personal data, including, but not limited to, The Health Insurance Portability and Accountability Act, The Health Information Technology for Economic and Clinical Health Act, the California Consumer Privacy Act of 2018 and the European Union's General Data Protection Regulation (GDPR). In May 2018, the GDPR superseded current European Union data protection legislation, imposed more stringent European Union data protection requirements, and provided for greater penalties for noncompliance. We or our third-party providers and business partners may also be subjected to audits or investigations by one or more domestic or foreign government agencies relating to compliance with information security and privacy laws and regulations, and noncompliance with the laws and regulations could result in substantial and material fines or class action litigation.

The increasing use and evolution of technology, including cloud-based computing, and reliance on third parties creates additional opportunities for the unintentional, intentional and/or unauthorized exposure, dissemination and/or destruction of Confidential Information stored in our devices, systems, servers, infrastructure and products (collectively, Technology). Security threats, including cyber and other attacks are becoming increasingly sophisticated, frequent, and adaptive. Our Technology (and that of third parties that we use) is vulnerable to breakdown, interruption, cyber and other security attacks, system malfunction, unauthorized access, inadvertent exposure or disclosure of information, theft and other events. Any such vulnerability could compromise our Technology and could expose Confidential Information to unauthorized third parties and/or cause permanent loss of such data. In addition to loss of Confidential Information, unauthorized access to or interference with our Technology may cause product functionality issues that may result in risk to patient safety, field actions and/or product recalls. While we have invested in the protection of data and Technology, there can be no assurance that our efforts will prevent breakdowns, attacks, breaches in our Technology, cyber incidents or other incidents or ensure compliance with all applicable security and privacy laws, regulations and standards, including with respect to third party service providers that host or process Confidential Information on our behalf. Such incidents can lead to substantial and material regulatory fines and penalties, business disruption, reputational harm, financial loss as well as other damages. Misappropriation or other loss of our intellectual property from any of the foregoing may have an adverse effect on our competitive position and may cause us to incur substantial litigation costs. We could also suffer strained relationships with customers and business partners, increased costs (for security measures, remediation or otherwise), litigation (including class actions and stockholder derivative actions) or other negative consequences (including a decline in stock price) from breaches, cyber and other security attacks, industrial espionage, ransomware, email or phishing scams, malware or other cyber incidents, which may compromise our system infrastructure or lead to data leakage, either internally or at our third-party providers or other business partners.

In addition, significant implementation issues may arise as we continue to consolidate and outsource certain computer operations and application support activities. We also face all of the same risks listed above and other heightened risks

when acquiring a company, in particular if we need to transition or implement certain processes or controls with the acquired company.

We are subject to a number of existing laws and regulations, non-compliance with which could adversely affect our business, financial condition and results of operations, and we are susceptible to a changing regulatory environment.

As a participant in the healthcare industry, our operations and products, and those of our customers, are regulated by numerous government agencies, both inside and outside the United States. The impact of this on us is direct to the extent we are subject to these laws and regulations, and indirect in that in a number of situations, even though we may not be directly regulated by specific healthcare laws and regulations, our products must be capable of being used by our customers in a manner that complies with those laws and regulations.

The manufacture, distribution, marketing and use of our products are subject to extensive regulation and scrutiny by FDA and other regulatory authorities globally. Any new product must undergo lengthy and rigorous testing and other extensive, costly and time-consuming procedures mandated by FDA and foreign regulatory authorities. The same testing and procedures sometimes apply to

current products that are up for authorization renewal or are subject to changes in law or regulation (for example certain of our medical devices will have to comply with the new European Union Medical Device Regulation). Changes to current products may be subject to vigorous review, including additional 510(k) and other regulatory submissions, and approvals or the time needed to secure approvals are not certain. Our facilities must be approved and licensed prior to production and remain subject to inspection from time to time thereafter. Failure to comply with the requirements of FDA or other regulatory authorities, including a failed inspection or a failure in our adverse event reporting system, could result in adverse inspection reports, voluntary or official action indicated, warning letters, import bans, product recalls or seizures, monetary sanctions, reputational damage, injunctions to halt the manufacture and distribution of products, civil or criminal sanctions, refusal of a government to grant approvals or licenses, restrictions on operations or withdrawal of existing approvals and licenses. Any of these actions could cause a loss of customer confidence in us and our products, which could adversely affect our sales. The requirements of regulatory authorities, including interpretative guidance, are subject to change and compliance with additional or changing requirements or interpretative guidance may subject us to further review, result in product launch delays or otherwise increase our costs. For information on current regulatory issues affecting us, please refer to the caption entitled “Certain Regulatory Matters” in Item 7 of this Annual Report on Form 10-K. In connection with these issues, there can be no assurance that additional costs or civil and criminal penalties will not be incurred, that additional regulatory actions with respect to us will not occur, that we will not face civil claims for damages from purchasers or users, that substantial additional charges or significant asset impairments may not be required, that sales of other products may not be adversely affected, or that additional regulation will not be introduced that may adversely affect our operations and consolidated financial statements.

The sales, marketing and pricing of products and relationships that pharmaceutical and medical device companies have with healthcare providers are under increased scrutiny by federal, state and foreign government agencies. Compliance with the Anti-Kickback Statute, False Claims Act, Food, Drug and Cosmetic Act (including as these laws relate to off-label promotion of products) and other healthcare related laws, as well as competition, data and patient privacy and export and import laws, is under increased focus by the agencies charged with overseeing such activities, including FDA, OIG, DOJ and the Federal Trade Commission. The DOJ and the Securities and Exchange Commission have also increased their focus on the enforcement of the U.S. Foreign Corrupt Practices Act (FCPA), particularly as it relates to the conduct of pharmaceutical and medical product companies. The FCPA and similar anti-bribery laws generally prohibit companies and their employees, contractors or agents from making improper payments to government officials for the purpose of obtaining or retaining business. Healthcare professionals in many countries are employed by the government and consequently may be considered government officials. Foreign governments have also increased their scrutiny of pharmaceutical and medical product companies’ sales and marketing activities and relationships with healthcare providers and competitive practices generally. The laws and standards governing the promotion, pricing, sale and reimbursement of our products and those governing our relationships with healthcare providers and governments, including the Sunshine Act enacted under the Patient Protection and Affordable Care Act (as amended, the PPACA), can be complicated, are subject to frequent change and may be violated unknowingly.

Additionally, the U.S. Department of the Treasury’s Office of Foreign Control and the Bureau of Industry and Security at the U.S. Department of Commerce administer laws and regulations that restrict U.S. persons and, in some instances, non-U.S. persons, in conducting activities, transacting business or making investments in certain countries, or with governments, entities and individuals subject to U.S. economic sanctions. From time to time, certain of our subsidiaries have limited business dealings in countries subject to these sanctions, including Iran, Sudan, Syria, Russia and Cuba. These dealings represent an insignificant amount of our consolidated revenues and income but expose us to an increased risk of operating in these countries, including foreign exchange risks or restrictions or limitations on our ability to access funds generated in these jurisdictions, or the risk of violating applicable sanctions regulations, which are complex and subject to frequent change. Additional restrictions may be enacted, enforced or interpreted in a way that may adversely affect our operations.

We have compliance programs in place, including policies, training and various forms of monitoring, designed to address the risks discussed above. Nonetheless, these programs and policies may not always protect us from conduct by individual employees that violate these laws. Violations or allegations of violations of these laws may result in large civil and criminal penalties, debarment from participating in government programs, diversion of management time, attention and resources and may otherwise have an adverse effect on our business, financial condition and results of operations. For more information related to our ongoing government investigations, please refer to Note 17 in Item 8 of this Annual Report on Form 10-K.

The laws and regulations discussed above are broad in scope and subject to evolving interpretations, which could require us to incur substantial cost associated with compliance or to alter one or more of our sales and marketing practices and may subject us to enforcement actions or litigation which could adversely affect our business, financial condition and results of operations.

If reimbursement or other payment for our current or future products is reduced or modified in the United States or in foreign countries, including through the implementation or repeal of government-sponsored healthcare reform or other similar actions, cost containment measures, or changes to policies with respect to pricing, taxation or rebates, our business could suffer.

Sales of our products depend, in part, on the extent to which the costs of our products are paid by both public and private payers. These payers include Medicare, Medicaid, and private healthcare insurers in the United States and foreign governments and third-party payers outside the United States. Our work with government payers carries various risks inherent in working with government entities and agencies, including government reporting and auditing, additional regulatory oversight, mandated contractual terms, failure of government appropriations or other complex procedural requirements.

Public and private payers are increasingly challenging the prices charged for medical products and services. We may continue to experience downward pricing pressures from any or all of these payers which could result in an adverse effect on our business, financial condition and operational results.

Global efforts toward healthcare cost containment continue to exert pressure on product pricing. Governments around the world use various mechanisms to control healthcare expenditures such as price controls, the formation of public contracting authorities, product formularies, which are lists of recommended or approved products, and competitive tenders which require the submission of a bid to sell products. Sales of our products are dependent, in part, on the availability of reimbursement by government agencies and healthcare programs, as well as insurance companies and other private payers. In much of Europe, Latin America, Asia and Australia, for example, the government provides healthcare at low cost to patients, and controls its expenditures by purchasing products through public tenders, collective purchasing, regulating prices, setting reference prices in public tenders or limiting reimbursement or patient access to certain products. Additionally, austerity measures or other reforms by foreign governments may limit, reduce or eliminate payments for our products and adversely affect both pricing flexibility and demand for our products.

The PPACA includes several provisions which impact our businesses in the United States, including increased Medicaid rebates and an expansion of the 340B Drug Pricing Program which provides certain qualified entities, such as hospitals serving disadvantaged populations, with discounts on the purchase of drugs for outpatient use and an excise tax on the sale of certain drugs. The PPACA reduces Medicare and Medicaid payments to hospitals and other providers, which may cause us to experience downward pricing pressure. Certain portions of the PPACA, could negatively impact the demand for our products, and therefore our results of operations and financial position.

It is uncertain what impact the current U.S. presidential administration might have on coverage, reimbursement and other matters related to the PPACA and/or healthcare reform in general, including the timing and speed of any such impact. In addition, a substantial portion of our revenues is dependent on federal healthcare program reimbursement, and any disruptions in federal government operations, including a federal government shutdown or failure of the U.S. government to enact annual appropriations, could have a material adverse effect on our business, financial condition and results of operations. Additionally, disruptions in federal government operations may negatively impact regulatory approvals and guidance that are important to our operations, and create uncertainty about the pace of upcoming healthcare regulatory developments or approvals.

As a result of these and other measures, including future measures or reforms that cannot be predicted, reimbursement may not be available or sufficient to allow us to sell our products on a competitive basis. Legislation and regulations affecting reimbursement for our products may change at any time and in ways that may be adverse to us. We cannot

predict the impact of these pressures and initiatives, or any negative effects of any additional regulations that may affect our business.

There is substantial competition in the product markets in which we operate.

Although no single company competes with us in all of our businesses, we face substantial competition in all of our markets from international and domestic healthcare and pharmaceutical companies and providers of all sizes, and these competitors often differ across our businesses. Competition is primarily focused on cost-effectiveness, price, service, product performance, and technological innovation.

Competition may increase further as additional companies begin to enter our markets or modify their existing products to compete directly with ours. If our competitors respond more quickly to new or emerging technologies and changes in customer requirements or we do not introduce new versions or upgrades to our product portfolio in response to those requirements, our products may be rendered obsolete or non-competitive. If our competitors develop more effective or affordable products, or achieve earlier patent protection or product commercialization than we do, our business, financial condition and operations will likely be negatively affected. If we are forced to reduce our prices due to increased competition, our business could become less profitable. Our sales

could be adversely affected if any of our contracts with GPOs, IDNs or other customers are terminated due to increased competition or otherwise.

In addition, many health care industry companies, including health care systems, distributors, manufacturers, providers, and insurers, are consolidating or have formed strategic alliances. As the health care industry consolidates, competition to provide goods and services to industry participants will become more intense. Further, this consolidation creates larger enterprises with greater negotiating power, which they can use to negotiate price concessions. If we face an increase in costs or must reduce our prices because of industry consolidation, or if we lose customers as a result of consolidation, our business, financial condition and results of operations could be adversely affected.

If our business development activities are unsuccessful, we may not realize the intended benefits.

We expect to continue to engage in business development activities including evaluating acquisitions, joint development opportunities, technology licensing arrangements and other opportunities. These activities may result in substantial investment of our resources. Our success developing products or expanding into new markets from such activities will depend on a number of factors, including our ability to find suitable opportunities for acquisition, investment or alliance; competition from other companies in the industries in which we operate that are seeking similar opportunities; whether we are able to complete an acquisition, investment or alliance on terms that are satisfactory to us; the strength of the other company's underlying technology, products and ability to execute its business strategies; any intellectual property and litigation related to the other company's products or technology; and our ability to successfully integrate the acquired company, business, product, technology or research into our existing operations, including the ability to adequately fund acquired in-process R&D projects and to maintain adequate controls over the combined operations. Certain of these activities are subject to antitrust and competition laws, which laws could impact our ability to pursue strategic transactions and could result in mandated divestitures in the context of proposed acquisitions. If we are unsuccessful in our business development activities, we may not realize the intended benefits of such activities, including that acquisition and integration costs may be greater than expected or the possibility that expected return on investment, synergies and accretion will not be realized or will not be realized within the expected timeframes.

For more information on recent business development activities, see Note 5 in Item 8 of this Annual Report on Form 10-K.

If we are unable to protect our patents or other proprietary rights, or if we infringe the patents or other proprietary rights of others, our competitiveness and business prospects may be materially damaged.

Patent and other proprietary rights are essential to our business. Our success depends to a significant degree on our ability to obtain and enforce patents and licenses to patent rights, both in the United States and in other countries. We cannot guarantee that pending patent applications will result in issued patents, that patents issued or licensed will not be challenged or circumvented by competitors, that our patents will not be found to be invalid or that the intellectual property rights of others will not prevent us from selling certain products or including key features in our products.

The patent position of a healthcare company is often uncertain and involves complex legal and factual questions. Significant litigation concerning patents and products is pervasive in our industry. Patent claims include challenges to the coverage and validity of our patents on products or processes as well as allegations that our products infringe patents held by competitors or other third parties. An unfavorable litigation outcome in any of these types of cases could result in a loss of patent protection or the ability to market products, which could lead to a significant loss of sales, or otherwise materially affect future results of operations. We also rely on trademarks, copyrights, trade secrets and know-how to develop, maintain and strengthen our competitive positions. Third parties may know, discover or

independently develop equivalent proprietary information or techniques, or they may gain access to our trade secrets or disclose our trade secrets to the public.

Although our employees, consultants, parties to collaboration agreements and other business partners are generally subject to confidentiality or similar agreements to protect our confidential and proprietary information, these agreements may be breached, and we may not have adequate remedies for any breach. To the extent that our employees, consultants, parties to collaboration agreements and other business partners use intellectual property owned by others in their work for us, disputes may arise as to the rights in related or resulting know-how and inventions.

Furthermore, our intellectual property, other proprietary technology and other sensitive company data is potentially vulnerable to loss, damage or misappropriation from system malfunction, computer viruses, unauthorized access to our data or misappropriation or misuse thereof by those with permitted access and other events. While we have invested to protect our intellectual property, confidential information and other data, and continue to work diligently in this area, there can be no assurance that our precautionary measures will prevent breakdowns, breaches, cyber incidents or other events. Such events could have a material adverse effect on our reputation, business, financial condition or results of operations.

Misappropriation or other loss of our intellectual property from any of the foregoing would have an adverse effect on our competitive position and may cause us to incur substantial litigation costs.

We are subject to risks associated with doing business globally.

Our operations are subject to risks inherent in conducting business globally and under the laws, regulations and customs of various jurisdictions and geographies. These risks include changes in exchange controls and other governmental actions, loss of business in government and public tenders that are held annually in many cases, increasingly complex labor environments, availability of raw materials, changes in taxation, export control restrictions, changes in or violations of U.S. or local laws, including the FCPA, the United Kingdom Bribery Act, GDPR and other data privacy laws, dependence on a few government entities as customers, pricing restrictions, economic and political instability, monetary or currency volatility or instability (including as it relates to the U.S. dollar, the Euro, the Yuan and currencies in emerging market countries), disputes between countries, diminished or insufficient protection of intellectual property, and disruption or destruction of operations in a significant geographic region regardless of cause, including natural disaster, pandemic, power loss, cyber attack, data breach, war, terrorism, riot, labor disruption, civil insurrection or social unrest. Failure to comply with, or material changes to, the laws and regulations that affect our global operations could have an adverse effect on our business, financial condition or results of operations.

The 2016 referendum by British voters to exit the European Union (EU) (commonly known as Brexit) and the UK government's subsequent initiation of the withdrawal process has created uncertainties affecting business operations in the EU. The potential withdrawal by the UK from the EU, particularly if such withdrawal occurs without a transitional agreement between the UK and the EU, could result in the deterioration of economic conditions, volatility in currency exchange rates, and increased regulatory complexities, as well as the potential for product shortages, increased costs or other similar effects. These outcomes could have an adverse effect on our business, financial condition or results of operations.

Changes in foreign currency exchange rates and interest rates could have a material adverse effect on our operating results and liquidity.

We generate the majority of our revenue and profit outside the United States. As a result, our financial results may be adversely affected by fluctuations in foreign currency exchange rates. We cannot predict with any certainty changes in foreign currency exchange rates or our ability to mitigate these risks. We may experience additional volatility as a result of inflationary pressures and other macroeconomic factors, including in emerging market countries. We are also exposed to changes in interest rates, and our ability to access the money markets and capital markets could be impeded if market conditions are not favorable. A discussion of the financial impact of foreign exchange rate and interest rate fluctuations, and the ways and extent to which we attempt to mitigate such impact is contained under the caption "Financial Instrument Market Risk" in Item 7 of this Annual Report on Form 10-K.

Changes in tax laws or exposure to additional income tax liabilities may have a negative impact on our operating results.

Changes to the tax laws in the United States or other countries in which we operate could have an adverse effect on our operating results. In particular, the Tax Cuts and Jobs Act of 2017 and the regulations issued thereunder (collectively, Tax Reform), including, among other things, certain changes in tax rates, deductibility of interest, deductibility of executive compensation expense, expensing of capital expenditures, the ability to use certain tax credits, taxation on earnings from international business operations, and the treatment of deductible payments made by

our U.S. affiliates to our foreign affiliates could adversely affect our financial condition and results of operations. In certain instances, Tax Reform could have a negative effect on our tax rate and the carrying value of deferred tax balances. Any of these changes could adversely affect our financial performance. There remains some uncertainty regarding the implementation of such Tax Reform and its impact on us. We cannot currently predict the full impact that Tax Reform may have over time on our business, including revenues, profit margins, profitability, operating cash flows and results of operations. For more information regarding the impact of Tax Reform, see Note 16 in Item 8 of this Annual Report on Form 10-K.

Taxing authorities may audit us from time to time and disagree with certain positions we have taken in respect of our tax liabilities. Our tax liabilities are affected by many factors, including the amounts we charge in intercompany transactions for inventory, services, licenses, funding and other items, which are subject to the use of assumptions and judgment. Because we operate in multiple income tax jurisdictions both inside and outside the United States, cross border transactions among our affiliates are a significant part of the manner in which we operate. Although we believe that we transact intercompany business in accordance with arms-length principles, tax authorities may disagree with our intercompany charges, cross-jurisdictional transfer pricing or other matters, and may assess additional taxes as a result.

We regularly assess the likely outcomes of these audits in order to determine the appropriateness of our tax provision. However, we may not accurately predict the outcome of these audits, and as a result the actual outcome of these audits may have an adverse impact on our financial results. For more information on ongoing audits, see Note 16 in Item 8 of this Annual Report on Form 10-K.

If we fail to attract and retain key employees our business may suffer.

Our ability to compete effectively depends on our ability to attract and retain key employees, including people in senior management, sales, marketing and R&D positions. Competition for top talent in the healthcare industry can be intense. Our ability to recruit and retain such talent will depend on a number of factors, including hiring practices of our competitors, compensation and benefits, work location, work environment and industry economic conditions. If we cannot effectively recruit and retain qualified employees, our business could suffer.

We are party to a number of pending lawsuits and other disputes which may have an adverse impact on our business, operations or financial condition.

We are party to a number of pending lawsuits, settlement discussions, mediations, arbitrations and other disputes. In addition, in the future we may be party to such disputes, including patent, product liability or other lawsuits. These current and future matters may result in a loss of patent protection, reduced revenue, incurrence of significant liabilities and diversion of our management's time, attention and resources. Given the uncertain nature of litigation and other disputes generally, we are not able in all cases to estimate the amount or range of loss that could result from an unfavorable outcome in these current matters. In view of these uncertainties, the outcome of these matters may result in charges in excess of any established reserves, and, to the extent available, liability insurance. We also continue to be self-insured with respect to product liability claims. The absence of third-party insurance coverage for current or future claims increases our potential exposure to unanticipated claims and adverse decisions. Protracted litigation and other disputes, including any adverse outcomes, may have an adverse impact on our business, operations or financial condition. Even claims without merit could subject us to adverse publicity and require us to incur significant legal fees. See Note 17 in Item 8 of this Annual Report on Form 10-K for more information regarding current lawsuits.

Our operating results and financial condition may fluctuate.

Our operating results and financial condition may fluctuate from quarter to quarter and year to year for a number of reasons. Events such as a delay in product development, changes to our expectations or strategy or even a relatively small revenue shortfall may cause financial results for a period to be below our expectations or projections. As a result, we believe that period-to-period comparisons of our results of operations are not necessarily meaningful, and these comparisons should not be relied upon as an indication of future performance. Our operating results and financial condition are also subject to fluctuation from all of the risks described throughout this section. These fluctuations may adversely affect our results of operations and financial condition and our stock price.

Future material impairments in the value of our long-lived assets, including goodwill, could negatively affect our operating results.

We regularly review our long-lived assets, including identifiable intangible assets, goodwill (which results from our acquisition activity) and property, plant and equipment, for impairment. Goodwill and acquired indefinite life intangible assets are subject to impairment review on an annual basis and whenever potential impairment indicators are present. Other long-lived assets are reviewed when there is an indication that impairment may have occurred. Changes in market conditions or other changes in the future outlook of value may lead to impairment charges in the future. In addition, we may from time to time sell assets that we determine are not critical to our strategy, including in

connection with certain strategic exits. Future events or decisions may lead to asset impairments and/or related charges. Certain non-cash impairments may result from a change in our strategic goals, business direction or other factors relating to the overall business environment. Material impairment charges could negatively affect our results of operations. For more information on the valuation and impairment of long-lived assets, refer to the discussion under the caption entitled “Critical Accounting Policies” in Item 7 of this Annual Report on Form 10-K.

Current or worsening economic conditions may adversely affect our business and financial condition.

Our ability to generate cash flows from operations could be affected if there is a material decline in the demand for our products, in the solvency of our customers or suppliers, or deterioration in our key financial ratios or credit ratings. Current or worsening economic conditions may adversely affect the ability of our customers (including governments) to pay for our products and services, and the amount spent on healthcare generally. This could result in a decrease in the demand for our products and services, declining cash flows, longer sales cycles, slower adoption of new technologies and increased price competition. These conditions may also adversely affect certain of our suppliers, which could cause a disruption in our ability to produce our products. We continue to do business with foreign governments in certain countries, including Greece, Spain, Portugal, and Italy, which have experienced deterioration in credit and economic conditions. As of December 31, 2018, our net accounts receivable from the public sector in Greece, Spain, Portugal and Italy totaled $130 million. While global economic conditions have not significantly impacted our ability to collect receivables, liquidity issues in certain countries have resulted, and may continue to result, in delays in the collection of receivables and credit losses. These conditions may also impact the stability of the U.S. dollar, Euro or Yuan. For more information on accounts receivable

and credit matters with respect to certain of these countries, refer to the discussion under the caption entitled “Credit Facilities, Access to Capital and Credit Ratings” in Item 7 of this Annual Report on Form 10-K.

We may incur operational difficulties or be exposed to claims and liabilities as a result of the separation and distribution of Baxalta.

On July 1, 2015, we distributed approximately 80.5% of the outstanding shares of Baxalta common stock to Baxter stockholders in connection with the separation of our biopharmaceuticals business. We disposed of our remaining 19.5% stake in Baxalta (Retained Shares) in 2016, in connection with a series of transactions including debt-for-equity exchanges, an equity-for-equity exchange and a contribution to our U.S. pension plan (Retained Shares Transactions). Shire plc (Shire) acquired Baxalta in June 2016, after completion of the last Retained Shares Transaction and in January 2019, Takeda Pharmaceutical Company Limited (Takeda) acquired Shire. In connection with the July 2015 distribution, we entered into a separation and distribution agreement and various other agreements (including a tax matters agreement, a long term services agreement, a manufacturing and supply agreement, a trademark license agreement, a Galaxy license agreement, an international commercial operations agreement and certain other commercial agreements) with Baxalta. These agreements govern the separation and distribution and the relationship between the companies going forward, including with respect to potential tax-related losses associated with the separation and distribution and the Retained Shares Transactions. They also provide for the performance of services by each company for the benefit of the other for a period of time (including under the manufacturing and supply agreement pursuant to which Shire now manufactures and sells certain products and materials to us).

The separation and distribution agreement provides for indemnification obligations designed to make Baxalta financially responsible for many liabilities that may exist relating to its business activities, whether incurred prior to or after the distribution, including any pending or future litigation. In addition, the separation and distribution agreement provides for certain indemnification obligations of Baxter, which may be significant. It is possible that a court would disregard the allocation agreed to between us and Baxalta and require us to assume responsibility for obligations allocated to Baxalta. Third parties could also seek to hold us responsible for any of these liabilities or obligations, and we may be unsuccessful in obtaining indemnification or the indemnity rights we have under the separation and distribution agreement may not be sufficient to fully cover all of these liabilities and obligations. Even if we are successful in obtaining indemnification, we may have to bear costs. These risks could negatively affect our business, financial condition or results of operations.

The separation and distribution of Baxalta continues to involve a number of risks, including, among other things, the indemnification risks described above. Certain of the agreements described above provide for the performance of services by each company for the benefit of the other for a period of time. Takeda may elect to extend the term for which we provide services to Baxalta under these agreements. If Baxalta is unable to satisfy its obligations under these agreements, including its indemnification obligations, we could incur losses. These arrangements could also lead to disputes over rights to certain shared property and over the allocation of costs and revenues for products and operations.

There could be significant liability if the separation and distribution or any Retained Shares Transaction is determined to be a taxable transaction. Baxalta has indemnified us for certain potential liabilities that may arise, and such indemnification obligation is guaranteed by Shire, but Baxalta and Shire may be unable to satisfy their indemnification obligations to us in the future.

The separation and distribution and the Retained Shares Transactions (collectively, the Baxter Transactions) qualify for tax-free treatment to Baxter and its stockholders under the Internal Revenue Code of 1986, as amended (the Code). Completion of the separation and distribution was conditioned upon, among other things, the receipt of a private letter ruling from the IRS regarding certain issues relating to the tax-free treatment of the Baxter Transactions. Although the

IRS private letter ruling is generally binding on the IRS, the continuing validity of such ruling is subject to the accuracy of factual representations and assumptions made in the ruling. Completion of the distribution was also conditioned upon Baxter's receipt of a tax opinion from KPMG LLP regarding certain aspects of the Baxalta separation not covered by the IRS private letter ruling. The opinion was based upon various factual representations and assumptions, as well as certain undertakings made by Baxter and Baxalta. If any of the factual representations or assumptions in the IRS private letter ruling or tax opinion is untrue or incomplete in any material respect, if any undertaking is not complied with, or if the facts upon which the IRS private letter ruling or tax opinion are based are materially different from the actual facts relating to the Baxter Transactions, the opinion or IRS private letter ruling may not be valid. Moreover, opinions of a tax advisor are not binding on the IRS. As a result, the conclusions expressed in the opinion of a tax advisor could be successfully challenged by the IRS.

If the Baxter Transactions are determined to be taxable, Baxter and its stockholders could incur significant tax liabilities. Pursuant to the tax matters agreement, Baxalta agreed to indemnify us for certain tax-related losses incurred if Baxalta's actions cause the separation and distribution and certain related transactions to fail to qualify for tax-free status under the applicable provisions of the Code.

In anticipation of the merger between Baxalta and Shire (the Merger), we entered into a letter agreement with Shire and Baxalta (the Letter Agreement). Under the Letter Agreement, Baxalta agreed to indemnify, and Shire agreed to guarantee such indemnity to, Baxter and each of its affiliates and each of their respective officers, directors and employees against certain tax-related losses attributable to or resulting from (in whole or in part) the Merger as further described in the Letter Agreement. If the Baxter Transactions are determined to be taxable as a result (in whole or in part) of the Merger (for example, if the Merger is deemed to be part of a plan (or series of related transactions) that includes the Baxter Transactions, Baxter and its stockholders could incur significant tax liabilities. Although Baxalta and Shire may be required to indemnify Baxter under the tax matters agreement and the Letter Agreement for any such tax liabilities incurred by Baxter, there can be no assurance that the indemnity from Baxalta or the guarantee thereof by Shire will be sufficient to protect us against all or a part of the amount of such liabilities, or that either Baxalta or Shire will fully satisfy their respective obligations.

Even if we ultimately succeed in recovering from Baxalta or Shire any amounts for which we are held liable, we may be required to bear these costs initially, which could negatively affect our business, results of operations and financial condition.

Item 1B. Unresolved Staff Comments.

None.

Item 2. Properties.

The company's corporate offices are owned and located at One Baxter Parkway, Deerfield, Illinois 60015.

Baxter owns or has long-term leases on all of its manufacturing facilities. The location of the principal manufacturing facilities of each of the company's geographic segments are listed below:

Region	Location	Owned/Leased
Americas		
	Aibonito, Puerto Rico	Leased
	Alliston, Canada	Owned
	Cali, Colombia	Owned
	Cartago, Costa Rica	Owned
	Cuernavaca, Mexico	Owned
	Guayama, Puerto Rico	Owned
	Haina, Dominican Republic	Leased
	Hayward, California	Leased
	Round Lake, Illinois	Owned
	Bloomington, Indiana	Owned/Leased[(1)]
	Cleveland, Mississippi	Leased
	Medina, New York	Leased
	Jayuya, Puerto Rico	Leased
	Opelika, Alabama	Owned
	Brooklyn Park, Minnesota	Leased
	PESA, Mexico	Leased
	Sao Paulo, Brazil	Owned
	Tijuana, Mexico	Owned
	Mountain Home, Arkansas	Owned/Leased[(1)]
	North Cove, North Carolina	Owned
	St. Paul, Minnesota	Leased
	Irvine, California	Owned
APAC		
	Ahmedabad, India	Owned
	Guangzhou, China	Owned
	Shanghai, China	Owned
	Suzhou, China	Owned
	Toongabbie, Australia	Leased
	Woodlands, Singapore	Owned/Leased[(2)]
	Canlubang, Philippines	Leased
	Amata, Thailand	Owned
	Tianjin, China	Owned
	Miyazaki, Japan	Owned
EMEA		
	Castlebar, Ireland	Owned
	Grosotto, Italy	Owned
	Halle, Germany	Owned
	Hechingen, Germany	Leased
	Lessines, Belgium	Owned
	Liverpool, United Kingdom	Leased
	Lund, Sweden	Leased

Marsa, Malta	Owned
Medolla, Italy	Owned
Meyzieu, France	Owned
Rostock, Germany	Leased
Sabinanigo, Spain	Owned
San Vittore, Switzerland	Owned
Sondalo, Italy	Owned
Swinford, Ireland	Owned
Thetford, United Kingdom	Owned
Elstree, United Kingdom	Leased
Tunis, Tunisia	Owned

(1) Includes both owned and leased facilities.
(2) Baxter owns the facility located at Woodlands, Singapore and leases the property upon which it rests.
The company also owns or operates shared distribution facilities throughout the world. In the United States and Puerto Rico, there are six shared distribution facilities with the principal facilities located in Memphis, Tennessee; Catano, Puerto Rico; North Cove, North Carolina; and Round Lake, Illinois. Internationally, we have more than 100 shared distribution facilities located in Argentina,

Australia, Austria, Belgium, Brazil, Canada, Chile, China, Colombia, Costa Rica, the Czech Republic, Ecuador, France, Germany, Greece, Guatemala, Hong Kong, India, Ireland, Italy, Japan, Korea, Mexico, New Zealand, Panama, the Philippines, Poland, Portugal, Russia, Singapore, Spain, Sweden, Switzerland, Thailand, Turkey, the United Arab Emirates, the United Kingdom, and Venezuela.

The company continually evaluates its plants and production lines and believes that its current facilities plus any planned expansions are generally sufficient to meet its expected needs and expected near-term growth. Expansion projects and facility closings will be undertaken as necessary in response to market needs.

Item 3. Legal Proceedings.
Incorporated by reference to Note 17 in Item 8 of this Annual Report on Form 10-K.

Item 4. Mine Safety Disclosures.
Not Applicable.

Executive Officers of the Registrant

As of February 21, 2019, the following serve as Baxter's executive officers:

José E. Almeida, age 56, is Chairman, President and Chief Executive Officer, having served in that capacity since January 2016. He began serving as an executive officer of the company in October 2015. He served as Senior Advisor with The Carlyle Group from May 2015 until October 2015. Previously, he served as the Chairman, President and Chief Executive Officer of Covidien plc (Covidien) from March 2012 to January 2015, prior to Medtronic plc's (Medtronic) acquisition of Covidien, and President and Chief Executive Officer of Covidien from July 2011 to March 2012. Mr. Almeida served in other executive roles with Covidien (formerly Tyco Healthcare (Tyco)) between April 2004 and June 2011. Mr. Almeida is a member of the Board of Directors of Walgreens Boots Alliance, Inc.

Giuseppe Accogli, age 48, is Senior Vice President and President, Global Businesses. Prior to his current role, Mr. Accogli served as Corporate Vice President and President, Renal from 2016 to 2017 and as Head of the U.S. region for Baxter's Renal business from 2015 to 2016. Mr. Accogli joined Baxter in 2007 as Renal business unit Director in Italy, and assumed positions of increasing responsibility with the Renal business in Europe, including Head of the EMEA region for Renal from 2013 to 2015. Previously he worked as a Business Unit Manager and Sales and Marketing Manager for Medtronic (Italy) and in several sales, product and marketing roles for Tyco and then Covidien in Italy and EMEA.

Brik V. Eyre, age 55, is Senior Vice President and President, Americas. Prior to his current role, Mr. Eyre served as Corporate Vice President and President, Hospital Products from 2015 to 2017. Mr. Eyre joined the company in 2008

as General Manager for BioPharma Solutions, Baxter's global manufacturing and contract services business. He later served as General Manager for our U.S. Medication Delivery business and then he served as Corporate Vice President and President of Renal. Prior to joining Baxter, he held a variety of senior management positions at Cardinal Health, Inc., including President of Cardinal's PreSource Products and Services business.

Cristiano Franzi, age 56, is Senior Vice President and President, EMEA. Mr. Franzi joined Baxter in 2017 from Medtronic, where he served as Vice President and President, Minimally Invasive Therapies Group EMEA from 2015 to 2017. He served as President EMEA at Covidien prior to Medtronic's acquisition of Covidien. He joined Covidien in 2009 and held roles of increasing responsibility during his tenure. He held a number of commercial and functional roles across Europe, the Middle East and Africa at ev3 Endovascular, Inc., Boston Scientific Corporation and Becton, Dickinson & Co. earlier in his career.

Andrew Frye, age 53, is Senior Vice President and President, APAC. Mr. Frye joined Baxter in 2017 from DKSH Holdings Ltd., where he served as Global Head of Healthcare from 2015 to 2017. In that role, he oversaw a portfolio of pharmaceuticals, over-the-counter and device products across 13 countries. Previously, he served as Vice President of Business Development from 2011 to 2014 for DKSH Healthcare. Earlier in his career, he held a number of commercial roles with increasing responsibility at Abbott Laboratories' Pharmaceutical and Nutrition divisions.

Sean Martin, age 56, is Senior Vice President and General Counsel. Mr. Martin joined Baxter in 2017 from Apollo Education Group, Inc., where he served as Senior Vice President, General Counsel and Secretary from 2010 to 2017. Previously, he served as Assistant Secretary (2010), Vice President of Corporate Law (2009 to 2010) and Vice President of Commercial Law (2005 to 2009) for Amgen Inc. He also served as Vice President and Deputy General Counsel at Fresenius Medical Care North America from 2000 to 2005. Mr.

Martin was a Partner at the law firm Foley & Lardner LLP from 1998 to 2000 and served eight years as Assistant U.S. Attorney for the Northern District of Illinois.

Jeanne K. Mason, Ph.D., age 63, is Senior Vice President, Human Resources. Ms. Mason joined Baxter in 2006 from GE Insurance Solutions, a primary insurance and reinsurance business, where she was responsible for global human resource functions. Ms. Mason began her career with General Electric (GE) in 1988 after serving with the U.S. General Accounting Office in Washington, D.C. Her GE experience included leadership roles in Europe for GE Information Services and GE Capital Real Estate.

Scott Pleau, age 53, is Senior Vice President, Operations. Mr. Pleau joined Baxter in 2016 from Medtronic, where he served as Vice President of Global Operations. Previously he held key operations positions of increasing responsibility across multiple businesses at Covidien beginning in 1995, most recently as Vice President, Operations, prior to Medtronic's 2015 acquisition of Covidien.

James K. Saccaro, age 46, is Executive Vice President and Chief Financial Officer. Mr. Saccaro was Senior Vice President and Chief Financial Officer at Hill-Rom Corporation prior to rejoining Baxter in 2014. He originally joined the company in 2002 as Manager of Strategy for the company's BioScience business, and over the years assumed positions of increasing responsibility, including Vice President of Financial Planning, Vice President of Finance for the company's operations in Europe, the Middle East and Africa and Corporate Vice President and Treasurer. He previously held strategy and business development positions at Clear Channel Communications and the Walt Disney Company.

All executive officers hold office until the next annual election of officers and until their respective successors are elected and qualified.

PART II

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

The following table includes information about the company's common stock repurchases during the three-month period ended December 31, 2018.

Period	Total Number of Shares Purchased(1)	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Programs(1)	Approximate Dollar Value of Shares that may yet be Purchased Under the Program(1)
October 1, 2018 through October 31, 2018	1,328,099	$ 70.35	1,328,099	
November 1, 2018 through November 30, 2018	953,202	$ 63.28	953,202	
December 1, 2018 through December 31, 2018 (2)	18,627,352	$ 66.23	18,627,352	
Total	20,908,653	$ 66.36	20,908,653	$2,144,034,361

(1) On July 25, 2012, the company announced that its Board of Directors authorized the company to repurchase up to $2.0 billion of its common stock on the open market or in private transactions. The Board of Directors increased this authority by $1.5 billion in each of November 2016 and February 2018 and by an additional $2.0 billion in November 2018. During the fourth quarter of 2018, the company repurchased approximately 20.9 million shares for $1.4 billion in cash pursuant to this authority through Rule 10b5-1 purchase plans, an accelerated share repurchase program and otherwise. The remaining authorization under this program totaled approximately $2.1 billion at December 31, 2018. This program does not have an expiration date.

(2) In December 2018, the company entered into an accelerated share repurchase agreement to repurchase an aggregate of $300 million of common stock. In December 2018, 3.6 million shares were initially delivered to the company and the final number of shares and the average purchase price will be determined at the end of the purchase period, which is scheduled to occur in the second quarter of 2019 but may occur earlier in certain circumstances.

Baxter common stock is listed on the New York, Chicago and SIX Swiss stock exchanges. The New York Stock Exchange is the principal market on which the company's common stock is traded under the symbol "BAX". At January 31, 2019, there were 24,563 holders of record of the company's common stock.

Performance Graph

The following graph compares the change in Baxter's cumulative total stockholder return (including reinvested dividends) on Baxter's common stock with the Standard & Poor's 500 Composite Index and the Standard & Poor's 500 Health Care Index over the past five years. Performance through June 30, 2015 has been adjusted for the Baxalta separation which occurred on July 1, 2015.

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Item 6.Selected Financial Data.

See Note 1 of Item 8 of this Annual Report on Form 10-K for additional details regarding basis of presentation.

as of or for the years ended December 31		2018[2,1]	2017[3,1]	2016[4,1]	2015[5,1]	2014[6,1]
Operating Results	Net sales	$11,127	10,561	10,163	9,968	10,719
(in millions)	Income from continuing operations	$1,630	724	4,966	393	457
	(Loss) income from discontinued operations, net of tax	$(6)	(7)	(1)	575	2,040
	Net income	$1,624	717	4,965	968	2,497
Balance Sheet	Capital expenditures, continuing operations	$681	634	719	911	925
Information	Total assets	$15,641	17,111	15,546	20,962	26,138
(in millions)	Long-term debt and lease obligations	$3,473	3,509	2,779	3,922	7,331
Common Stock Information	Weighted-average number of common shares outstanding					
	Basic	534	543	546	545	542
	Diluted	546	555	551	549	547
	Income from continuing operations per common share					
	Basic	$3.05	1.33	9.10	0.72	0.84
	Diluted	$2.99	1.30	9.01	0.72	0.83
	(Loss) income from discontinued operations per common share					
	Basic	$(0.01)	(0.01)	(0.01)	1.06	3.77
	Diluted	$(0.02)	(0.01)	—	1.04	3.73
	Net income per common share					
	Basic	$3.04	1.32	9.09	1.78	4.61
	Diluted	$2.97	1.29	9.01	1.76	4.56
	Cash dividends declared per common share	$0.730	0.610	0.505	1.270	2.050

[1] Refer to the notes to the consolidated financial statements for information regarding other charges and income items.

[2] Income from continuing operations included charges totaling $220 million for business optimization, $33 million related to acquisition and integration activities, $10 million related to certain product litigation and $9 million related to European medical devices regulations. Also included were benefits totaling $80 million related to a settlement with Claris Lifesciences Limited, $6 million related to a reduction of SIGMA SPECTRUM infusion pump inspection and remediation reserves, $42 million related to insurance recoveries as a result of losses incurred due to Hurricane Maria and $196 million primarily related to the impact of U.S. tax reform.

[3] Income from continuing operations included charges totaling $169 million for business optimization, $19 million related to the Baxalta separation, $17 million related to SIGMA SPECTRUM infusion pump inspection and remediation reserves and other historical product reserves, $28 million of Claris acquisition and integration expenses, $32 million related to the impact of Hurricane Maria on the company's operations in Puerto Rico, $21 million related to litigation and contractual disputes for business arrangements in which the company is no longer engaged or a party thereto, $33 million related to the deconsolidation of the company's Venezuelan operations and $322 million related to the impact of U.S. tax reform. Also included was a benefit of $12 million related to an adjustment to the company's historical rebates and discount reserves.

[4] Income from continuing operations included charges totaling $409 million for business optimization, $54 million related to the Baxalta separation, $149 million of debt extinguishment costs related to the March 2016 debt-for-equity exchange for certain company indebtedness and certain debt redemptions and $51 million for impairment primarily related to developed technology. Also included were net realized gains of $4.4 billion related to the Baxalta Retained Shares transactions, a benefit of $18 million primarily related to adjustments to the COLLEAGUE and SIGMA SPECTRUM infusion pump reserves and a benefit of $10 million related to the settlement of an income tax matter in the company's non-wholly owned subsidiary in Turkey.

[5] Income from continuing operations included charges totaling $200 million for business optimization, $111 million related to the Baxalta separation and $130 million related to Baxter's July 2015 tender offer for certain outstanding indebtedness. Also included were benefits of $28 million primarily related to adjustments to the COLLEAGUE and SIGMA SPECTRUM infusion pump reserves, $52 million related to a litigation settlement in which Baxter was the beneficiary and $20 million relating to the reversal of contingent consideration milestone liabilities.

[6] Income from continuing operations included charges totaling $138 million for business optimization, $68 million for SIGMA SPECTRUM infusion pump product remediation efforts, $11 million related to the Baxalta separation and $3 million to account for an additional year of the Branded Prescription Drug Fee in accordance with final regulations issued by the Internal Revenue Service. Also included were benefits of $1 million related to third-party recoveries and reversals of prior reserves.

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations.
The following commentary should be read in conjunction with the consolidated financial statements and accompanying notes.

EXECUTIVE OVERVIEW

Description of the Company and Business Segments

Baxter International Inc., through its subsidiaries, provides a broad portfolio of essential healthcare products including acute and chronic dialysis therapies; sterile IV solutions; infusion systems and devices; parenteral nutrition therapies; inhaled anesthetics; generic injectable pharmaceuticals; and surgical hemostat and sealant products. The company's global footprint and critical nature of its products and services play a key role in expanding access to healthcare in emerging and developed countries. These products are used by hospitals, kidney dialysis centers, nursing homes, rehabilitation centers, doctors' offices and by patients at home under physician supervision.

The company manages its business based on three geographic segments: Americas (North and South America), EMEA (Europe, Middle East and Africa) and APAC (Asia-Pacific).

For financial information about Baxter's segments, see Note 18 in Item 8 of this Annual Report on Form 10-K.

Acquisition of Claris Injectables Limited

On July 27, 2017, Baxter acquired 100 percent of Claris Injectables Limited (Claris), a wholly owned subsidiary of Claris Lifesciences Limited, for total cash consideration of approximately $629 million, net of cash acquired. Through the acquisition, Baxter added capabilities in production of essential generic injectable medicines, such as anesthesia and analgesics, renal, anti-infectives and critical care in a variety of presentations including bags, vials and ampoules. Refer to Note 5 in Item 8 of this Annual Report on Form 10-K for additional information regarding the acquisition of Claris.

Acquisition of Recothrom and Preveleak

In March 2018, Baxter acquired two hemostat and sealant products from Mallinckrodt plc: RECOTHROM Thrombin topical

(Recombinant), the first and only stand-alone recombinant thrombin, and PREVELEAK Surgical Sealant, which is used in vascular

reconstruction. The purchase price included an upfront payment of approximately $163 million and potential contingent payments in

the future. Refer to Note 5 in Item 8 of this Annual Report on Form 10-K for additional information regarding the acquisition of the RECOTHROM and PREVELEAK products.

Baxter had approximately 50,000 employees and conducted business in over 100 countries as of December 31, 2018. In 2018, the company generated approximately 58% of its revenues outside the United States. The company maintained approximately 50 manufacturing facilities and over 100 distribution facilities in the United States, Europe, Asia-Pacific, Latin America and Canada as of December 31, 2018.

Financial Results

Baxter's global net sales totaled $11.1 billion in 2018, an increase of 5% over 2017 on a reported basis and 4% on a constant currency basis. International sales totaled $6.4 billion in 2018, an increase of 6% compared to 2017 on a reported basis and 4% on a constant currency basis. Sales in the United States totaled $4.7 billion in 2018, an increase of 5% compared to 2017.

Baxter's income from continuing operations totaled $1.6 billion, or $2.99 per diluted share in 2018, $724 million, or $1.30 per diluted share in 2017 and $4,966 million, or $9.01 per diluted share in 2016. Income from continuing operations in 2018 included special items which resulted in a net decrease to income from continuing operations of $36 million, or $0.06 per diluted share. Income from continuing operations in 2017 included special items which resulted in a net decrease to income from continuing operations of $652 million, or $1.18 per diluted share. Income from continuing operations in 2016 included special items which resulted in a net increase to income from continuing operations of $3.9 billion, or $7.05 per diluted share. The company's special items are discussed further in the Results of Operations section below.

Baxter's financial results included R&D expenses totaling $655 million in 2018, which reflects the company's focus on balancing increased investments to support its new product pipeline with efforts to optimize overall R&D spending.

The company's financial position remains strong, with operating cash flows from continuing operations totaling $2.1 billion in 2018. The company has continued to execute on its disciplined capital allocation framework, which is designed to optimize stockholder

value creation through reinvestment in the businesses, dividends and share repurchases, as well as acquisitions and other business development initiatives as discussed in the Strategic Objectives section below.

Capital expenditures totaled $681 million in 2018 as the company continues to invest across its businesses to support future growth, including additional investments in support of new and existing product capacity expansions. The company's investments in capital expenditures in 2018 were focused on projects that improve production efficiency and enhance manufacturing capabilities to support its strategy of geographic expansion with select investments in growing markets.

The company also continued to return value to its stockholders in the form of dividends. During 2018, the company paid cash dividends to its stockholders totaling $376 million. Additionally, in 2018 the company repurchased 35.8 million shares through cash repurchases pursuant to Rule 10b5-1 repurchase plans, an accelerated share repurchase plan and otherwise. For information on the company's share repurchase plans, see Note 13 in Item 8 of this Annual Report on Form 10-K.

Strategic Objectives

Baxter continues to focus on several key objectives to successfully execute its long-term strategy to achieve sustainable growth and deliver enhanced stockholder value. Baxter's diversified and broad portfolio of medical products that treat life-threatening acute or chronic conditions and its global presence are core components of the company's strategy to achieve these objectives. The company is focused on three strategic factors as part of its pursuit of industry leading performance: optimizing its core portfolio globally; operational excellence focused on streamlining its cost structure and enhancing operational efficiency; and maintaining a disciplined and balanced approach to capital allocation.

Optimizing the Core Portfolio Globally

Baxter has categorized its product portfolio into four strategic business groupings. Those groupings include core growth, core return on capital, maintain or manage differently and strategic bets. Within the core growth grouping, Baxter looks to invest for long-term, higher margin growth. Baxter seeks to optimize its return on investment and to maintain or enhance its market position with its core return on capital products. Maintain or manage differently products are those for which Baxter looks to sustain or reposition its underlying investment. Finally, the strategic bet grouping includes products for which Baxter is evaluating its market position and investment strategy. These products cover mature and emerging markets. Baxter continues to evaluate each product category's placement in light of shifting market dynamics and company priorities and may reassign a product category into a different business grouping from time to time.

As part of this portfolio review, Baxter seeks to optimize its position in product areas where the company has a stable, profitable business model, identify and alter investments in products that have reached the end of their life cycles or with respect to which market positions have evolved unfavorably. In the course of doing so, Baxter expects to continue to reallocate capital to more promising opportunities or business groupings, as described above.

As part of this strategy, Baxter is shifting its investments to drive innovation where it has compelling opportunities to serve patients and healthcare professionals while advancing the business and will accelerate the pace in bringing these advances to market. Baxter is in the midst of launching several new products, geographic expansions and line extensions by 2023 including in such areas as chronic and acute renal care, smart pump technology, hospital pharmaceuticals and nutritionals, surgical sealants, and more. These comprise a mix of entirely new offerings,

improvements on existing technologies, and the expansion of current products into new geographies.

Operational Excellence

As part of its pursuit of improved margin performance, Baxter is working to optimize its cost structure and as such is critically assessing optimal support levels in light of the company's ongoing portfolio optimization efforts.

The company intends to continue to actively manage its cost structure to help ensure that it is committing resources to the highest value uses. Such high value activities include supporting innovation, building out the portfolio, expanding patient access and accelerating growth for the company's stockholders.

Baxter has undertaken a comprehensive review of all aspects of its operations and is actively implementing changes in line with its business goals.

Maintaining Disciplined and Balanced Capital Allocation

Baxter's capital allocation strategies include the following:

- reinvest in the business, by funding opportunities that are positioned to deliver sustainable growth, support the company's innovation efforts and improve margin performance;
- return capital to stockholders through dividends, to meaningfully increase with earnings growth;
- share repurchases; and
- identify and pursue accretive M&A opportunities.

Responsible Corporate Citizen

The company strives for continued growth and profitability, while furthering its focus on acting as a responsible corporate citizen. At Baxter, sustainability means creating lasting social, environmental and economic value by addressing the needs of the company's wide-ranging stakeholder base. Baxter's comprehensive sustainability program is focused on areas where the company is uniquely positioned to make a positive impact. Priorities include providing employees a safe, healthy and inclusive workplace, fostering a culture that drives integrity, strengthening access to healthcare, enhancing math and science education, and driving environmental performance across the product life cycle including development, manufacturing and transport. Baxter and the Baxter International Foundation provide financial support and product donations in support of critical needs, from assisting underserved communities to providing emergency relief for countries experiencing natural disasters.

Throughout 2018 the company continued to implement a range of water conservation strategies and facility-based energy saving initiatives. In the area of product stewardship and life cycle management, Baxter is pursuing efforts such as sustainable design and reduced packaging. Baxter is also responding to the challenges of climate change through innovative greenhouse gas emissions-reduction programs, such as shifting to less carbon-intensive energy sources in manufacturing and transport. Additionally, the company developed new long-term goals to drive continued environmental stewardship while creating healthier, more sustainable communities where Baxter employees work and live.

Risk Factors

The company's ability to sustain long-term growth and successfully execute the strategies discussed above depends in part on the company's ability to manage within an increasingly competitive and regulated environment and to address the other risk factors described in Item 1A of this Annual Report on Form 10-K.

RESULTS OF OPERATIONS

Special Items

The following table provides a summary of the company's special items and the related impact by line item on the company's results of continuing operations for 2018, 2017 and 2016.

years ended December 31 (in millions)	2018	2017	2016
Gross Margin			
Intangible asset amortization expense	$(169)	$(154)	$(163)
Business optimization items[1]	(49)	(53)	(156)
Intangible asset impairment[2]	—	—	(51)
Separation-related costs[3]	—	(1)	(1)
Product-related items[4]	6	(17)	18
Acquisition and integration activities[5]	(27)	(8)	—
Litigation and contractual disputes[6]	(8)	—	—
Hurricane Maria benefits (costs)[7]	32	(32)	—
European medical devices regulation[9]	(6)	—	—
Total Special Items	$(221)	$(265)	$(353)
Impact on Gross Margin Ratio	(2.0 pts)	(2.5 pts)	(3.5 pts)
Marketing and Administrative Expenses			
Business optimization items[1]	$145	$116	$173
Separation-related costs[3]	—	18	53
Acquisition and integration activities[5]	23	20	—
Historical reserve adjustments[8]	—	(12)	—
Litigation and contractual disputes[6]	2	21	—
Total Special Items	$170	$163	$226
Impact on Marketing and Administrative Expense Ratio	1.5 pts	1.5 pts	2.2 pts
Research and Development Expenses			
Business optimization items[1]	$26	$—	$80
Acquisition and integration activities[5]	7	—	—
European medical devices regulation[9]	3	—	—
Total Special Items	$36	$—	$80
Other Operating Income			
Claris Settlement[10]	$(80)	$—	$—
Hurricane Maria benefits[7]	(10)	—	—
Total Special Items	$(90)	$—	$—
Other (Income) Expense, Net			
Acquisition and integration activities[5]	$(24)	$—	$—
Net realized gains on Retained Shares transactions[11]	—	—	(4,391)
Loss on debt extinguishment[12]	—	—	149
Tax matter[13]	—	—	9
Venezuela deconsolidation[14]	—	33	—
Total Special Items	$(24)	$33	$(4,233)
Income Tax Expense			

Tax effects of special items and impact of U.S. Tax Reform[13]	$277	$191	$(314)
Total Special Items	$277	$191	$(314)
Impact on Effective Tax Rate	(13.2 pts)	22.5 pts	(22.1 pts)

Intangible asset amortization expense is identified as a special item to facilitate an evaluation of current and past operating performance and is consistent with how management and the company's Board of Directors internally assess performance. Additional special items are identified above because they are highly variable, difficult to predict and of a size that may substantially impact the company's reported operations for a period. Management believes that providing the separate impact of the above items on the company's results in accordance with generally accepted accounting principles (GAAP) in the United States may provide a more complete understanding of the company's operations and can facilitate a fuller analysis of the company's results of operations,

particularly in evaluating performance from one period to another. This information should be considered in addition to, and not as a substitute for, information prepared in accordance with GAAP.

[1] In 2018, 2017 and 2016, the company's results were impacted by costs associated with the company's execution of certain strategies to optimize its organization and cost structure on a global basis. These actions included streamlining the company's international operations, rationalizing its manufacturing facilities, reducing its general and administrative infrastructure, re-aligning certain R&D activities and cancelling certain R&D programs. The company recorded business optimization charges of $220 million, $169 million and $409 million in 2018, 2017 and 2016, respectively. The company's results in 2018 included a charge of $117 million related to restructuring activities, $94 million of costs to implement business optimization programs, which primarily included external consulting and project employee costs, and $9 million of accelerated depreciation associated with facilities to be closed. The $117 million of restructuring charges included $100 million of employee termination costs, $7 million of asset impairment charges related to facility closures and $10 million of other exit costs. The company's results in 2017 included a charge of $70 million related to restructuring activities, $89 million of costs to implement business optimization programs, which primarily included external consulting and project employee costs, and $10 million of accelerated depreciation associated with facilities to be closed. The $70 million of restructuring charges included $59 million of employee termination costs, $6 million of asset impairment charges related to facility closures and $5 million of other exit costs. The company's results in 2016 included a charge of $285 million related to restructuring activities, $65 million of costs to implement business optimization programs, which primarily included external consulting and project employee costs, $33 million of accelerated depreciation associated with facilities to be closed, and $26 million of Gambro integration costs. The $285 million of restructuring charges included $180 million of employee termination costs, $54 million of costs related to the discontinuance of the VIVIA home hemodialysis development program, $47 million of asset impairment charges related to acquired in-process R&D and facility closures and $4 million of other exit costs. Refer to Note 8 of this Annual Report on Form 10-K in Item 8 for further information regarding these charges and related reserves.

[2] The company's results in 2016 included a $51 million asset impairment primarily related to developed technology.

[3] The company's results in 2017 and 2016 included costs related to the Baxalta separation of $19 million and $54 million, respectively. Refer to Note 2 in Item 8 of this Annual Report on Form 10-K for further information related to the separation of Baxalta.

[4] The company's results in 2018 included a net benefit of $6 million related to an adjustment to its accrual for SIGMA SPECTRUM infusion pump inspection and remediation activities. The company's results in 2017 included a net charge of $17 million related to SIGMA SPECTRUM infusion pump inspection and remediation activities and other historical product reserves. The company's results in 2016 included a net benefit of $18 million primarily related to adjustments to the COLLEAGUE and SIGMA SPECTRUM infusion pump reserves. Refer to Note 7 in Item 8 of this Annual Report on Form 10-K for further information regarding these charges and related reserves.

[5] The company's results in 2018 included acquisition and integration expenses related to the company's acquisitions of Claris and the RECOTHROM and PREVELEAK products of $50 million, upfront payments related to R&D collaborations and license agreements of $7 million and a gain of $24 million from remeasuring its previously held investment to fair value upon acquisition of a controlling interest in its joint venture in Saudi Arabia. The company's results in 2017 included acquisition and integration expenses of $28 million related to the company's acquisition of Claris. Refer to Note 5 in Item 8 of this Annual Report on Form 10-K for further information regarding business

development activities.

[6] The company’s results in 2018 included a charge of $10 million related to certain product litigation. The company’s results in 2017 included charges of $21 million related to litigation and contractual disputes for businesses or arrangements in which the company is no longer engaged or a party thereto.

[7] The company’s results in 2018 included a benefit of $42 million related to insurance recoveries as a result of losses incurred due to Hurricane Maria. The company’s results in 2017 included a charge of $32 million related to the impact of Hurricane Maria on the company’s operations in Puerto Rico. The costs primarily included inventory and fixed asset impairments as well as idle facility costs. Refer to Note 1 in Item 8 of this Annual Report on Form 10-K for further information regarding the impact of Hurricane Maria.

[8] The company's results in 2017 included a benefit of $12 million related to an adjustment to the company's historical rebates and discounts reserve.

[9] The company’s results in 2018 included costs of $9 million related to updating its quality systems and product labeling to comply with the new medical device reporting regulation and other requirements of the European Union’s regulations for medical devices that will become effective in 2020.

[10] The company's results in 2018 included a benefit of $80 million for settlement of certain claims related to the acquired operations of Claris. Refer to Note 5 in Item 8 of this Annual Report on Form 10-K for further information regarding the acquisition of Claris.

[11] The company's results in 2016 included net realized gains of $4.4 billion related to the debt-for-equity exchanges of the company's retained shares in Baxalta for certain indebtedness, the exchange of retained shares in Baxalta for Baxter shares and the contribution of retained shares in Baxalta to Baxter's U.S. pension fund. Refer to Note 2 in Item 8 of this Annual Report on Form 10-K for further information regarding the separation of Baxalta.

[12] The company's results in 2016 included a net debt extinguishment loss totaling $149 million related to the March 2016 debt-for-equity exchange for certain company indebtedness and certain debt redemptions. Refer to Note 9 in Item 8 of this Annual Report on Form 10-K for additional information.

[13] Reflected in this item is the income tax impact of the special items identified in this table. Additionally, the company's results in 2018 included a net tax benefit of $196 million, primarily related to updates to the estimated impact of U.S. federal tax reform previously made by the company. The company's results in 2017 included a net tax charge of $322 million related to the estimated impact of U.S. tax reform on the company's tax related assets and liabilities. The company's results in 2016 included a net after-tax benefit of $10 million related to the settlement of an income tax matter in the company's non-wholly owned subsidiary in Turkey. This amount was comprised of $19 million included in income tax expense offset by $9 million in non-controlling interest recorded in other (income) expense, net. The tax effect of each adjustment is based on the jurisdiction in which the adjustment is incurred and the tax laws in effect for each such jurisdiction.

[14] The company's results in 2017 included a charge of $33 million related to the deconsolidation of its Venezuelan operations. Refer to Note 1 in Item 8 of this Annual Report on Form 10-K for further information regarding the deconsolidation of the company's Venezuelan operations.

Net Sales

				Percent change			
				At actual currency rates		At constant currency rates	
years ended December 31 (in millions)	2018	2017	2016	2018	2017	2018	2017
United States	$4,723	$4,510	$4,259	5%	6%	5%	6%
International	6,404	6,051	5,904	6%	2%	4%	2%
Total net sales	$11,127	$10,561	$10,163	5%	4%	4%	4%

Net sales for the year ended December 31, 2018 increased 5% at actual rates and 4% at constant currency rates. Net sales for the year ended December 31, 2017 increased 4% at actual and constant currency rates.

Foreign currency favorably impacted net sales by one percentage point during 2018 compared to 2017 principally due to the weakening of the U.S dollar relative to the Euro, British Pound and Chinese Yuan, partially offset by the strengthening of the U.S. dollar relative to the Brazilian Real and Australian Dollar. Changes in foreign currency exchange rates had no net impact on net sales during 2017 compared to the prior year.

The comparisons presented at constant currency rates reflect comparative local currency sales at the prior year's foreign exchange rates. This measure provides information on the change in net sales assuming that foreign currency exchange rates had not changed between the prior and the current period. The company believes that the non-GAAP measure of change in net sales at constant currency rates, when used in conjunction with the GAAP measure of change in net sales at actual currency rates, may provide a more complete understanding of the company's operations and can facilitate a fuller analysis of the company's results of operations, particularly in evaluating performance from one period to another.

On March 19, 2018, Baxter acquired two hemostat and sealant products from Mallinckrodt plc: RECOTHROM Thrombin topical (Recombinant), the first and only stand-alone recombinant thrombin, and PREVELEAK Surgical Sealant, which is used in vascular reconstruction. The purchase price included cash payments of $163 million and potential contingent payments in the future. In 2018, consolidated Baxter results include $52 million of net sales of RECOTHROM and PREVELEAK.

On July 27, 2017, the company completed the acquisition of Claris, a wholly owned subsidiary of Claris Lifesciences Limited, for total cash consideration of approximately $629 million, net of cash acquired. The Claris acquisition contributed $140 million and $57 million of net sales in 2018 and 2017, respectively.

Global Business Unit Net Sales Reporting

The company's global business units (GBUs) include the following:

- Renal Care includes sales of the company's peritoneal dialysis (PD), hemodialysis (HD) and additional dialysis therapies and services.
- Medication Delivery includes sales of the company's IV therapies, infusion pumps, administration sets and drug reconstitution devices.
- Pharmaceuticals includes sales of the company's premixed and oncology drug platforms, inhaled anesthesia and critical care products and pharmacy compounding services.
- Clinical Nutrition includes sales of the company's parenteral nutrition (PN) therapies and related products.
- Advanced Surgery includes sales of the company's biological products and medical devices used in surgical procedures for hemostasis, tissue sealing and adhesion prevention.
- Acute Therapies includes sales of the company's continual renal replacement therapies (CRRT) and other organ support therapies focused in the intensive care unit (ICU).
- Other includes sales primarily from the company's pharmaceutical partnering business.

The following is a summary of net sales by GBU.

				Percent change			
				At actual currency rates		At constant currency rates	
years ended December 31 (in millions)	2018	2017	2016	2018	2017	2018	2017
Renal Care	$3,662	$3,480	$3,421	5 %	2 %	4 %	2 %
Medication Delivery	2,669	2,698	2,596	(1)%	4 %	(2)%	4 %
Pharmaceuticals	2,092	1,883	1,722	11 %	9 %	10 %	9 %
Clinical Nutrition	877	882	858	(1)%	3 %	(3)%	2 %
Advanced Surgery	800	707	690	13 %	2 %	12 %	2 %
Acute Therapies	517	456	429	13 %	6 %	11 %	6 %
Other	510	455	447	12 %	2 %	10 %	1 %
Total Baxter	$11,127	$10,561	$10,163	5 %	4 %	4 %	4 %

Renal Care net sales increased 5% and 2% in 2018 and 2017, respectively. Excluding the impact of foreign currency, net sales increased 4% and 2% in 2018 and 2017, respectively. The increase in 2018 was primarily driven by global growth in the PD business as well as increased international sales in the HD business. The company expects net sales in its U.S. in-center HD business to decline in 2019, which will partially offset expected global growth in the Renal Care business. The increase in 2017 was driven by continued growth of PD patients and adoption of the company's new Automated Peritoneal Dialysis Cyclers (APD) AMIA in the U.S. and HomeChoice CLARIA in international markets, partially offset by lower sales of HD products internationally. Additionally, net sales were negatively impacted in 2017 by approximately $50 million as compared to 2016 due to certain international strategic market exits.

Medication Delivery net sales decreased 1% in 2018 and increased 4% in 2017. Excluding the impact of foreign currency, net sales decreased 2% in 2018 and increased 4% in 2017. The decrease in 2018 was partially attributable to supply constraints associated with the company's small volume parenterals (SVPs) due to Hurricane Maria as well as lower international sales resulting from a reallocation of volume to the U.S. As a result of those supply constraints, some customers have changed their protocols for use of these products and some others shifted to competitive products. The increase in 2017 was driven by select pricing and improved volumes for U.S. IV solutions. This increase was also positively impacted by increased sales of the company's IV access administrative sets, reflecting the on-going pull through from the company's growing SPECTRUM infusion pump base. Net sales were negatively impacted in 2017 by approximately $35 million as compared to 2016 due to certain international strategic market exits. Additionally, 2017 net sales were also negatively impacted due to the impact of Hurricane Maria.

Pharmaceuticals net sales increased 11% and 9% in 2018 and 2017, respectively. Excluding the impact of foreign currency, net sales increased 10% and 9% in 2018 and 2017, respectively. The increase in 2018 was a result of the benefit from the acquisition of Claris, increased sales of the company's premixed injectables and inhaled anesthetics, as well as increased demand for pharmacy compounding services. The acquisition of Claris in 2017 contributed $140 million of net sales in 2018 compared to $57 million of net sales in 2017. Partially offsetting the increase in 2018 was reduced sales of U.S. cyclophosphamide, which decreased from $185 million in 2017 to $166 million in 2018. The company expects sales of U.S. cyclophosphamide and BREVIBLOC to decline in 2019 by approximately $70 million and $75 million, respectively. The increase in 2017 was a result of increased sales of pre-mixed

injectable drugs, a one-time benefit from a pharmacy compounding early contract settlement, improved pricing for BREVIBLOC, and increased sales of TransDerm Scop resulting from temporary supply disruptions. The acquisition of Claris in 2017 also contributed $57 million of net sales. The increase was partially offset by a reduction in sales of U.S. cyclophosphamide from $210 million in 2016 to $185 million in 2017 due to the entry of competitors into the market and the negative impact of Hurricane Maria. Additionally, net sales were negatively impacted in 2017 by approximately $10 million as compared to 2016 due to certain international strategic market exits.

Clinical Nutrition net sales decreased 1% in 2018 and increased 3% in 2017. Excluding the impact of foreign currency, net sales decreased 3% in 2018 and increased 2% in 2017. The decrease in 2018 was driven by the impact of Hurricane Maria related supply constraints which resulted in some customers in the U.S. changing protocols for parenteral nutritional therapies or shifting to outsourced nutrition compounding centers and competitive products, partially offset by improved volumes internationally for the company's nutritional therapies. The increase in 2017 was driven by improved volumes, new product launches and ongoing geographic expansion for the company's PN therapies. Partially offsetting the increase in 2017 was reduced sales due to the impact of Hurricane Maria.

Advanced Surgery net sales increased 13% and 2% in 2018 and 2017, respectively. Excluding the impact of foreign currency, net sales increased 12% and 2% in 2018 and 2017, respectively. The increase in 2018 was primarily driven by the acquisition of RECOTHROM and PREVELEAK from Mallinckrodt, which contributed $52 million of net sales in 2018, and improved sales for the company's core hemostats and sealants. The increase in 2017 was primarily driven by improved volumes internationally. Offsetting performance in 2017 was reduced sales of non-core surgical products Actifuse and Peristrips.

Acute Therapies net sales increased 13% and 6% in 2018 and 2017, respectively. Excluding the impact of foreign currency, net sales increased 11% and 6%, respectively. The increases in 2018 and 2017 were due to higher demand for the company's CRRT systems to treat acute kidney injuries and higher demand for other products from an intense flu season in 2018.

Other net sales increased 12% and 2% in 2018 and 2017, respectively. Excluding the impact of foreign currency, net sales increased 10% and 1% in 2018 and 2017, respectively. The increases in 2018 and 2017 were due primarily to favorable volumes for products manufactured by Baxter on behalf of its pharmaceutical partners, including the impact of increasing safety stock levels of select products.

Gross Margin and Expense Ratios

				Change	
years ended December 31 (as a percent of net sales)	2018	2017	2016	2018	2017
Gross margin	43.0%	42.3%	40.5%	0.7 pts	1.8 pts

Marketing and administrative expenses	23.5%	24.3%	26.8%	(0.8 pts) (2.5 pts)

Gross Margin

The special items identified above had an unfavorable impact of 2.0, 2.5 and 3.5 percentage points on the gross margin ratio in 2018, 2017 and 2016, respectively. Refer to the Special Items section above for additional detail.

Excluding the impact of the special items, the gross margin ratio increased 0.2 percentage points in 2018. The gross margin ratio increased primarily due to a favorable product mix and manufacturing efficiencies, partially offset by the negative impact of foreign exchange rates, incremental supply chain costs and the impact of lost sales due to Hurricane Maria.

Excluding the impact of the special items, the gross margin ratio increased 0.8 percentage points in 2017. The gross margin ratio was impacted by select price increases, favorable manufacturing performance and a benefit from the company’s business transformation initiatives aimed at simplifying the portfolio to drive efficiency and reduce costs, partially offset by the impact of foreign currency.

Marketing and Administrative Expenses

The special items identified above had an unfavorable impact of 1.5, 1.5 and 2.2 percentage points on the marketing and administrative expenses ratio in 2018, 2017 and 2016, respectively. Refer to the Special Items section above for additional detail.

Excluding the impact of the special items, the marketing and administrative expenses ratio decreased 0.8 percentage points in 2018 due to the actions taken by the company to restructure its cost position and focus on expense management. These savings were partially offset by decreased benefits to the marketing and administrative expenses ratio from lower transition service income, as the agreement with Baxalta for these services terminated as of July 1, 2018, and increased freight expenses as the company worked to ensure adequate product availability to meet customer needs. In addition, a change in the estimated useful life of the company's ERP systems contributed to the reduction in the marketing and administrative expense ratio.

Excluding the impact of the special items, the marketing and administrative expense ratio decreased 1.8 percentage points in 2017 due to the actions taken by the company to restructure its cost position and focus on expense management. These savings were partially offset by decreased benefits to the marketing and administrative expenses ratio from lower transition service income as the agreement with Baxalta for these services continued to wind down.

Pension and Other Postemployment Benefit Plan Expense

Expense related to the company's pension and other postemployment benefits (OPEB) plans decreased $85 million in 2018 primarily as a result of the split and freeze of its U.S. pension plans announced in January 2018 coupled with a higher expected return on assets. Expense related to the company's pension and OPEB plans increased $9 million in 2017 primarily due to a reduction in the expected return on assets. The company expects expenses from pension and OPEB plans to decrease in 2019 as a result of higher discount rates. Refer to Note 14 in Item 8 of this Annual Report on Form 10-K for further information regarding pension and other postemployment benefit plan expenses.

Business Optimization Items

Beginning in the second half of 2015, the company has initiated actions to transform the company's cost structure and enhance operational efficiency. These efforts include restructuring the organization, optimizing the manufacturing footprint, R&D operations and supply chain network, employing disciplined cost management, and centralizing and streamlining certain support functions. Through December 31, 2018, the company incurred cumulative pre-tax costs of $796 million related to these actions. The costs consisted primarily of employee termination costs, implementation costs, and accelerated depreciation. The company expects to incur additional pretax costs of approximately $75 million and capital expenditures of $50 million related to these initiatives by the end of 2020. These costs will primarily include employee termination costs and implementation costs. The reductions in our cost base from these actions in the aggregate are expected to provide cumulative annual pretax savings of approximately $1.2 billion once the remaining actions are complete. The savings from these actions will impact cost of sales, marketing and administrative expenses, and R&D expenses. The company estimates that actions taken through December 31, 2018 have resulted in approximately $975 million of savings in 2018. Approximately 90 percent of the expected annual pretax savings are expected to be realized by the end of 2019, with the remainder by the end of 2020.

In addition to the programs above, the company recorded additional business optimization charges of $125 million in 2016. These charges primarily included employee termination costs, contract termination costs, asset impairments, and Gambro integration costs. Approximately 40% of these other 2016 charges were non-cash. The company does not anticipate incurring any additional costs related to these programs in the future. The actions in the aggregate provide annual pre-tax savings of approximately $19 million. The savings from these actions impact cost of sales, marketing and administrative expenses, and R&D expenses.

Refer to Note 8 in Item 8 of this Annual Report on Form 10-K for additional information regarding the company's business optimization initiatives.

Research and Development

years ended December 31 (in millions)	2018	2017	2016	Percent change 2018	2017
Research and development expenses	$655	$613	$646	7%	(5)%
as a percent of net sales	5.9 %	5.8 %	6.4 %	0.1 pts	(0.6) pts

The special items identified above had an unfavorable impact of $36 million in 2018 and $80 million in 2016.

Excluding the impact of the special items, the research and development expenses ratio decreased in 2018 as a result of actions taken by the company to restructure its cost position and focus on expense management, partially offset by an increase in project-related expenditures.

Excluding the impact of special items, the research and development expenses ratio increased in 2017 as a result of the company’s increased investment in new product development and geographic expansion.

Net Interest Expense

Net interest expense was $45 million, $55 million and $66 million in 2018, 2017 and 2016, respectively. The decrease in 2018 was primarily driven by higher interest income earned as a result of favorable interest rates. The decrease in 2017 was principally driven by lower outstanding debt as a result of the first quarter 2016 debt-for-equity exchanges and reduced coupon rates resulting from the third quarter 2016 and second quarter 2017 debt issuances, partially offset by lower capitalized interest compared to 2016. Refer to Note 3 in Item 8 of this Annual Report on Form 10-K for a summary of the components of net interest expense for 2018, 2017 and 2016.

Other (Income) Expense, Net

Other (income) expense, net was income of $139 million, expense of $19 million and income of $4,275 million in 2018, 2017 and 2016, respectively. The current year results included $73 million of income related to foreign currency fluctuations principally relating to intercompany receivables, payables and monetary assets denominated in a foreign currency, pension and OPEB income of $48 million and a $24 million gain from remeasuring the company's previously held investment to fair value upon acquisition of a controlling interest in its joint venture in Saudi Arabia. The 2017 results included $50 million of income related to foreign currency fluctuations principally relating to intercompany receivables, payables and monetary assets denominated in a foreign currency, partially offset by the $33 million loss on the deconsolidation of the company's Venezuela operations, $8 million of losses related to investment impairments and $33 million of expense related to pension and OPEB plans. The 2016 results included net realized gains of $4.4 billion on the Retained Shares transactions, dividend income of $16 million from the Retained Shares, and $28 million of income related to foreign currency fluctuations principally relating to intercompany receivables, payables and monetary assets denominated in a foreign currency. These income items were partially offset by net debt extinguishment losses of $153 million and expense of $21 million related to pension and OPEB plans.

Income Taxes

Effective Income Tax Rate

The effective income tax rate for continuing operations was 3.7% in 2018, 40.5% in 2017, and (0.2%) in 2016. The special items identified above had a favorable impact of 13.2 percentage points on the effective income tax rate in 2018, an unfavorable impact of 22.5 percentage points in 2017 and a favorable impact of 22.1 percentage points in 2016. Refer to the Special Items section above for additional detail.

The company's provision for income taxes and its effective rate decreased in 2018 compared to 2017 primarily due to special items, the most significant of which was the company's finalization of its provisional adjustments resulting from the U.S. Tax Cuts and Jobs Act of 2017 (the 2017 Tax Act). SEC Staff Accounting Bulletin 118 (SAB 118) allowed a one-year measurement period from the December 22, 2017 Tax Act enactment date to refine the provisional amounts recognized in the 2017 financial statements.

The company recorded several SAB 118 measurement period provisional adjustments in 2018. First, after further studying the 2017 Tax Act and associated U.S. Treasury Department Proposed Regulations, the company refined its provisional estimate of a full valuation allowance against its U.S. foreign tax credit deferred tax assets (DTAs) and released a $194 million valuation allowance due to the company's ability to utilize a portion of its U.S. foreign tax credits DTAs. Second, the 2017 Tax Act requires the company to pay U.S. income taxes on accumulated foreign subsidiary earnings not previously subject to U.S. income tax at a rate of 15.5% to the extent of foreign cash and certain other net current assets and 8% on the remaining earnings. In 2017, the company recognized a provisional charge for its one-time transitional tax expense of $529 million, the majority of which was non-cash. During 2018, the company refined its estimated one-time transition tax expense, recognizing a benefit of $5 million. Third, the 2017

Tax Act lowered the U.S. Federal rate from 35% to 21% and generally exempts foreign income from U.S. taxation. The company finalized its provisional revaluation of U.S. deferred tax assets, recording an additional $8 million benefit.

The benefit from the lower U.S. federal rate was almost wholly offset by changes to deductions related to the 2017 Tax Act. These changes included lost tax benefits from the allocations of certain U.S. expenses to exempt foreign income. The company's tax provision for 2018 does not include any tax charge related to either the Global Intangible Low Taxed Income (GILTI) or Base Erosion Anti-Abuse Tax (BEAT) provisions as the company does not believe that it is subject to either. Refer to Note 16 in Item 8 of this Annual Report on Form 10-K for further information related to the 2017 Tax Act and the finalization of associated SAB 118 provisional adjustments.

In addition to the 2017 Tax Act SAB 118 measurement period adjustments, the company's provision for income taxes and its effective rate decreased in 2018 compared to 2017 due to a settlement of a 2008 through 2010 transfer pricing Competent Authority proceeding between the U.S. and Germany, the reversal of a foreign valuation allowance as a result of continued profit improvements, and the receipt of tax free income from the settlement of Claris contingent matters. Partially offsetting the decrease in the effective tax rate

was a decrease in benefits related to deductions in excess of share-based compensation costs (windfall tax benefits), the revaluation of Swedish net deferred tax assets and miscellaneous transfer pricing-related income tax accruals.

The company's provision for income taxes and its effective rate increased in 2017 compared to 2016 primarily due to special items including provisional charges resulting from the 2017 Tax Act, the tax-free net realized gains recognized in 2016 on the Baxalta Retained Shares and resolution of uncertain tax positions related to a foreign subsidiary in 2016. In addition, the company's provision for income taxes and its effective tax rate in 2017 increased due to tax benefits recognized in 2016 from partially settling an IRS (2008-2013) income tax audit, settling a German (2008-2011) income tax audit and other miscellaneous transfer pricing matters. Partially offsetting the increase in the effective tax rate was a benefit of $56 million in 2017 related to deductions in excess of share-based compensation costs (windfall tax benefits) and the mix of earnings in lower tax jurisdictions relative to higher tax jurisdictions.

The company anticipates that the effective income tax rate from continuing operations, calculated in accordance with GAAP, will be approximately 18% in 2019. This rate may be further impacted by a number of factors including discrete items, such as tax windfalls or deficiencies attributable to stock compensation exercises as well as additional audit developments, or the tax effect of other special items.

Income from Continuing Operations and Earnings per Diluted Share

Income from continuing operations was $1.6 billion in 2018, $724 million in 2017 and $5.0 billion in 2016. Income from continuing operations per diluted share was $2.99 in 2018, $1.30 in 2017 and $9.01 in 2016. The significant factors and events causing the net changes from 2017 to 2018 and 2016 to 2017 are discussed above. Additionally, income from continuing operations per diluted share was positively impacted by the repurchase of 9.2 million shares in 2017 through Rule 10b5-1 purchase plans and the repurchase of 35.8 million shares in 2018 through Rule 10b5-1 purchase plans, an accelerated share repurchase plan and otherwise. Refer to Note 13 in Item 8 of this Annual Report on Form 10-K for further information regarding the company's stock repurchases.

(Loss) Income from Discontinued Operations

The following table is a summary of the operating results related to Baxalta, which have been reflected as discontinued operations for the years ended December 31, 2018, 2017 and 2016.

Years ended December 31 (in millions)	2018	2017	2016
Net sales	$—	$ 7	$148
(Loss) income from discontinued operations before income taxes	(13)	1	(10)
Gain on disposal of discontinued operations	—	2	19
Income tax expense (benefit)	(7)	—	10
Total (loss) income from discontinued operations	$(6)	$ 3	$(1)

Refer to Note 2 in Item 8 of this Annual Report on Form 10-K for additional information regarding the separation of Baxalta.

In addition, the company recognized additional expense of $10 million, net of tax, in 2017 related to environmental clean-up costs at a former location. Refer to Note 17 in Item 8 of this Annual Report on Form 10-K for additional

information regarding environmental liabilities.

Segment results

The company uses operating income on a segment basis to make resource allocation decisions and assess the ongoing performance of the company's segments. Refer to Note 18 in Item 8 of this Annual Report on Form 10-K for additional details regarding the company's segments. The following is a summary of significant factors impacting the reportable segments' financial results.

	Net sales			Operating income		
years ended December 31 (in millions)	2018	2017	2016	2018	2017	2016
Americas	$5,959	$5,720	$5,437	$2,412	$2,234	$2,078
EMEA	2,961	2,731	2,697	674	564	476
APAC	2,207	2,110	2,029	538	512	464
Corporate and other	—	—	—	(2,025)	(2,019)	(2,273)
Total	$11,127	$10,561	$10,163	$1,599	$1,291	$745

Americas

Segment operating income was $2,412 million, $2,234 million and $2,078 million in 2018, 2017 and 2016, respectively. The increase in 2018 was primarily driven by increased net sales and gross margin as a result of the Claris and RECOTHROM and PREVELEAK acquisitions and higher net sales related to premix injectables. Also, driving performance was improved performance in Renal Care, driven primarily by PD growth, and Acute Therapies. Negatively impacting performance in 2018 were the challenges in the Medication Delivery and Clinical Nutrition GBUs as previously described. The increase in 2017 was primarily driven by increased sales and gross margin largely due to strength in the Medication Delivery, Renal Care and Pharmaceuticals GBUs. In addition, marketing and administrative expenses were lower as cost savings were realized from the company's business optimization programs and continued focus on expense management.

EMEA

Segment operating income was $674 million, $564 million and $476 million in 2018, 2017 and 2016, respectively. The increase in 2018 was primarily driven by higher net sales across multiple GBUs, and improved margins primarily as a result of product mix. The increase in 2017 was largely driven by lower marketing and administrative expenses as cost savings were realized from the company's business optimization programs and continued focus on expense management.

APAC

Segment operating income was $538 million, $512 million and $464 million in 2018, 2017 and 2016, respectively. Results in 2018 were primarily driven by higher sales, primarily from China in the Renal Care and Clinical Nutrition GBUs. The increase in 2017 was largely driven by strong performance in the Renal Care and Acute Therapies GBUs along with lower marketing and administrative expenses as cost savings were realized from the company's business optimization programs and continued focus on expense management.

Corporate and other

Certain income and expense amounts are not allocated to a segment. These amounts primarily include corporate headquarters costs, certain R&D costs, certain GBU support costs, stock compensation expense, non-strategic investments and related income and expense, certain employee benefit plan costs as well as certain gains, losses, and other charges (such as business optimization and asset impairments).

LIQUIDITY AND CAPITAL RESOURCES

The company's cash flows reflect both continuing and discontinued operations.

Cash Flows from Operations — Continuing Operations

Operating cash flows from continuing operations totaled $2.1 billion, $1.9 billion and $1.6 billion in 2018, 2017 and 2016, respectively. The increases were driven by the factors described below.

Net Income

Net income, as adjusted for certain non-cash items, such as depreciation and amortization, net periodic pension benefit and OPEB costs, stock compensation, deferred income taxes and other items increased in 2018 compared to 2017 as well as in 2017 as compared to 2016.

Accounts Receivable

Changes in accounts receivable had a negative impact to cash flows in 2018 compared to a positive impact in 2017 and 2016. Days sales outstanding were 54.3 days, 53.0 days and 54.5 days for 2018, 2017 and 2016, respectively. Days sales outstanding increased in 2018 and decreased in 2017 primarily driven by the timing of collections in certain international markets.

Inventories

Changes in inventories resulted in a cash outflow of $197 million in 2018, an inflow of $76 million in 2017 and an inflow of $80 million in 2016. The following is a summary of inventories at December 31, 2018 and 2017, as well as inventory turns for 2018, 2017 and 2016. Inventory turns for the year are calculated as the annualized fourth quarter cost of sales divided by the year-end inventory balance.

	Inventories		Inventory turns		
(in millions, except inventory turn data)	2018	2017	2018	2017	2016
Total company	$1,653	$1,475	3.8	4.2	4.1

Other

The changes in accounts payable and accrued liabilities were an inflow of $53 million in 2018 and $84 million in 2017 and an outflow of $197 million in 2016. The changes were primarily driven by the timing of supplier payments. Days payables outstanding increased to 55.5 days in 2018 compared to 48.7 days in 2017 and 39.6 in 2016, respectively.

Payments related to the execution of the company's business optimization initiatives were $99 million in 2018, $143 million in 2017 and $164 million in 2016, respectively. Refer to Note 8 in Item 8 of this Annual Report on Form 10-K for further information regarding the business optimization initiatives.

Changes in other balance sheet items had net cash outflows of $105 million and $229 million in 2018 and 2017, respectively, and a net inflow of $90 million in 2016. The change in 2018 compared to 2017 is driven by higher pension contributions in 2017. The cash inflow in 2016 was the result of a U.S. federal income tax refund of $250 million. Cash contributions to the company's pension plans totaled $51 million, $242 million and $66 million in 2018, 2017 and 2016, respectively.

Cash Flows from Investing Activities — Continuing Operations

Capital Expenditures

Capital expenditures relating to continuing operations totaled $681 million, $634 million and $719 million in 2018, 2017 and 2016, respectively. The company's capital expenditures were driven by targeted investments in projects to support production of PD and IV solutions as well as expansion activities for dialyzers. The decline in capital expenditures over the three years was due to a reduction in spending related to ongoing projects and the completion of certain expansion activities.

Acquisitions and Investments

Net cash outflows related to acquisitions and investments were $268 million, $686 million and $48 million in 2018, 2017 and 2016, respectively. The cash outflows in 2018 were primarily driven by the $163 million acquisition of RECOTHROM and PREVELEAK from Mallinckrodt and the acquisition of two products from Celerity for $72 million. The cash outflows in 2017 were driven by the acquisition of Claris and the rights to certain molecules from Celerity. The cash outflows in 2016 were driven primarily by the acquisition of the rights to vancomycin from Celerity.

Refer to Note 5 in Item 8 of this Annual Report on Form 10-K for further information about the company's significant acquisitions and other arrangements.

Divestitures and Other Investing Activities

Net cash inflows relating to divestitures and other investing activities were $11 million, $10 million and $37 million in 2018, 2017 and 2016, respectively. The net inflow in 2018 was primarily driven by the sale of certain investment securities. The net inflow in 2017 was driven by proceeds received from asset sales partially offset by the impact of the deconsolidation of the company's Venezuelan operations. The net inflow in 2016 was driven by certain asset sales.

Cash Flows from Financing Activities

Debt Issuances, Net of Payments of Obligations

Net cash inflows related to debt and other financing obligations in 2018 were insignificant.

Net cash inflows related to debt and other financing obligations totaled $632 million in 2017 primarily related to the issuance of €600 million of senior notes at a fixed coupon rate of 1.30% due in May 2025. Refer to Note 9 in Item 8 of this Annual Report on Form 10-K for additional details regarding the debt transactions in 2017.

Net cash inflows related to debt and other financing obligations totaled $56 million in 2016 primarily related to a $190 million repayment of the company's 0.95% senior unsecured notes that matured in June 2016, a $130 million repayment of the company's 5.9% senior unsecured notes that matured in September 2016 and the redemption of approximately $1 billion in aggregate principal amount of senior notes in September 2016, as well as the repayment of other short-term obligations. The company also had $300 million of net repayments related to its commercial paper program. These cash outflows were partially offset by issuances of senior

notes totaling $1.6 billion in August 2016. Refer to Note 9 in Item 8 of this Annual Report on Form 10-K for additional details regarding the debt transactions in 2016.

The company's debt instruments discussed above are unsecured and contain certain covenants, including restrictions relating to the company's issuance of secured debt.

Other Financing Activities

Cash dividend payments totaled $376 million in 2018, $315 million in 2017 and $268 million in 2016. The increase in cash dividend payments in 2018 was primarily due to an increase in the quarterly dividend rate from $0.13 to $0.16 per share for quarterly dividends declared between May 2017 and May 2018. In addition, the company increased the quarterly dividend rate from $0.16 to $0.19 per share for quarterly dividends declared beginning May 2018. The increase in cash dividend payments in 2017 was primarily due to an increase in the quarterly dividend rate from $0.115 to $0.13 per share for quarterly dividends declared between May 2016 and May 2017 and the previously mentioned increase in May 2017.

Proceeds from stock issued under employee benefit plans totaled $258 million, $347 million and $286 million in 2018, 2017 and 2016, respectively.

Total realized excess tax benefits of $40 million in 2018 and $56 million in 2017 are presented as an inflow from operating activities as required under new accounting guidance implemented in 2017. Total realized excess tax benefits of $39 million in 2016 are presented in the consolidated statements of cash flows as an inflow in the financing section. Refer to Note 1 in Item 8 of this Annual Report on Form 10-K for additional information regarding the change in accounting.

In 2016, the company executed an equity-for-equity exchange of Retained Shares for 11.5 million outstanding Baxter shares. As authorized by the Board of Directors, the company repurchases its stock depending on the company's cash flows, net debt level and market conditions. In July 2012, the Board of Directors authorized the repurchase of up to $2.0 billion of the company's common stock. The Board of Directors increased this authority by an additional $1.5 billion in November 2016. The company paid $292 million in cash to repurchase approximately 6.3 million shares pursuant to this authority in 2016. In 2017, the company paid $564 million to repurchase approximately 9.2 million shares under this authority pursuant to Rule 10b5-1 plans and otherwise and had $1.1 billion remaining available under this authorization as of December 31, 2017. The Board of Directors increased this authority by an additional $1.5 billion in February 2018 and an additional $2.0 billion in November 2018. In 2018, the company paid $2.5 billion to repurchase approximately 35.8 million shares under this authority pursuant to Rule 10b5-1 plans, the accelerated share repurchase agreement noted below and otherwise and had $2.1 billion remaining available under this authorization as of December 31, 2018. Refer to Note 13 in Item 8 of this Annual Report on Form 10-K for additional details regarding the company's share repurchase programs.

In December 2018, the company entered into a $300 million accelerated share repurchase agreement (ASR Agreement) with an investment bank. The company funded the ASR Agreement with available cash. Under the ASR Agreement, 3.6 million shares were received by the company upon execution. At final settlement of the ASR Agreement, which is expected to occur no later than the second quarter of 2019, the investment bank may be required to deliver additional shares of common stock to the company or the company may be required to deliver shares of its common stock to the investment bank, with the number of shares to be delivered based on the volume-weighted average price of the company's common stock during the term of the ASR Agreement.

Credit Facilities, Access to Capital and Credit Ratings

Credit Facilities

As of December 31, 2018, the company's U.S. dollar-denominated senior revolving credit facility and Euro-denominated senior revolving credit facility had a maximum capacity of $1.5 billion and approximately €200 million, respectively, both maturing in 2020. As of December 31, 2018, the company was in compliance with the financial covenants in these agreements. The non-performance of any financial institution supporting either of the credit facilities would reduce the maximum capacity of these facilities by each institution's respective commitment. The company may, at its option, seek to increase the aggregate commitment under the U.S. facility by up to an additional $750 million. The facilities enable the company to borrow funds on an unsecured basis at variable interest rates, and contain various covenants, including a maximum net leverage ratio and maximum interest coverage ratio.

The company also maintains other credit arrangements, as described in Note 9 in Item 8 of this Annual Report on Form 10-K.

Access to Capital

The company intends to fund short-term and long-term obligations as they mature through cash on hand, future cash flows from operations or by issuing additional debt. In early 2019, the company has issued commercial paper as an additional source of financing. The company had $1.8 billion of cash and cash equivalents as of December 31, 2018, with adequate cash available to meet operating requirements in each jurisdiction in which the company operates. The company invests its excess cash in certificates of deposit and money market funds, and diversifies the concentration of cash among different financial institutions.

The company's ability to generate cash flows from operations, issue debt or enter into other financing arrangements on acceptable terms could be adversely affected if there is a material decline in the demand for the company's products or in the solvency of its customers or suppliers, deterioration in the company's key financial ratios or credit ratings or other significantly unfavorable changes in conditions. However, the company believes it has sufficient financial flexibility to issue debt, enter into other financing arrangements and attract long-term capital on acceptable terms to support the company's growth objectives.

The company continues to do business with foreign governments in certain countries, including Greece, Spain, Portugal and Italy, which have experienced deterioration in credit and economic conditions. As of December 31, 2018, the company's net accounts receivable from the public sector in Greece, Spain, Portugal and Italy totaled $130 million.

While these economic conditions have not significantly impacted the company's ability to collect receivables, global economic conditions and liquidity issues in certain countries have resulted, and may continue to result, in delays in the collection of receivables and credit losses.

Credit Ratings

The company's credit ratings at December 31, 2018 were as follows:

	Standard & Poor's	Fitch	Moody's
Ratings			
Senior debt	A-	A-	Baa1
Short-term debt	A2	F2	P2
Outlook	Stable	Stable	Stable

In the first quarter of 2018, Moody's upgraded Baxter's senior unsecured debt ratings from Baa2 to Baa1, and Fitch upgraded Baxter's senior unsecured debt ratings from BBB+ to A-.

Contractual Obligations

As of December 31, 2018, the company had contractual obligations, excluding accounts payable and accrued liabilities, payable or maturing in the following periods.

(in millions)	Total	One to

		Less than one year	three years	Three to five years	More than five years
Long-term debt and capital lease obligations, including current maturities	$3,495	$2	$706	$211	$2,576
Interest on short- and long-term debt and capital lease obligations [1]	1,421	101	196	180	944
Operating leases	646	122	179	135	210
Other long-term liabilities[2]	544	—	102	43	399
Purchase obligations[3]	576	350	165	54	7
Contractual obligations[4]	$6,682	$575	$1,348	$623	$4,136

[1] Interest payments on debt and capital lease obligations are calculated for future periods using interest rates in effect at the end of 2018. Projected interest payments include the related effects of interest rate swap agreements. Certain of these projected interest payments may differ in the future based on changes in floating interest rates, foreign currency fluctuations or other factors or events. The projected interest payments only pertain to obligations and agreements outstanding at December 31, 2018. Refer to Note 9 in Item 8 of this Annual Report on Form 10-K for further discussion regarding the company's debt instruments outstanding at December 31, 2018.

[2] The primary components of other long-term liabilities in the company's consolidated balance sheet are liabilities relating to pension and OPEB, litigation, and foreign currency hedges. The company projected the timing of the future cash payments based on contractual maturity dates (where applicable) and estimates of the timing of payments (for liabilities with no contractual maturity dates). The actual timing of payments could differ from the estimates.

The company contributed $69 million, $260 million and $772 million to its defined benefit pension and OPEB plans in 2018, 2017 and 2016, respectively. The timing of funding in the future is uncertain and is dependent on future movements in interest rates and investment returns, changes in laws and regulations, and other variables. Therefore, the table above excludes pension plan cash outflows. The pension plan balance included in other long-term liabilities (and excluded from the table above) totaled $888 million at December 31, 2018.

[3] Includes the company's significant contractual unconditional purchase obligations. For cancelable agreements, any penalty due upon cancellation is included. These commitments do not exceed the company's projected requirements and are in the normal course of business. Examples include firm commitments for raw material purchases, utility agreements and service contracts.

[4] Excludes contingent liabilities and uncertain tax positions. These amounts have been excluded from the contractual obligations above due to uncertainty regarding the timing and amount of future payments. Refer to Notes 11 and 16 in Item 8 of this Annual Report on Form 10-K for additional information regarding these commitments.

Off-Balance Sheet Arrangements

Baxter periodically enters into off-balance sheet arrangements. Certain contingencies arise in the normal course of business, and are not recorded in the consolidated balance sheet in accordance with GAAP (such as contingent joint development and commercialization arrangement payments). Also, upon resolution of uncertainties, the company may incur charges in excess of presently established liabilities for certain matters (such as contractual indemnifications). For a discussion of the company's significant off-balance sheet arrangements, refer to Note 11 in Item 8 of this Annual Report on Form 10-K for information regarding receivable transactions, Note 12 in Item 8 of this Annual Report on Form 10-K regarding joint development and commercialization arrangements and indemnifications, and Note 17 in Item 8 of this Annual Report on Form 10-K regarding legal contingencies.

FINANCIAL INSTRUMENT MARKET RISK

The company operates on a global basis and is exposed to the risk that its earnings, cash flows and equity could be adversely impacted by fluctuations in foreign exchange and interest rates. The company's hedging policy attempts to manage these risks to an acceptable level based on the company's judgment of the appropriate trade-off between risk, opportunity and costs. Refer to Note 10 and Note 11 in Item 8 of this Annual Report on Form 10-K for further information regarding the company's financial instruments and hedging strategies.

Currency Risk

The company is primarily exposed to foreign exchange risk with respect to revenues generated outside of the United States denominated in the Euro, British Pound, Chinese Yuan, Korean Won, Australian Dollar, Canadian Dollar, Japanese Yen, Colombian Peso, Brazilian Real, Mexican Peso, and Swedish Krona. The company manages its foreign currency exposures on a consolidated basis, which allows the company to net exposures and take advantage of any natural offsets. In addition, the company uses derivative and nonderivative financial instruments to further reduce the net exposure to foreign exchange. Gains and losses on the hedging instruments offset losses and gains on the hedged transactions and reduce the earnings and stockholders' equity volatility relating to foreign exchange. Financial market and currency volatility may limit the company's ability to cost-effectively hedge these exposures.

The company may use options, forwards and cross-currency swaps to hedge the foreign exchange risk to earnings relating to forecasted transactions denominated in foreign currencies and recognized assets and liabilities. The maximum term over which the company has cash flow hedge contracts in place related to forecasted transactions at December 31, 2018 is 15 months. The company also enters into derivative instruments to hedge certain intercompany and third-party receivables and payables and debt denominated in foreign currencies.

As part of its risk-management program, the company performs sensitivity analyses to assess potential changes in the fair value of its foreign exchange instruments relating to hypothetical and reasonably possible near-term movements in foreign exchange rates.

A sensitivity analysis of changes in the fair value of foreign exchange option and forward contracts outstanding at December 31, 2018, while not predictive in nature, indicated that if the U.S. Dollar uniformly weakened by 10% against all currencies, on a net-of-tax basis, the net asset balance of $16 million with respect to those contracts would decrease by $26 million, resulting in a net liability position. A similar analysis performed with respect to option and forward contracts outstanding at December 31, 2017 indicated that, on a net-of-tax basis, the net asset balance of $7 million would decrease by $25 million, resulting in a net liability position.

The sensitivity analysis model recalculates the fair value of the foreign exchange option and forward contracts outstanding at December 31, 2018 by replacing the actual exchange rates at December 31, 2018 with exchange rates that are 10% weaker compared to the actual exchange rates for each applicable currency. All other factors are held constant. These sensitivity analyses disregard the

possibility that currency exchange rates can move in opposite directions and that gains from one currency may or may not be offset by losses from another currency. The analyses also disregard the offsetting change in value of the underlying hedged transactions and balances.

The company’s operations in Argentina are reported using highly inflationary accounting effective July 1, 2018. Changes in the value of the Argentine peso applied to our peso-denominated net monetary asset positions are recorded in income at the time of the change. As of December 31, 2018, the company’s net monetary assets denominated in Argentine pesos are not significant.

Interest Rate and Other Risks

The company is also exposed to the risk that its earnings and cash flows could be adversely impacted by fluctuations in interest rates. The company’s policy is to manage interest costs using a mix of fixed- and floating-rate debt that the company believes is appropriate. To manage this mix in a cost-efficient manner, the company periodically enters into interest rate swaps in which the company agrees to exchange, at specified intervals, the difference between fixed and floating interest amounts calculated by reference to an agreed-upon notional amount. The company also periodically uses forward-starting interest rate swaps and treasury rate locks to hedge the risk to earnings associated with fluctuations in interest rates relating to anticipated issuances of term debt.

As part of its risk management program, the company performs sensitivity analyses to assess potential gains and losses in earnings relating to hypothetical movements in interest rates. A 13 basis-point increase in interest rates (approximately 10% of the company’s weighted-average interest rate during 2018) affecting the company’s financial instruments, including debt obligations and related derivatives, would have an immaterial effect on the company’s 2018, 2017 and 2016 earnings and on the fair value of the company’s fixed-rate debt as of the end of each fiscal year.

CHANGES IN ACCOUNTING STANDARDS

Refer to Note 1 in Item 8 of this Annual Report on Form 10-K for information on changes in accounting standards.

CRITICAL ACCOUNTING POLICIES

The preparation of financial statements in accordance with GAAP requires the company to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses. A summary of the company’s significant accounting policies is included in Note 1 in Item 8 of this Annual Report on Form 10-K. Certain of the company’s accounting policies are considered critical because these policies are the most important to the depiction of the company’s financial statements and require significant, difficult or complex judgments by the company, often requiring the use of estimates about the effects of matters that are inherently uncertain. Actual results that differ from the company’s estimates could have an unfavorable effect on the company’s results of operations and financial position. The following is a summary of accounting policies that the company considers critical to the consolidated financial statements.

Revenue Recognition and Related Provisions and Allowances

The company’s revenues from product sales are recorded at the net sales price (transaction price), which includes estimates of variable consideration for reserves related to rebates, product returns, sales discounts and wholesaler chargebacks. These reserves are based on estimates of the amounts earned or to be claimed on the related sales. Management's estimates take into consideration historical experience, current contractual and statutory requirements, specific known market events and trends, industry data, and forecasted customer buying and payment patterns. Overall, these reserves reflect the company’s best estimates of the amount of consideration to which it is entitled based

on the terms of the contract. The amount of variable consideration included in the net sales price is limited to the amount that is probable not to result in a significant reversal in the amount of the cumulative revenue recognized in a future period.

The company's contracts with customers often include promises to transfer multiple products and services to a customer. Determining whether products and services are considered distinct performance obligations that should be accounted for separately may require significant judgment.

The new standard related to revenue recognition has not had a material impact on the company's consolidated financial statements as compared to historical revenue recognition guidelines. Refer to Note 1 within Item 8 of this Annual Report on Form 10-K for further information.

The company periodically and systematically evaluates the collectability of accounts receivable and determines the appropriate reserve for doubtful accounts. In determining the amount of the reserve, the company considers historical credit losses, the past-due status of receivables, payment history and other customer-specific information, and any other relevant factors or considerations.

The company also provides for the estimated costs that may be incurred under its warranty programs when the cost is both probable and reasonably estimable, which is at the time the related revenue is recognized. The cost is determined based on actual company experience for the same or similar products as well as other relevant information. Estimates of future costs under the company's warranty programs could change based on developments in the future.

Pension and OPEB Plans

The company provides pension and other postemployment benefits to certain of its employees. The service component of employee benefit expenses is reported in the same line items in the consolidated income statement as the applicable employee's compensation expense. All other components of these employee benefit expenses are reported in other (income) expense, net in the consolidated income statement. The valuation of the funded status and net periodic benefit cost for the plans is calculated using actuarial assumptions. These assumptions are reviewed annually, and revised if appropriate. The significant assumptions include the following:

- interest rates used to discount pension and OPEB plan liabilities;
- the long-term rate of return on pension plan assets;
- rates of increases in employee compensation (used in estimating liabilities);
- anticipated future healthcare trend rates (used in estimating the OPEB plan liability); and
- other assumptions involving demographic factors such as retirement, mortality and turnover (used in estimating liabilities).

Selecting assumptions involves an analysis of both short-term and long-term historical trends and known economic and market conditions at the time of the valuation (also called the measurement date). The use of different assumptions would result in different measures of the funded status and net cost. Actual results in the future could differ from expected results.

The company's key assumptions are listed in Note 14 in Item 8 of this Annual Report on Form 10-K. The most critical assumptions relate to the plans covering U.S. and Puerto Rico employees, because these plans are the most significant to the company's consolidated financial statements.

Discount Rate Assumption

Effective for the December 31, 2018 measurement date, the company utilized discount rates of 4.31% and 4.20% to measure its benefit obligations for the U.S. and Puerto Rico pension plans and OPEB plan, respectively. The company used a broad population of approximately 200 Aa-rated corporate bonds as of December 31, 2018 to determine the discount rate assumption. All bonds were denominated in U.S. dollars, with a minimum amount outstanding of $50 million. This population of bonds was narrowed from a broader universe of approximately 700 Moody's Aa rated, non-callable (or callable with make-whole provisions) bonds by eliminating the top 10th percentile and bottom 40th percentile to adjust for any pricing anomalies and to represent the bonds Baxter would most likely select if it were to actually annuitize its pension and OPEB plan liabilities. This portfolio of bonds was used to generate a yield curve and associated spot rate curve to discount the projected benefit payments for the U.S. and Puerto Rico plans. The discount rate is the single level rate that produces the same result as the spot rate curve.

For plans in Canada, Japan, the United Kingdom and other European countries, the company uses a method essentially the same as that described for the U.S. and Puerto Rico plans. For the company's other international plans, the discount rate is generally determined by reviewing country- and region-specific government and corporate bond interest rates.

To understand the impact of changes in discount rates on pension and OPEB plan cost, the company performs a sensitivity analysis. Holding all other assumptions constant, for each 50 basis point (i.e., one-half of one percent)

increase in the discount rate, global pre-tax pension and OPEB plan cost would decrease by approximately $27 million, and for each 50 basis point decrease in the discount rate, global pre-tax pension and OPEB plan cost would increase by approximately $30 million.

Return on Plan Assets Assumption

In measuring the net periodic cost for 2018, the company used a long-term expected rate of return of 6.25% for the pension plans covering U.S. and Puerto Rico employees. This assumption will not change in 2019. This assumption is not applicable to the company's OPEB plan because it is not funded.

The company establishes the long-term asset return assumption based on a review of historical compound average asset returns, both company-specific and relating to the broad market (based on the company's asset allocation), as well as an analysis of current market

and economic information and future expectations. The current asset return assumption is supported by historical market experience for both the company's actual and targeted asset allocation. In calculating net pension cost, the expected return on assets is applied to a calculated value of plan assets, which recognizes changes in the fair value of plan assets in a systematic manner over five years. The difference between this expected return and the actual return on plan assets is a component of the total net unrecognized gain or loss and is subject to amortization in the future.

To understand the impact of changes in the expected asset return assumption on net cost, the company performs a sensitivity analysis. Holding all other assumptions constant, for each 50 basis point increase (decrease) in the asset return assumption, global pre-tax pension plan cost would decrease (increase) by approximately $25 million.

Other Assumptions

For the U.S. and Puerto Rico plans, beginning with the December 31, 2018 measurement date, the company used the RP 2014 combined mortality table adjusted to reflect Baxter specific past experience with improvements projected using the MP-2018 projection scale adjusted to a long term improvement of 0.8% in 2034. For all other pension plans, the company utilized country- and region-specific mortality tables to calculate the plans' benefit obligations. The company periodically analyzes and updates its assumptions concerning demographic factors such as retirement, mortality and turnover, considering historical experience as well as anticipated future trends.

The assumptions relating to employee compensation increases and future healthcare costs are based on historical experience, market trends, and anticipated future company actions. Refer to Note 14 in Item 8 of this Annual Report on Form 10-K for information regarding the sensitivity of the OPEB plan obligation and the total of the service and interest cost components of OPEB plan cost to potential changes in future healthcare trend rates.

Legal Contingencies

The company is involved in product liability, patent, commercial, regulatory and other legal proceedings that arise in the normal course of business. Refer to Note 17 in Item 8 of this Annual Report on Form 10-K for further information. The company records a liability when a loss is considered probable and the amount can be reasonably estimated. If the reasonable estimate of a probable loss is a range, and no amount within the range is a better estimate, the minimum amount in the range is accrued. If a loss is not probable or a probable loss cannot be reasonably estimated, no liability is recorded. The company has established reserves for certain of its legal matters. At December 31, 2018, total legal liabilities were $34 million.

The company's loss estimates are generally developed in consultation with outside counsel and are based on analyses of potential outcomes. With respect to the recording of any insurance recoveries, after completing the assessment and accounting for the company's legal contingencies, the company separately and independently analyzes its insurance coverage and records any insurance recoveries that are probable of occurring at the gross amount that is expected to be collected. In performing the assessment, the company reviews available information, including historical company-specific and market collection experience for similar claims, current facts and circumstances pertaining to the particular insurance claim, the financial viability of the applicable insurance company or companies, and other relevant information.

While the liability of the company in connection with certain claims cannot be estimated and although the resolution in any reporting period of one or more of these matters could have a significant impact on the company's results of operations and cash flows for that period, the outcome of these legal proceedings is not expected to have a material adverse effect on the company's consolidated financial position. While the company believes it has valid defenses in these matters, litigation is inherently uncertain, excessive verdicts do occur, and the company may in the future incur material judgments or enter into material settlements of claims.

Deferred Tax Asset Valuation Allowances, Reserves for Uncertain Tax Positions and Tax Reform

The company maintains valuation allowances unless it is more likely than not that all or a portion of the deferred tax asset will be realized. Changes in valuation allowances are included in the company's tax provision in the period of change. In determining whether a valuation allowance is warranted, the company evaluates factors such as prior earnings history, expected future earnings, carryback and carryforward periods, and tax strategies that could potentially enhance the likelihood of realization of a deferred tax asset. The realizability assessments made at a given balance sheet date are subject to change in the future, particularly if earnings of a subsidiary are significantly higher or lower than expected, or if the company takes operational or tax planning actions that could impact the future taxable earnings of a subsidiary.

In the normal course of business, the company is audited by federal, state and foreign tax authorities, and is periodically challenged regarding the amount of taxes due. These challenges relate to the timing and amount of deductions and the allocation of income

among various tax jurisdictions. The company believes its tax positions comply with applicable tax law and the company intends to defend its positions. In evaluating the exposure associated with various tax filing positions, the company records reserves for uncertain tax positions in accordance with GAAP, based on the technical support for the positions, the company's past audit experience with similar situations, and potential interest and penalties related to the matters. The company's results of operations and effective tax rate in a given period could be impacted if, upon final resolution with taxing authorities, the company prevailed in positions for which reserves have been established, or was required to pay amounts in excess of established reserves.

On December 22, 2017, the 2017 Tax Act was enacted into law and the new legislation contains several key tax provisions that affected the company, including a one-time mandatory transition tax on accumulated foreign earnings and a reduction of the U.S. corporate income tax rate to 21% effective January 1, 2018, among others. The company was required to recognize the effect of the tax law changes in the period of enactment, such as determining the transition tax, remeasuring its U.S. deferred tax assets and liabilities as well as reassessing the net realizability of its deferred tax assets and liabilities. In December 2017, the SEC staff issued SAB 118 which allowed the company to record provisional amounts during a measurement period not to extend beyond one year of the enactment date. The company has completed its analysis in accordance with SAB 118 and has finalized the accounting for the initial impact of the 2017 Tax Act. Refer to Note 16 within Item 8 of this Annual Report on Form 10-K for further information.

Valuation of Intangible Assets, Including IPR&D

The company acquires intangible assets and records them at fair value. Valuations are generally completed for business acquisitions using a discounted cash flow analysis, incorporating the stage of completion and consideration of market participant assumptions. The most significant estimates and assumptions inherent in a discounted cash flow analysis include the amount and timing of projected future cash flows, the discount rate used to measure the risks inherent in the future cash flows, the assessment of the asset's life cycle, and the competitive and other trends impacting the asset, including consideration of technical, legal, regulatory, economic and other factors. Each of these factors and assumptions can significantly affect the value of the intangible asset.

Acquired in-process R&D (IPR&D) is the value assigned to acquired technology or products under development which have not received regulatory approval and have no alternative future use. Acquired IPR&D included in a business combination is capitalized as an indefinite-lived intangible asset. Development costs incurred after the acquisition are expensed as incurred. Upon receipt of regulatory approval of the related technology or product, the indefinite-lived intangible asset is then accounted for as a finite-lived intangible asset and amortized on a straight-line basis over its estimated useful life. If the R&D project is abandoned, the indefinite-lived intangible asset is charged to expense.

IPR&D acquired in transactions that are not business combinations is expensed immediately. For such transactions, payments made to third parties on or after regulatory approval are capitalized and amortized over the remaining useful life of the related asset, and are classified as intangible assets.

Due to the inherent uncertainty associated with R&D projects, there is no assurance that actual results will not differ materially from the underlying assumptions used to prepare discounted cash flow analyses, nor that the R&D project will result in a successful commercial product.

Impairment of Goodwill and Other Long-Lived Assets

Goodwill and other indefinite-lived intangible assets are subject to impairment reviews annually, and whenever indicators of impairment exist. The company assesses goodwill for impairment based on its reporting units, which are

the same as its operating segments. Goodwill is tested for impairment by performing either a qualitative or quantitative evaluation. The qualitative evaluation is an assessment of factors to determine whether it is more likely than not that the fair value of a reporting unit is less than its carrying amount, including goodwill. As of December 31, 2018, the date of the company's annual impairment review, the company determined that the fair values of the company's reporting units were more likely than not in excess of their carrying values. The company performs a qualitative assessment of other indefinite-lived intangible assets, including IPR&D, at least annually. If the intangible asset is determined to be more likely than not impaired as a result of the assessment, the company completes a quantitative impairment test. Intangible assets with definite lives and other long-lived assets (such as fixed assets) are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Refer to Note 1 in Item 8 of this Annual Report on Form 10-K for further information. Fair value measurements used in impairment reviews are based on an estimated future cash flow approach that requires significant judgment with respect to future volume, revenue and expense growth rates, changes in working capital use, foreign currency exchange rates, the selection of an appropriate discount rate, asset groupings, and other assumptions and estimates. The estimates and assumptions used are consistent with the company's business plans and reflect its judgements about the estimates and assumptions that market participants would use in valuing the related assets. The use of alternative estimates and assumptions could increase or decrease the estimated fair values of the assets, and potentially result in different impacts to the company's results of operations. Actual results may differ from the company's estimates.

CERTAIN REGULATORY MATTERS

The U.S. Food and Drug Administration (FDA) commenced an inspection of Claris' facilities in Ahmedabad, India in July 2017, immediately prior to the closing of the Claris acquisition. FDA completed the inspection, at which time FDA issued a related Form-483 (Claris 483). In July 2018, FDA issued a Warning Letter based on observations identified in the 2017 inspection (Claris Warning Letter).[1] The Claris Warning Letter includes a number of observations across a variety of areas. The company submitted its response to the Claris Warning Letter in August 2018 and is continuing to implement corrective and preventive actions, which have included product recalls that are financially immaterial to the company, to address FDA's observations as set forth in the Claris 483 or the Claris Warning Letter and other items identified in connection with integrating Claris into the company's quality systems. The company had a Regulatory Meeting with FDA on November 6, 2018 and continues to cooperate with FDA in connection with the resolution of these matters.

In June 2013, the company received a Warning Letter from FDA regarding operations and processes at its North Cove, North Carolina and Jayuya, Puerto Rico facilities. The company attended Regulatory Meetings with FDA regarding one or both of these facilities in October 2014, November 2015, July 2017, April 2018 and October 2018. The Warning Letter addresses observations related to Current Good Manufacturing Practice violations at the two facilities.

Refer to Item 1A of this Annual Report on Form 10-K for additional discussion of regulatory matters and how they may impact the company.

[1] Available online at https://www.fda.gov/ICECI/EnforcementActions/WarningLetters/ucm613538.htm

FORWARD-LOOKING INFORMATION

This annual report includes forward-looking statements. Use of the words "may," "will," "would," "could," "should," "believes," "estimates," "projects," "potential," "expects," "plans," "seeks," "intends," "evaluates," "pursues," "anticipates," "continues," "impacts," "affects," "forecasts," "target," "outlook," "initiative," "objective," "designed," "priorities," "goal," or the negative of these words or other similar expressions is intended to identify forward-looking statements that represent our current judgment about possible future events. These forward-looking statements may include statements with respect to accounting estimates and assumptions, litigation-related matters including outcomes, future regulatory filings and the company's R&D pipeline (including estimates regarding the company's ability to obtain approval for distribution in the U.S. of new products manufactured at its Baxter Ahmedabad facility), strategic objectives, sales from new product offerings, credit exposure to foreign governments, potential developments with respect to credit ratings, investment of foreign earnings, estimates of liabilities including those related to uncertain tax positions, contingent payments, future pension plan contributions, costs, discount rates and rates of return, the company's exposure to financial market volatility and foreign currency and interest rate risks, potential tax liability associated with the separation of the company's biopharmaceuticals and medical products businesses (including the 2016 disposition of the company's formerly retained shares in Baxalta (Retained Shares)), the impact of competition, future sales growth, business development activities (including the recent acquisitions of Claris Injectables and two surgical products from Mallinckrodt plc), Hurricane Maria related production disruptions, business optimization initiatives, cost saving initiatives, future capital and R&D expenditures, future debt issuances, manufacturing expansion, the sufficiency of

the company's facilities and financial flexibility, the adequacy of credit facilities, tax provisions and reserves, the effective tax rate and all other statements that do not relate to historical facts.

These forward-looking statements are based on certain assumptions and analyses made in light of the company's experience and perception of historical trends, current conditions, and expected future developments as well as other factors that the company believes are appropriate in the circumstances. While these statements represent the company's current judgment on what the future may hold, and the company believes these judgments are reasonable, these statements are not guarantees of any events or financial results. Whether actual future results and developments will conform to expectations and predictions is subject to a number of risks and uncertainties, including the following factors, many of which are beyond our control:

- failure to achieve our long-term financial improvement goals;
- demand for and market acceptance risks for and competitive pressures related to new and existing products (including challenges with the company's ability to accurately predict these pressures and the resulting impact on customer inventory levels), and the impact of those products on quality and patient safety concerns;
- product development risks, including satisfactory clinical performance, the ability to manufacture at appropriate scale, and the general unpredictability associated with the product development cycle;
- the company's ability to finance and develop new products or enhancements on commercially acceptable terms or at all;

- the company's ability to identify business development and growth opportunities and to successfully execute on business development strategies;
- product quality or patient safety issues, leading to product recalls, withdrawals, launch delays, warning letters (including the Claris Warning Letter), import bans, sanctions, seizures, litigation, or declining sales;
- the continuity, availability and pricing of acceptable raw materials and component supply, and the related continuity of our manufacturing and distribution;
- inability to create additional production capacity in a timely manner or the occurrence of other manufacturing or supply difficulties (including as a result of natural disaster or otherwise);
- breaches or failures of the company's information technology systems or products, including by cyber-attack, unauthorized access or theft;
- future actions of (or failures to act or delays in acting by) FDA, the European Medicines Agency or any other regulatory body or government authority (including the DOJ or the Attorney General of any State) that could delay, limit or suspend product development, manufacturing or sale or result in seizures, recalls, injunctions, monetary sanctions or criminal or civil liabilities;
- failures with respect to the company's quality, compliance or ethics programs;
- future actions of third parties, including third-party payers, the impact of healthcare reform and its implementation, suspension, repeal, replacement, amendment, modification and other similar actions undertaken by the United States or foreign governments, including with respect to pricing, reimbursement, taxation and rebate policies; legislation, regulation and other governmental pressures in the United States or globally, including the cost of compliance and potential penalties for purported noncompliance thereof, all of which may affect pricing, reimbursement, taxation and rebate policies of government agencies and private payers or other elements of the company's business, including new or amended laws, rules and regulations (such as the California Consumer Privacy Act of 2018 and the European Union's General Data Protection Regulation which became effective in May 2018, for example);
- the impact of competitive products and pricing, including generic competition, drug reimportation and disruptive technologies;
- global regulatory, trade and tax policies;
- the ability to protect or enforce the company's owned or in-licensed patent or other proprietary rights (including trademarks, copyrights, trade secrets and know-how) or patents of third parties preventing or restricting the company's manufacture, sale or use of affected products or technology;
- the impact of any goodwill impairments on our operating results;
- any failure by Baxalta or Shire to satisfy its obligations under the separation agreements, including the tax matters agreement, or that certain letter agreement entered into with Shire and Baxalta;
- the impact of global economic conditions (including potential trade wars) on the company and its customers and suppliers, including foreign governments in countries in which the company operates;
- fluctuations in foreign exchange and interest rates;
- any changes in law concerning the taxation of income (whether with respect to current or future tax reform), including income earned outside the United States;
- actions by tax authorities in connection with ongoing tax audits;
- loss of key employees or inability to identify and recruit new employees;
- the outcome of pending or future litigation;
- the adequacy of the company's cash flows from operations to meet its ongoing cash obligations and fund its investment program; and
- other factors identified elsewhere in this Annual Report on Form 10-K including those factors described in Item 1A and other filings with the Securities and Exchange Commission, all of which are available on the company's website.

Actual results may differ materially from those projected in the forward-looking statements. The company does not undertake to update its forward-looking statements.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk.

Incorporated by reference to the section entitled “Financial Instrument Market Risk” in “Management’s Discussion and Analysis of Financial Condition and Results of Operations” in Item 7 of this Annual Report on Form 10-K.

Item 8. Financial Statements and Supplementary Data.

CONSOLIDATED BALANCE SHEETS

as of December 31 (in millions, except share information)		2018	2017
Current assets	Cash and cash equivalents	$1,832	$3,394
	Accounts and other current receivables, net	1,812	1,793
	Inventories	1,653	1,475
	Prepaid expenses and other	622	601
	Total current assets	5,919	7,263
Property, plant and equipment, net		4,542	4,588
Other assets	Goodwill	2,958	3,099
	Other intangible assets, net	1,398	1,374
	Other	824	787
	Total other assets	5,180	5,260
	Total assets	$15,641	$17,111
Current liabilities	Short-term debt	$2	$—
	Current maturities of long-term debt and lease obligations	2	3
	Accounts payable and accrued liabilities	2,728	2,733
	Current income taxes payable	104	85
	Total current liabilities	2,836	2,821
Long-term debt and lease obligations		3,473	3,509
Other long-term liabilities		1,516	1,665
	Total liabilities	7,825	7,995
Commitments and contingencies			
Equity	Common stock, $1 par value, authorized 2,000,000,000 shares, issued 683,494,944 shares in 2018 and 2017	683	683
	Common stock in treasury, at cost, 170,495,859 shares in 2018 and 142,017,600 shares in 2017	(9,989)	(7,981)
	Additional contributed capital	5,898	5,940
	Retained earnings	15,626	14,483
	Accumulated other comprehensive (loss) income	(4,424)	(4,001)
	Total Baxter stockholders' equity	7,794	9,124
	Noncontrolling interests	22	(8)
	Total equity	7,816	9,116
	Total liabilities and equity	$15,641	$17,111

The accompanying notes are an integral part of these consolidated financial statements.

CONSOLIDATED STATEMENTS OF INCOME

years ended December 31 (in millions, except per share data)	2018	2017	2016
Net sales	$11,127	$10,561	$10,163
Cost of sales	6,346	6,091	6,047
Gross margin	4,781	4,470	4,116
Marketing and administrative expenses	2,617	2,566	2,725
Research and development expenses	655	613	646
Other operating income	(90)	—	—
Operating income	1,599	1,291	745
Net interest expense	45	55	66
Other (income) expense, net	(139)	19	(4,275)
Income from continuing operations before income taxes	1,693	1,217	4,954
Income tax expense (benefit)	63	493	(12)
Income from continuing operations	1,630	724	4,966
Loss from discontinued operations, net of tax	(6)	(7)	(1)
Net income	$1,624	$717	$4,965
Income from continuing operations per common share			
Basic	$3.05	$1.33	$9.10
Diluted	$2.99	$1.30	$9.01
Loss from discontinued operations per common share			
Basic	$(0.01)	$(0.01)	$(0.01)
Diluted	$(0.02)	$(0.01)	$—
Net income per common share			
Basic	$3.04	$1.32	$9.09
Diluted	$2.97	$1.29	$9.01
Weighted-average number of common shares outstanding			
Basic	534	543	546
Diluted	546	555	551

The accompanying notes are an integral part of these consolidated financial statements.

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

years ended December 31 (in millions)	2018	2017	2016
Net income	$1,624	$717	$4,965
Other comprehensive income (loss), net of tax:			
Currency translation adjustments, net of tax (benefit) expense of $58 in 2018, $91 in 2017 and ($39) in 2016	(461)	425	(247)
Pension and other employee benefits, net of tax expense (benefit) of $9 in 2018, $62 in 2017, and ($36) in 2016	32	141	(97)
Hedging activities, net of tax expense (benefit) of $3 in 2018, ($6) in 2017, and ($2) in 2016	9	(13)	(4)
Available-for-sale securities, net of tax expense of zero in 2018, 2017, and 2016, respectively	—	2	(4,432)
Total other comprehensive income (loss), net of tax	(420)	555	(4,780)
Comprehensive income	$1,204	$1,272	$185

The accompanying notes are an integral part of these consolidated financial statements.

CONSOLIDATED STATEMENTS OF CASH FLOWS

years ended December 31 (in millions) (brackets denote cash outflows)		2018	2017	2016
Cash flows from operations	Net income	$1,624	$717	$4,965
	Adjustments to reconcile income from continuing operations to net cash from operating activities:			
	Loss from discontinued operations, net of tax	6	7	1
	Depreciation and amortization	785	761	800
	Deferred income taxes	(267)	211	(302)
	Stock compensation	115	107	115
	Realized excess tax benefits from stock issued under employee benefit plans	—	—	(39)
	Net periodic pension benefit and OPEB costs	41	126	116
	Business optimization items	117	70	285
	Net realized gains on Baxalta common stock	—	—	(4,387)
	Other	35	36	246
	Changes in balance sheet items			
	Accounts and other current receivables, net	(12)	30	15
	Inventories	(197)	76	80
	Accounts payable and accrued liabilities	53	84	(197)
	Business optimization payments	(99)	(143)	(164)
	Other	(105)	(229)	90
	Cash flows from operations – continuing operations	2,096	1,853	1,624
	Cash flows from operations – discontinued operations	-	(16)	30
	Cash flows from operations	2,096	1,837	1,654
Cash flows from investing activities	Capital expenditures	(681)	(634)	(719)
	Acquisitions and investments, net of cash acquired	(268)	(686)	(48)
	Divestitures and other investing activities	11	10	37
	Cash flows from investing activities – continuing operations	(938)	(1,310)	(730)
	Cash flows from investing activities – discontinued operations	—	—	15
	Cash flows from investing activities	(938)	(1,310)	(715)
Cash flows from financing activities	Issuances of debt	—	633	1,641
	Payments of debt and capital lease obligations	(5)	(1)	(1,381)
	Debt extinguishment costs	—	—	(16)
	Decrease in debt with original maturities of three months or less, net	—	—	(300)
	Cash dividends on common stock	(376)	(315)	(268)
	Proceeds from stock issued under employee benefit plans	258	347	286
	Purchases of treasury stock	(2,452)	(564)	(292)
	Other	(28)	(39)	6

Cash flows from financing activities	(2,603)	61	(324)
Effect of foreign exchange rate changes on cash and cash equivalents	(117)	5	(27)
(Decrease) Increase in cash and cash equivalents	(1,562)	593	588
Cash and cash equivalents at beginning of year	3,394	2,801	2,213
Cash and cash equivalents at end of year	$1,832	$3,394	$2,801
Supplemental schedule of non-cash investing and financing activities			
Net proceeds on Retained Shares transactions	$—	$—	$4,387
Payment of obligations in exchange for Retained Shares	$—	$—	$3,646
Exchange of Baxter shares with Retained Shares	$—	$—	$611
(Increases) decreases in the accrual for capital expenditures	$(33)	$9	$28
Other supplemental information			
Interest paid, net of portion capitalized	$94	$80	$99
Income taxes paid	$302	$255	$500

The accompanying notes are an integral part of these consolidated financial statements.

CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY

as of and for the years ended December 31 (in millions)	2018 Shares	2018 Amount	2017 Shares	2017 Amount	2016 Shares	2016 Amount
Common stock						
Balance, beginning and end of year	683	$683	683	$683	683	$683
Common stock in treasury						
Beginning of year	142	(7,981)	144	(7,995)	136	(7,646)
Purchases of common stock	36	(2,415)	9	(564)	18	(902)
Stock issued under employee benefit plans and other	(8)	407	(11)	578	(10)	553
End of year	170	(9,989)	142	(7,981)	144	(7,995)
Additional contributed capital						
Beginning of year		5,940		5,958		5,902
Stock issued under employee benefit plans and other		17		(19)		43
Purchases of common stock		(60)		—		—
Other		1		1		13
End of year		5,898		5,940		5,958
Retained earnings						
Beginning of year		14,483		14,200		9,683
Net income		1,624		717		4,965
Dividends declared on common stock		(392)		(334)		(276)
Stock issued under employee benefit plans		(71)		(134)		(190)
Distribution of Baxalta		—		34		18
Adoption of new accounting standards		(18)		—		—
End of year		15,626		14,483		14,200
Accumulated other comprehensive income (loss)						
Beginning of year		(4,001)		(4,556)		224
Other comprehensive income (loss)		(420)		555		(4,780)
Adoption of new accounting standard		(3)		—		—
End of year		(4,424)		(4,001)		(4,556)
Total Baxter stockholders' equity		$7,794		$9,124		$8,290
Noncontrolling interests						
Beginning of year		$(8)		$(10)		$19
Change in noncontrolling interests		30		2		(29)
End of year		$22		$(8)		$(10)
Total equity		$7,816		$9,116		$8,280

The accompanying notes are an integral part of these consolidated financial statements.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

NOTE 1

SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Nature of Operations

Baxter International Inc., through its subsidiaries, provides a broad portfolio of essential healthcare products, including acute and chronic dialysis therapies; sterile intravenous (IV) solutions; infusion systems and devices; parenteral nutrition therapies; inhaled anesthetics; generic injectable pharmaceuticals; and surgical hemostat and sealant products. The company’s global footprint and the critical nature of its products and services play a key role in expanding access to healthcare in emerging and developed countries. These products are used by hospitals, kidney dialysis centers, nursing homes, rehabilitation centers, doctors’ offices and by patients at home under physician supervision. The company operates in three segments: Americas, EMEA and APAC, which are described in Note 18.

Use of Estimates

The preparation of the financial statements in conformity with generally accepted accounting principles (GAAP) requires the company to make estimates and assumptions that affect reported amounts and related disclosures. Actual results could differ from those estimates.

Basis of Presentation

The consolidated financial statements include the accounts of Baxter and its majority-owned subsidiaries that Baxter controls, after elimination of intercompany transactions. Certain reclassifications have been made to conform prior period consolidated financial statements to the current period presentation.

On November 18, 2018, Baxter acquired a controlling financial interest in its joint venture in Saudi Arabia. The acquisition allows the company to increase manufacturing output and utilize the facilities for additional capacity for certain products in the region. Beginning in the fourth quarter of 2018, the company consolidated the financial statements of the joint venture with the company's consolidated financial statements. Refer to Note 5 for additional information.

On March 16, 2018, Baxter acquired two hemostat and sealant products from Mallinckrodt plc: RECOTHROM Thrombin topical (Recombinant) and PREVELEAK Surgical Sealant for total consideration of $184 million. Beginning March 16, 2018, Baxter’s financial statements include the assets, liabilities and operating results of RECOTHROM and PREVELEAK. Refer to Note 5 for additional information.

On July 27, 2017, Baxter acquired 100 percent of Claris Injectables Limited (Claris), a wholly owned subsidiary of Claris Lifesciences Limited, for total cash consideration of approximately $629 million, net of cash acquired. Beginning July 27, 2017, Baxter’s financial statements include the assets, liabilities and operating results of Claris. Refer to Note 5 for additional information.

On July 1, 2015, Baxter completed the distribution of approximately 80.5% of the outstanding common stock of Baxalta Incorporated (Baxalta), to Baxter stockholders (the Distribution).

In 2016, Baxter disposed of its remaining 19.5% interest in Baxalta through a series of transactions including debt-for-equity exchanges, an equity-for-equity exchange and a contribution to its U.S. pension plan. As a result of these transactions, the company extinguished approximately $3.65 billion in company indebtedness, repurchased 11,526,638 Baxter shares and contributed 17,145,570 Baxalta shares to its U.S. pension plan. On June 3, 2016, Baxalta became a wholly-owned subsidiary of Shire plc (Shire). In January 2019, Takeda Pharmaceutical Company Limited (Takeda) acquired Shire.

References in this report to Baxalta prior to the Merger closing date refer to Baxalta as a stand-alone public company. References in this report to Baxalta subsequent to the Merger closing date refer to Baxalta as a subsidiary of Shire.

As a result of the separation, the consolidated statements of income, consolidated balance sheets, consolidated statements of cash flow, and related financial information reflect Baxalta’s operations, assets and liabilities, and cash flows as discontinued operations for all periods presented. Refer to Note 2 for additional information regarding the separation of Baxalta.

Currency restrictions enacted in Venezuela require Baxter to obtain approval from the Venezuelan government to exchange Venezuelan bolivars for U.S. dollars and require such exchange to be made at the official exchange rate established by the government. In the first quarter of 2016, the Venezuelan government moved from the three-tier exchange rate system to a two-tiered

exchange rate system and the official rate for food and medicine imports was adjusted from 6.3 to 10 bolivars per U.S. dollar. Due to a decline in transactions settled at the official rate or the secondary rate and limitations on the company's ability to repatriate funds generated by its Venezuela operations, the company concluded in the second quarter of 2017 that it no longer met the accounting criteria for control over its business in Venezuela and the company deconsolidated its Venezuelan operations on June 30, 2017. As a result of deconsolidating the Venezuelan operations, the company recorded a pre-tax charge of $33 million in other (income) expense, net in 2017. This charge included the write-off of the company's investment in its Venezuelan operations, related cumulative translation adjustments and elimination of intercompany amounts. Beginning in the third quarter of 2017, the company no longer included the results of its Venezuelan business in its consolidated financial statements. In 2018, the company liquidated its subsidiary in Venezuela and currently sells direct to distributors in that country through legal entities outside of Venezuela. These distributors purchase applicable products from the company in U.S. dollars and are responsible for importing those products into Venezuela.

In September 2017, Hurricane Maria caused damage to certain of the company's assets in Puerto Rico and disrupted operations. Insurance, less applicable deductibles and subject to any coverage exclusions, covers the repair or replacement of the company's assets that suffered loss or damage, and also provides coverage for interruption to its business, including lost profits, and reimbursement for other expenses and costs that have been incurred relating to the damages and losses suffered. In 2017, the company recorded $32 million of pre-tax charges related to damages caused by the hurricane, including $11 million related to the impairment of damaged inventory and fixed assets as well as $21 million of idle facility and other costs. These amounts were recorded as a component of cost of sales in the consolidated statement of income for year ended December 31, 2017. In 2018, the company recognized $42 million of insurance recoveries related to the previously mentioned asset impairments and idle facility and other costs suffered as a result of the hurricane. These benefits were recorded as a reduction of cost of sales and within other operating income in the consolidated statement of income for the year ended December 31, 2018. At this time, any additional insurance recoveries are not realizable, and accordingly, no additional amounts have been recorded as of December 31, 2018.

Revenue Recognition

The company adopted Accounting Standards Update (ASU) No. 2014-09, Revenue from Contracts with Customers (Topic 606) as of January 1, 2018. Results for the year ended December 31, 2018 are presented under Topic 606, while earlier periods are presented under previous guidance. See further discussion of the impact of Topic 606 below under the header "New Accounting Standards."

Revenue is recognized when obligations under the terms of a contract with a customer are satisfied; generally this occurs with the transfer of control of the company's products or services. The company's global payment terms are typically between 30-90 days. Revenue is measured as the amount of consideration the company expects to receive in exchange for transferring goods or providing services. A performance obligation is a promise in a contract to transfer a distinct good or service to the customer, and is the unit of account in the contract. A contract's transaction price is allocated to each distinct performance obligation and recognized as revenue when, or as, the performance obligation is satisfied. Some of the company's contracts have multiple performance obligations. For contracts with multiple performance obligations, the company allocates the contract's transaction price to each performance obligation using its best estimate of the standalone selling price of each distinct good or service in the contract.

The majority of the company's performance obligations are satisfied at a point in time. This includes sales of the company's broad portfolio of essential healthcare products across its geographic segments including acute and chronic dialysis therapies; sterile IV solutions; infusion systems and devices; parenteral nutrition therapies; inhaled anesthetics; generic injectable pharmaceuticals; and surgical hemostat and sealant products. For a majority of these sales, the company's performance obligation is satisfied upon delivery to the customer. Shipping and handling

activities are considered to be fulfillment activities and are not considered to be a separate performance obligation.

To a lesser extent, in all the company's segments, the company enters into other types of contracts including contract manufacturing arrangements, equipment leases, and certain subscription software and licensing arrangements. The company recognizes revenue for these arrangements over time or at a point in time depending on its evaluation of when the customer obtains control of the promised goods or services. Revenue is recognized over time when the company is creating or enhancing an asset that the customer controls as the asset is created or enhanced or the company's performance does not create an asset with an alternative use and the company has an enforceable right to payment for performance completed.

On December 31, 2018, the company had $8.4 billion of transaction price allocated to remaining performance obligations related to executed contracts with an original duration of one year or more which are primarily included in the Americas segment. Some contracts in the United States included in this amount contain index-dependent price increases, which are not known at this time. The company expects to recognize approximately 20% of this amount as revenue each in 2019, 2020, 2021, and 2022, 15% in 2023, and the remaining balance thereafter.

Significant Judgments

Revenues from product sales are recorded at the net sales price (transaction price), which includes estimates of variable consideration for reserves related to rebates, product returns, sales discounts and wholesaler chargebacks. These reserves are based on estimates of the amounts earned or to be claimed on the related sales and are included in accounts payable and accrued liabilities on the consolidated balance sheet. Management's estimates take into consideration historical experience, current contractual and statutory requirements, specific known market events and trends, industry data, and forecasted customer buying and payment patterns. Overall, these reserves reflect the company's best estimates of the amount of consideration to which it is entitled based on the terms of the contract using the expected value method. The amount of variable consideration included in the net sales price is limited to the amount that is probable not to result in a significant reversal in the amount of the cumulative revenue recognized in a future period. Revenue recognized in the current period related to performance obligations satisfied in prior periods was not material.

The company's contracts with customers sometimes include promises to transfer multiple products and services to a customer. Determining whether products and services are considered distinct performance obligations that should be accounted for separately versus together may require significant judgment. Judgment is also required to determine the stand-alone selling price for each distinct performance obligation and whether there is a discount to be allocated based on the relative stand-alone selling price of the various products and services.

Contract Balances

The timing of revenue recognition, billings and cash collections results in billed accounts receivable, unbilled receivables (contract assets), and customer advances and deposits (contract liabilities) on the consolidated balance sheet. Net trade accounts receivable at December 31, 2018 and January 1, 2018 were $1.7 billion. Generally, for certain contract manufacturing and software arrangements, revenue recognition occurs prior to billing, resulting in contract assets. These assets are reported on the consolidated balance sheet on an individual basis at the end of each reporting period. The contract asset balances at December 31, 2018 and January 1, 2018 were $80 million and $73 million, respectively. The contract assets as of December 31, 2018 are presented within accounts and other current receivables, net ($50 million) and other ($30 million) on the consolidated balance sheet. The company had contract assets of $33 million and $31 million as of December 31, 2018 and January 1, 2018, respectively, related to certain contract manufacturing arrangements for which revenue is recognized throughout the production cycle which typically lasts up to 90 days. The company had contract assets of $47 million and $42 million as of December 31, 2018 and January 1, 2018, respectively, related to certain software arrangements for which revenue is recognized upon delivery to the customer, however the customer is billed over time, generally between one and five years. The company had no contract liabilities as of December 31, 2018 and January 1, 2018, respectively.

Practical Expedients

The company applies a practical expedient to expense costs as incurred for costs to obtain a contract with a customer when the amortization period would have been one year or less. The company does not disclose the value of transaction price allocated to unsatisfied performance obligations for contracts with an original expected length of one year or less. The company has elected to use the practical expedient to not adjust the promised amount of consideration for the effects of a significant financing component if it is expected, at contract inception, that the period between when the company transfers a promised good or service to a customer, and when the customer pays for that good or service, will be one year or less. Additionally, all taxes assessed by a governmental authority that are both imposed on and concurrent with a specific revenue-producing transaction and collected from a customer are excluded

from revenue.

Accounts Receivable and Allowance for Doubtful Accounts

In the normal course of business, the company provides credit to its customers, performs credit evaluations of these customers and maintains reserves for potential credit losses. In determining the amount of the allowance for doubtful accounts, the company considers, among other items, historical credit losses, the past-due status of receivables, payment histories and other customer-specific information. Receivables are written off when the company determines they are uncollectible. The allowance for doubtful accounts was $110 million at December 31, 2018 and $120 million at December 31, 2017.

Product Warranties

The company provides for the estimated costs relating to product warranties at the time the related revenue is recognized. The cost is determined based on actual company experience for the same or similar products, as well as other relevant information. Product warranty liabilities are adjusted based on changes in estimates.

Cash and Cash Equivalents

Cash and cash equivalents include cash, certificates of deposit and money market funds with an original maturity of three months or less.

Inventories

as of December 31 (in millions)	2018	2017
Raw materials	$363	$347
Work in process	203	116
Finished goods	1,087	1,012
Inventories	$1,653	$1,475

Inventories are stated at the lower of cost (first-in, first-out method) or market value. Market value for raw materials is based on replacement costs, and market value for work in process and finished goods is based on net realizable value. The company reviews inventories on hand at least quarterly and records provisions for estimated excess, slow-moving and obsolete inventory, as well as inventory with a carrying value in excess of net realizable value.

Property, Plant and Equipment, Net

as of December 31 (in millions)	2018	2017
Land	$142	$144
Buildings and leasehold improvements	1,698	1,687
Machinery and equipment	6,331	6,220
Equipment with customers	1,457	1,403
Construction in progress	699	694
Total property, plant and equipment, at cost	10,327	10,148
Accumulated depreciation	(5,785)	(5,560)
Property, plant and equipment (PP&E), net	$4,542	$4,588

Depreciation expense is calculated using the straight-line method over the estimated useful lives of the related assets, which range from 20 to 50 years for buildings and improvements and from three to 15 years for machinery and equipment. Leasehold improvements are amortized over the life of the related facility lease (including any renewal periods, if appropriate) or the asset, whichever is shorter. Baxter capitalizes certain computer software and software development costs incurred in connection with developing or obtaining software for internal use as part of machinery and equipment. Capitalized software costs are amortized on a straight-line basis over the estimated useful lives of the software, and are included in depreciation expense. Straight-line and accelerated methods of depreciation are used for income tax purposes. Depreciation expense was $613 million in 2018, $607 million in 2017 and $632 million in 2016. Depreciation expense in 2018, 2017 and 2016 included accelerated depreciation of $9 million, $18 million and $48 million, respectively, related to business optimization and Baxalta separation costs.

In 2018, the estimated useful life of the company’s enterprise resource planning (ERP) software was extended from 2020 on a prospective basis based on the company’s commitment to upgrade, enhance and support its existing systems

through 2028. This change in estimate resulted in a reduction of depreciation expense of $24 million and increase in net income of $20 million, or $0.04 per diluted share, for the year ended December 31, 2018.

Acquisitions

Results of operations of acquired companies are included in the company's results of operations as of the respective acquisition dates. The purchase price of each acquisition is allocated to the net assets acquired based on estimates of their fair values at the date of the acquisition. Any purchase price in excess of these net assets is recorded as goodwill. The allocation of purchase price in certain cases may be subject to revision based on the final determination of fair values during the measurement period, which may be up to one year from the acquisition date.

Contingent consideration related to business combinations is recognized at the estimated fair value on the acquisition date. Subsequent changes to the fair value of contingent payments are recognized in earnings. Contingent payments related to acquisitions may consist of development, regulatory and commercial milestone payments, in addition to sales-based payments, and are valued using discounted cash flow techniques. The fair value of development, regulatory and commercial milestone payments reflects management's

expectations of probability of payment, and increases or decreases as the probability of payment or expectation of timing of payments changes. The fair value of sales-based payments is based upon probability-weighted future revenue estimates and increases or decreases as revenue estimates or expectation of timing of payments changes.

Research and Development

Research and development (R&D) costs, including R&D acquired in transactions that are not business combinations, are expensed as incurred. Pre-regulatory approval contingent milestone obligations to counterparties in collaborative arrangements which include acquired R&D are expensed when the milestone is achieved. Contingent milestone payments made to such counterparties on or after regulatory approval are capitalized and amortized over the remaining useful life of the related product. Amounts capitalized for such payments are included in other intangible assets, net of accumulated amortization.

Acquired in-process R&D (IPR&D) is the value assigned to technology or products under development acquired in a business combination which have not received regulatory approval and have no alternative future use.

Acquired IPR&D is capitalized as an indefinite-lived intangible asset. Development costs incurred after the acquisition are expensed as incurred. Upon receipt of regulatory approval of the related technology or product, the indefinite-lived intangible asset is accounted for as a finite-lived intangible asset and amortized on a straight-line basis over the estimated economic life of the related technology or product, subject to annual impairment reviews as discussed below. If the R&D project is abandoned, the indefinite-lived asset is charged to expense.

Collaborative Arrangements

The company enters into collaborative arrangements in the normal course of business. These collaborative arrangements take a number of forms and structures, and are designed to enhance and expedite long-term sales and profitability growth. These arrangements may provide that Baxter obtain commercialization rights to a product under development, and require Baxter to make upfront payments, contingent milestone payments, profit-sharing, and/or royalty payments. Baxter may be responsible for ongoing costs associated with the arrangements, including R&D cost reimbursements to the counterparty. See above regarding the accounting treatment of upfront and contingent payments. Any royalty and profit-sharing payments during the commercialization phase are expensed as cost of sales when they become due and payable.

Business Optimization Charges

The company records liabilities for costs associated with exit or disposal activities in the period in which the liability is incurred. Employee termination costs are primarily recorded when actions are probable and estimable. Costs for one-time termination benefits in which the employee is required to render service until termination in order to receive the benefits are recognized ratably over the future service period. Refer to the discussion below regarding the accounting for asset impairment charges.

Goodwill, Intangible Assets, and Other Long-Lived Assets

Goodwill is the excess of purchase price over the fair value of acquired assets and liabilities in a business combination. Goodwill is not amortized, but is subject to an impairment review annually and whenever indicators of impairment exist. The company has the option to assess goodwill for impairment by first performing a qualitative assessment to determine whether it is more-likely-than-not that the fair value of a reporting unit is less than its carrying amount. If the company determines that it is not more-likely-than-not that the fair value of a reporting unit is less than its carrying amount, then the two-step goodwill impairment test is not required to be performed. If the

company determines that it is more-likely-than-not that the fair value of a reporting unit is less than its carrying amount, or if it does not elect the option to perform an initial qualitative assessment, it performs the two-step goodwill impairment test. In the first step, the fair value of the reporting unit is compared with its book value including goodwill. If the fair value of the reporting unit is in excess of its book value, the related goodwill is not impaired and no further analysis is necessary. If the fair value of the reporting unit is less than its book value, there is an indication of potential impairment and a second step is performed. When required, the second step of testing involves calculating the implied fair value of goodwill for the reporting unit. The implied fair value of goodwill is determined in the same manner as goodwill recognized in a business combination, which is the excess of the fair value of the reporting unit determined in step one over the fair value of its net assets, including identifiable intangible assets, as if the reporting unit had been acquired. If the carrying amount of the reporting unit's goodwill exceeds the implied fair value of that goodwill, an impairment loss is recognized in an amount equal to that excess.

Indefinite-lived intangible assets, such as IPR&D acquired in business combinations and certain trademarks with indefinite lives, are subject to an impairment review annually and whenever indicators of impairment exist. The company has the option to assess indefinite-lived intangible assets for impairment by first performing qualitative assessments to determine whether it is more likely than

not that the fair values of its indefinite-lived intangible assets are less than the carrying amounts. If the company determines that it is more likely than not that an indefinite-lived intangible asset is impaired, or if it elects not to perform an initial qualitative assessment, it then performs the quantitative impairment test by comparing the fair value of the indefinite-lived intangible asset with its carrying amount. If the carrying amount exceeds the fair value of the indefinite-lived intangible asset, the company writes the carrying amount down to the fair value.

The company reviews the carrying amounts of long-lived assets, other than goodwill and intangible assets not subject to amortization, for potential impairment when events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. In evaluating recoverability, the company groups assets and liabilities at the lowest level such that the identifiable cash flows relating to the group are largely independent of the cash flows of other assets and liabilities. The company then compares the carrying amounts of the assets or asset groups with the related estimated undiscounted future cash flows. In the event impairment exists, an impairment charge is recorded as the amount by which the carrying amount of the asset or asset group exceeds the fair value.

Shipping and Handling Costs

Shipping costs, which are costs incurred to physically move product from Baxter’s premises to the customer’s premises, are classified as marketing and administrative expenses. Handling costs, which are costs incurred to store, move and prepare products for shipment, are classified as cost of sales. Approximately $329 million in 2018, $291 million in 2017 and $311 million in 2016 of shipping costs were classified in marketing and administrative expenses.

Income Taxes

Deferred taxes are recognized for the future tax effects of temporary differences between financial and income tax reporting based on enacted tax laws and rates. The company maintains valuation allowances unless it is more likely than not that the deferred tax asset will be realized. With respect to uncertain tax positions, the company determines whether the position is more likely than not to be sustained upon examination based on the technical merits of the position. Any tax position that meets the more likely than not recognition threshold is measured and recognized in the consolidated financial statements at the largest amount of benefit that is greater than 50% likely of being realized upon ultimate settlement. The liability relating to uncertain tax positions is classified as current in the consolidated balance sheets to the extent the company anticipates making a payment within one year. Interest and penalties associated with income taxes are classified in the income tax expense line in the consolidated statements of income.

Refer to the Recently Adopted Accounting Pronouncements section of this note and Note 16 for additional information related to the 2017 Tax Act.

Foreign Currency Translation

Currency translation adjustments (CTA) related to foreign operations are included in other comprehensive income (OCI). For foreign operations in highly inflationary economies, translation gains and losses are included in other (income) expense, net, and were not material in 2018, 2017 and 2016.

Derivatives and Hedging Activities

All derivative instruments are recognized as either assets or liabilities at fair value in the consolidated balance sheets and are classified as short-term or long-term based on the scheduled maturity of the instrument. The company designates certain of its derivative instruments as cash flow, fair value or net investment hedges.

For each derivative instrument that is designated and effective as a cash flow hedge, the gain or loss on the derivative is recorded in accumulated other comprehensive income (AOCI) and then recognized in earnings consistent with the underlying hedged item. Option premiums or net premiums paid are initially recorded as assets and reclassified to OCI over the life of the option, and then recognized in earnings consistent with the underlying hedged item. Cash flow hedges are classified in net sales, cost of sales, and net interest expense, and primarily related to forecasted third-party sales denominated in foreign currencies, forecasted intercompany sales denominated in foreign currencies and anticipated issuances of debt, respectively.

For each derivative instrument that is designated and effective as a fair value hedge, the gain or loss on the derivative is recognized immediately to earnings, and offsets the loss or gain on the underlying hedged item. Fair value hedges are classified in net interest expense, as they hedge the interest rate risk associated with certain of the company’s fixed-rate debt.

For a portion of the company's senior notes, the company has designated this debt as a hedge of its net investment in its European operations, and, as a result, mark to spot rate adjustments of the outstanding debt balances have been and will be recorded as a component of AOCI.

For derivative instruments that are not designated as hedges, the change in fair value is recorded directly to other (income) expense, net.

If it is determined that a derivative or nonderivative hedging instrument is no longer highly effective as a hedge, the company discontinues hedge accounting prospectively. If the company removes the cash flow hedge designation because the hedged forecasted transactions are no longer probable of occurring, any gains or losses are immediately reclassified from AOCI to earnings. Gains or losses relating to terminations of effective cash flow hedges in which the forecasted transactions are still probable of occurring are deferred and recognized consistent with the income or loss recognition of the underlying hedged items. If the company terminates a fair value hedge, an amount equal to the cumulative fair value adjustment to the hedged items at the date of termination is amortized to earnings over the remaining term of the hedged item. If the company removes the net investment hedge designation, any gains or losses recognized in AOCI are not reclassified to earnings until the company sells, liquidates, or deconsolidates the foreign investments that were being hedged.

Derivatives, including those that are not designated as a hedge, are principally classified in the operating section of the consolidated statements of cash flows.

Refer to Note 10 for further information regarding the company's derivative and hedging activities.

New Accounting Standards

Recently issued accounting standards not yet adopted

In February 2018, the Financial Accounting Standards Board (FASB) issued ASU No. 2018-02, Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income. As a result of the enactment of the 2017 Tax Act, the FASB issued new accounting guidance on the reclassification of certain tax effects from AOCI to retained earnings. The optional guidance is effective January 1, 2019, with early adoption permitted. The company plans to adopt this guidance and is currently evaluating the impact of this standard on its consolidated financial statements.

In August 2017, the FASB issued ASU No. 2017-12, Targeted Improvements to Accounting for Hedging Activities, which amends ASC 815, Derivatives and Hedging. The purpose of this ASU is to better align a company's risk management activities and financial reporting for hedging relationships, simplify the hedge accounting requirements, and improve the disclosures of hedging arrangements. The effective date for this ASU is January 1, 2019, with early adoption permitted. The company does not expect the adoption of this standard to have a material impact on its consolidated financial statements.

In February 2016, the FASB issued ASU No. 2016-02, Leases. In July 2018, the FASB issued an update to the leasing guidance to allow an additional transition option which would allow companies to adopt the standard as of the beginning of the year of adoption as opposed to the earliest comparative period presented. Under the new guidance, lessees are required to recognize a right-of-use asset and a lease liability on the balance sheet for all leases, other than those that meet the definition of a short-term lease. This ASU is effective for the company beginning January 1, 2019

and the company expects the adoption to materially increase assets and liabilities on the consolidated balance sheets related to those leases classified as operating and not recognized on the consolidated balance sheets under current GAAP. The company does not anticipate any material change on the consolidated balance sheets related to capital leases under current GAAP or to the consolidated statements of income and cash flows. Under the new standard, lessor accounting will be largely unchanged from current GAAP, however, disclosures will be expanded. The estimated impact of the adoption of this standard will be an increase to the company's assets and liabilities of less than 5% of total assets as of January 1, 2019.

Recently adopted accounting pronouncements

As of January 1, 2018, the company adopted ASU No. 2016-16, Income Taxes (Topic 740): Intra-Entity Transfers of Assets Other than Inventory. ASU No. 2016-16 generally accelerates the recognition of income tax consequences for asset transfers between entities under common control. Entities are required to adopt using a modified retrospective approach with a cumulative adjustment to opening retained earnings in the year of adoption for previously unrecognized income tax expense. The company recorded a net negative retained earnings adjustment of approximately $66 million upon adoption of the standard on January 1, 2018 related to the unrecognized income tax effects of asset transfers that occurred prior to adoption. Net income increased $14 million for the year ended December 31, 2018 as a result of the adoption of the standard.

As of January 1, 2018, the company adopted ASU No. 2016-01, Financial Instruments: Recognition and Measurement of Financial Assets and Liabilities. The new standard amends certain aspects of accounting and disclosure requirements of financial instruments, including the requirement that equity investments with readily determinable fair values be measured at fair value with changes in fair value recognized in the results of operations. For privately-held securities, the company elected the measurement alternative approach for its existing investments, which is applied prospectively upon adoption. This approach requires entities to measure their investments at cost minus impairment, if any, plus or minus changes resulting from observable price changes in orderly transactions for the identical or a similar investment of the same issuer. The adoption of this standard did not have a material impact on the company's consolidated financial statements.

As of January 1, 2018, the company adopted Topic 606, which amends the existing accounting standards for revenue recognition. ASU No. 2014-09 is based on principles that govern the recognition of revenue at an amount an entity expects to be entitled when products are transferred to customers. The primary impact of the new standard relates to the company's contract manufacturing operations and software arrangements. Certain contract manufacturing arrangements require revenue recognition over-time in situations in which the company produces products that have no alternative use and the company has an enforceable right to payment for performance completed to date, inclusive of a reasonable profit margin. This results in an acceleration of revenue recognition for certain contractual arrangements as compared to recognition under prior accounting literature. The new guidance also impacts the company's arrangements subject to previous software revenue recognition guidance, as the company is required to recognize as revenue a significant portion of the contract consideration upon delivery of the software compared to the previous practice of recognizing the contract consideration ratably over time for certain arrangements. The company adopted Topic 606 using the modified retrospective method. The adjustment upon adoption increased the company's opening balance of retained earnings by approximately $45 million, net of tax, on January 1, 2018. The impact to net sales as a result of the adoption was an increase of $7 million for the year ended December 31, 2018. The impact to cost of sales was not material for the year ended December 31, 2018.

As of January 1, 2018, the company adopted ASU No. 2017-07, Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost, which amends ASC 715, Compensation – Retirement Benefits, to require employers that present a measure of operating income in their statements of earnings to include only the service cost component of net periodic benefit cost in operating expenses. Under that guidance, the service cost component of net periodic pension and postretirement benefit cost are presented in the same operating expense line items as other employee compensation costs arising from services rendered during the period. The other components of net periodic pension and postretirement benefit cost, including interest costs, expected return on assets, amortization of prior service cost/credit and actuarial gains/losses, and settlement and curtailment effects, are presented within other income (expense), net in the consolidated statements of income. This guidance impacted the presentation of the components of net periodic benefit cost in the consolidated statements of income with no impact on net income. The company elected to apply a practical expedient which allows it to reclassify amounts disclosed previously in the notes to the consolidated financial statements as the basis for applying retrospective presentation for prior comparative periods. The impact of the adoption of the standard was a decrease to operating income and an increase to other (income) expense, net of $48 million in 2018 and an increase to operating income and a decrease to other (income) expense, net of $33 million and $21 million in 2017 and 2016, respectively.

As of January 1, 2017, the company adopted on a prospective basis ASU No. 2016-09, Improvements to Employee Share-Based Payment Accounting, which amends ASC Topic 718, Compensation – Stock Compensation. The updated guidance requires all tax effects related to share-based payments to be recorded in income tax expense in the consolidated statements of income. Previous guidance required that tax effects of deductions in excess of share-based compensation costs (windfall tax benefits) be recorded in additional paid-in capital, and tax deficiencies be recorded in additional paid-in capital to the extent of previously recognized windfall tax benefits, with the remainder recorded in income tax expense. The new guidance also requires the cash flows resulting from windfall tax benefits to be

reported as operating activities in the consolidated statements of cash flows, rather than the previous requirement to present windfall tax benefits as an inflow from financing activities. Net income and operating cash flow for 2018 and 2017 included windfall tax benefits of approximately $40 million and $56 million, respectively. Prior periods have not been restated and therefore, windfall tax benefits of $39 million for 2016 were not included in net income and were included as cash flows from financing activities in the consolidated statements of cash flows.

In December 2017, the SEC issued guidance for situations where the accounting for certain elements of the 2017 Tax Act could not be completed prior to the release of a company's financial statements. For specific elements of the 2017 Tax Act, the company determined a reasonable estimate for certain effects and recorded that estimate as a provisional amount in 2017. The guidance provided a measurement period to allow a company to account for these specific elements, which began in the reporting period that included the enactment of the 2017 Tax Act and ended when the company obtained, prepared and analyzed the information needed in order to complete its accounting assessments or one year, whichever occurred sooner. The resulting tax effects must be recognized in the period the assessment is complete, and included in income tax (benefit) expense, accompanied by appropriate disclosures. The measurement period closed in 2018 and the company recorded adjustments to reduce income tax expense by $207 million in 2018. Refer to Note 16 for additional information related to the 2017 Tax Act.

NOTE 2

SEPARATION OF BAXALTA INCORPORATED

On July 1, 2015, Baxter completed the distribution of approximately 80.5% of the outstanding common stock of Baxalta to Baxter stockholders (the Distribution). After giving effect to the Distribution, the company retained 19.5% of the outstanding common stock, or 131,902,719 shares of Baxalta (Retained Shares). The Distribution was made to Baxter's stockholders of record as of the close of business on June 17, 2015 (Record Date), who received one share of Baxalta common stock for each Baxter common share held as of the Record Date. As a result of the Distribution, Baxalta became an independent public company.

On June 3, 2016, Baxalta became a wholly-owned subsidiary of Shire through a merger of a wholly-owned Shire subsidiary with and into Baxalta, with Baxalta as the surviving subsidiary (the Merger). In January 2019, Takeda acquired Shire.

On July 1, 2015, Baxter transferred net assets of $4.1 billion to Baxalta as a result of the separation. In 2016 and 2017, Baxter recorded certain separation related adjustments within equity of $18 million and $34 million, respectively. For a portion of Baxalta's operations, the legal transfer of Baxalta's assets and liabilities did not occur with the separation of Baxalta on July 1, 2015 due to the time required to transfer marketing authorizations and other regulatory requirements in certain countries. Under the terms of the International Commercial Operations Agreement (ICOA), Baxalta was subject to the risks and entitled to the benefits generated by these operations and assets until legal transfer; therefore, the net economic benefit and any cash collected by these entities by Baxter was transferred to Baxalta. As of December 31, 2017, all operations and assets in all countries have been separated.

The following table is a summary of the operating results related to Baxalta, which have been reflected as discontinued operations for the years ended December 31, 2018, 2017 and 2016.

Years ended December 31 (in millions)	2018	2017	2016
Major classes of line items constituting income from discontinued operations before income taxes			
Net sales	$—	$ 7	$148
Cost of sales	—	(5)	(139)
Marketing and administrative expenses	—	(1)	(20)
Research and development expenses	—	—	—
Other (expense) income	(13)	—	1
Total (loss) income from discontinued operations before income taxes	(13)	1	(10)
Gain on disposal of discontinued operations	—	2	19
Income tax expense (benefit)	(7)	—	10
Total (loss) income from discontinued operations	$(6)	$ 3	$(1)

In 2016, the company transferred $161 million of net assets to Baxalta resulting in a pre-tax gain of $19 million. In 2017, the remaining assets were transferred resulting in a pre-tax gain of $2 million. These gains are recorded within (loss) income from discontinued operations, net of tax.

Baxter and Baxalta entered into several additional agreements in connection with the July 1, 2015 separation, including a transition services agreement (TSA), separation and distribution agreement, manufacturing and supply agreements (MSA), tax matters agreement and a long-term services agreement.

Pursuant to the TSA, Baxter and Baxalta and their respective subsidiaries provided to each other, on an interim, transitional basis, various services. Services provided by Baxter included, among others, finance, information technology, human resources, quality, supply chain and certain other administrative services. The services generally commenced on the Distribution date and terminated as of July 1, 2018. Billings by Baxter under the TSA were recorded as a reduction of the costs to provide the respective service in the applicable expense category, primarily in marketing and administrative expenses, in the consolidated statements of income. In 2018, 2017 and 2016, the company recognized approximately $9 million, $56 million and $101 million, respectively, as a reduction to marketing and administrative expenses related to the TSA.

Pursuant to the MSA, Baxalta or Baxter, as the case may be, manufactures, labels, and packages products for the other party. The terms of the agreements range in initial duration from five to 10 years. In 2018, 2017 and 2016, Baxter recognized approximately $29 million, $22 million and $39 million, respectively, in sales to Baxalta. In addition, in 2018, 2017 and 2016, Baxter recognized approximately $152 million, $170 million and $189 million, respectively, in cost of sales related to purchases from Baxalta pursuant to the MSA. The cash flows associated with these agreements are included in cash flows from operations — continuing operations.

Cash outflows of $16 million in 2017 and inflows of $30 million in 2016 were reported in cash flows from operations – discontinued operations. These cash flows relate to non-assignable tenders whereby Baxter remained the seller of Baxalta products, transactions related to importation services Baxter provided in certain countries and trade payables settled following local separation on Baxalta's behalf.

NOTE 3

SUPPLEMENTAL FINANCIAL INFORMATION

Prepaid Expenses and Other

as of December 31 (in millions)	2018	2017
Prepaid value added taxes	$130	$134
Prepaid income taxes	79	99
Other	413	368
Prepaid expenses and other	$622	$601

Other Long-Term Assets

as of December 31 (in millions)	2018	2017
Deferred income taxes	$461	$408
Other long-term receivables	173	187
All other	190	192
Other long-term assets	$824	$787

Accounts Payable and Accrued Liabilities

as of December 31 (in millions)	2018	2017
Accounts payable, principally trade	$1,004	$920
Common stock dividends payable	101	87
Employee compensation and withholdings	485	548
Property, payroll and certain other taxes	130	143
Business optimization reserves	90	100
Accrued rebates	193	218
All other	725	717
Accounts payable and accrued liabilities	$2,728	$2,733

Other Long-Term Liabilities

as of December 31 (in millions)	2018	2017

Pension and other employee benefits	$1,113	$1,211
Deferred tax liabilities	205	280
Litigation reserves	28	27
Business optimization reserves	11	12
All other	159	135
Other long-term liabilities	$1,516	$1,665

Net Interest Expense

years ended December 31 (in millions)	2018	2017	2016
Interest costs	$105	$98	$107
Interest costs capitalized	(12)	(13)	(18)
Interest expense	93	85	89
Interest income	(48)	(30)	(23)
Net interest expense	$45	$55	$66

Other (Income) Expense, net

years ended December 31 (in millions)	2018	2017	2016
Foreign exchange	$(73)	$(50)	$(28)
Net loss on debt extinguishment	—	—	153
Net realized gains on Retained Shares transaction	—	—	(4,387)
Gain on sale of investments and other assets	(6)	(3)	(3)
Saudi Arabia joint venture gain	(24)	—	—
Venezuela deconsolidation	—	33	—
Pension and other postemployment benefit plans	(48)	33	21
All other	12	6	(31)
Other (income) expense, net	$(139)	$19	$(4,275)

NOTE 4

EARNINGS PER SHARE

The numerator for both basic and diluted earnings per share (EPS) is either net income, income from continuing operations, or loss from discontinued operations. The denominator for basic EPS is the weighted-average number of common shares outstanding during the period. The dilutive effect of outstanding stock options, restricted stock units (RSUs) and performance share units (PSUs) is reflected in the denominator for diluted EPS using the treasury stock method.

The following table is a reconciliation of basic shares to diluted shares.

years ended December 31 (in millions)	2018	2017	2016
Basic shares	534	543	546
Effect of dilutive securities	12	12	5
Diluted shares	546	555	551

The effect of dilutive securities included unexercised stock options, unvested RSUs and contingently issuable shares related to granted PSUs. The computation of diluted EPS excluded 3 million, 2 million, and nil equity awards in 2018, 2017, and 2016, respectively, because their inclusion would have had an anti-dilutive effect on diluted EPS. Refer to Note 13 for additional information regarding items impacting basic shares.

NOTE 5

ACQUISITIONS AND OTHER ARRANGEMENTS

Claris Injectables Limited

On July 27, 2017, Baxter acquired 100 percent of Claris, a wholly owned subsidiary of Claris Lifesciences Limited, for total cash consideration of approximately $629 million, net of cash acquired. Through the acquisition, Baxter added capabilities in production of essential generic injectable medicines, such as anesthesia and analgesics, renal, anti-infectives and critical care in a variety of presentations including bags, vials and ampoules.

In the third quarter of 2018, the company finalized its valuation of the acquisition date assets acquired and liabilities assumed. The measurement period adjustments in 2018 included a $2 million reduction in property, plant and equipment, a $1 million increase in accounts payable and accrued liabilities and a $2 million increase in other long-term liabilities. These adjustments resulted in a corresponding increase to goodwill of $5 million. The measurement period adjustments did not have a material impact on Baxter’s results of operations in 2018.

The following table summarizes the fair value of the assets acquired and liabilities assumed as of the acquisition date for the company’s acquisition of Claris:

(in millions)	
Assets acquired and liabilities assumed	
Cash	$11
Accounts and other current receivables	16
Inventories	30
Prepaid expenses and other	16
Property, plant and equipment	130
Goodwill	296
Other intangible assets	280
Other	20
Accounts payable and accrued liabilities	(23)
Other long-term liabilities	(136)
Total assets acquired and liabilities assumed	$640

The results of operations of Claris have been included in the company's consolidated statement of income since the date the business was acquired. The Claris acquisition contributed $140 million and $57 million, respectively, of net sales for the years ended December 31, 2018 and 2017. Acquisition and integration costs associated with the Claris acquisition were $33 million in 2018 and $28 million in 2017, and were primarily included within marketing and administrative expenses in the consolidated statements of income.

Baxter allocated $280 million of the total consideration to acquired intangible assets. The acquired intangible assets include $140 million of developed technology with a weighted-average useful life of eight years and $140 million of IPR&D with an indefinite useful life. For the IPR&D, additional R&D will be required prior to technological feasibility.

The fair value of intangible assets was determined using the income approach. The income approach is a valuation technique that provides an estimate of the fair value of an asset based on market participant expectations of the cash flows an asset will generate over its remaining useful life, discounted to present value. The discount rates used to measure the developed technology and IPR&D intangible assets were 12% and 13%, respectively. The company considers the fair value of each of the acquired intangible assets to be Level 3 measurements due to the significant estimates and assumptions used by management in establishing the estimated fair values. Refer to Note 11 for additional information regarding fair value measurements.

The goodwill, which is not deductible for tax purposes, includes the value of potential future technologies as well as the overall strategic benefits to Baxter in the injectables market, and is included in the Americas segment.

In the first quarter of 2018, Baxter and Claris Lifesciences Limited settled certain claims related to the acquired operations and terminated a development agreement with Dorizoe Lifesciences Limited. As a result, Baxter received $73 million in February 2018 and was released from an accrued liability to Claris Lifesciences Limited of $7 million. The total of $80 million is reflected as a benefit within other operating income in the 2018 consolidated statement of income.

RECOTHROM and PREVELEAK

On March 16, 2018, Baxter acquired two hemostat and sealant products from Mallinckrodt plc: RECOTHROM Thrombin topical (Recombinant), the first and only stand-alone recombinant thrombin, and PREVELEAK Surgical Sealant, which is used in vascular reconstruction. The company concluded that the acquired assets met the definition of a business and accounted for the transaction as a business combination using the acquisition method of accounting. The purchase price included an upfront payment of approximately $163 million in 2018. In addition, the purchase price included new and assumed contingent payments in the future related to inventory and technology transfer

milestones and net revenue royalty payments with an estimated fair value of $21 million as of the acquisition date. The maximum aggregate amounts payable for the inventory and technology transfer and net revenue royalties were $7 million, $15 million and $143 million, respectively. The fair value of the potential contingent consideration payments was estimated by applying a probability-weighted expected payment model for the inventory and technology transfer payments and a Monte Carlo simulation model for contingent royalty payments, which were then discounted to present value. The fair value measurements were based on Level 3 inputs. Refer to Note 11 for additional information regarding fair value measurements.

The following table summarizes total consideration:

(in millions)	
Cash	$163
Contingent consideration	21
Total consideration	$184

The following table summarizes the fair value of the assets acquired as of the acquisition date:

	(in millions)
Assets acquired	
Accounts receivable	$2
Inventory	80
Goodwill	2
Other intangible assets	100
Total assets acquired	$184

The valuations of the assets acquired are final. The results of operations of the acquired business have been included in the company's consolidated statement of income since the date the business was acquired. The RECOTHROM and PREVELEAK acquisitions contributed $52 million of net sales for the year ended December 31, 2018. Acquisition and integration costs, including incremental cost of sales relating to inventory fair value step-ups, associated with the acquisition were $17 million in 2018.

Baxter allocated $100 million of the total consideration to the RECOTHROM and PREVELEAK developed product rights with a weighted-average useful life of 10 years. The fair value of the intangible assets was determined using the income approach. The discount rates used to measure the RECOTHROM and PREVELEAK intangible assets were 12.5% and 13%, respectively. The company considers the fair value of the intangible assets to be Level 3 measurements due to the significant estimates and assumptions used by management in establishing the estimated fair values. Refer to Note 11 for additional information regarding fair value measurements.

The goodwill, which is deductible for tax purposes, includes the value of potential future technologies as well as the overall strategic benefits provided to Baxter's surgical portfolio of hemostats and sealants, and is included in the Americas segment.

Saudi Arabia Joint Venture

In November 2018, the company acquired additional equity to obtain a 51% controlling financial interest of its joint venture in Saudi Arabia that was previously accounted for under the equity method of accounting. The acquisition allows the company to increase manufacturing output and utilize the facilities for additional capacity for certain products in the region. Beginning in the fourth quarter of 2018, the company consolidated the financial statements of the joint venture with the company's consolidated financial statements. The results of operations of the joint venture have been included in the company's consolidated statement of income since the date the business was acquired and were not significant.

The guidance on accounting for business combinations requires that an acquirer remeasure its previously held equity interest in an acquiree at its acquisition date fair value and recognize the resulting gain or loss in earnings. Thus, in connection with the acquisition, the carrying amount of the company's previously held equity interest in the joint venture was remeasured to fair value at the acquisition date, resulting in a gain in the fourth quarter of 2018 of $24 million which was included in other (income) expense, net in the consolidated statement of income. The fair value of the equity interest on the acquisition date was $39 million and the company considers the fair value to be a Level 3 measurement due to the significant estimates and assumptions used by management in establishing the estimated fair value.

The following table summarizes the fair value of consideration transferred:

(in millions)	
Consideration transferred	
Cash	$2
Fair value of equity investment	39
Noncontrolling interest	39
Total consideration transferred	$80

The following table summarizes the fair value of assets acquired and liabilities assumed as of the acquisition date:

(in millions)	
Assets acquired and liabilities assumed	
Cash	$4
Accounts and other current receivables	25
Inventories	8
Property, plant and equipment	12
Goodwill	17
Other Intangible assets	40
Other	2
Short-term debt	(4)
Accounts payable and accrued liabilities	(16)
Other long-term liabilities	(8)
Total assets acquired and liabilities assumed	$80

The goodwill, which is not deductible for tax purposes, includes the value to create a more fully integrated supply chain and go-to-market business model, and is included in the EMEA segment.

In connection with the acquisition, the company reacquired certain license rights which had provided the joint venture with the exclusive and perpetual rights to manufacture and distribute Baxter products for sale in specified territories. Reacquired license rights with fair values totaling $10 million were assigned a useful life of 12 years. Other amortizable intangible assets consist of customer relationships and have a weighted-average estimated useful life of 10 years. The intangible assets were valued using the income approach. The discount rates used to measure the reacquired rights and customer relationship intangible assets were 13% and 14%, respectively. The company considers the fair value of each of the acquired intangible assets to be Level 3 measurements due to the significant estimates and assumptions used by management in establishing the estimated fair values.

The fair value of the 49% noncontrolling interest in the joint venture is estimated to be $39 million. The fair value of the noncontrolling interest was estimated using the income approach applied to the projected cash flows of the joint venture. As the joint venture is a private company, the fair value measurement is based on significant inputs that are not observable in the market and thus represents a Level 3 measurement.

Other Business Combinations

Total consideration transferred for other acquisitions totaled $36 million, $16 million and $4 million in 2018, 2017 and 2016, respectively, and primarily resulted in the recognition of intangible assets. These acquisitions did not materially affect the company’s results of operations.

The Company has not presented pro forma financial information for any of the 2018, 2017 or 2016 acquisitions because their results are not material to the company’s consolidated financial statements.

Other Business Development Activities

Celerity Pharmaceuticals, LLC

In September 2013, Baxter entered into an agreement with Celerity Pharmaceutical, LLC (Celerity) to develop certain acute care generic injectable premix and oncolytic molecules through regulatory approval. Baxter transferred its rights in these molecules to Celerity and Celerity assumed ownership and responsibility for development of the molecules. Baxter is obligated to purchase the individual product rights from Celerity if the products obtain regulatory approval. In 2018, 2017 and 2016, Baxter paid $72 million, $20 million and $23 million, respectively, to acquire the rights to various molecules. The payment in 2018 for one of the molecules was based on tentative approval from the U.S. Food and Drug Administration (FDA). Full approval from FDA was received in the third quarter of 2018. Baxter capitalized the purchase prices as intangible assets and is amortizing the assets over their estimated useful lives of 12 years. As of December 31, 2018, Baxter's contingent future payments total up to $163 million upon Celerity's achievement of specified regulatory approvals.

Other

In addition to the significant arrangements described above, Baxter has entered into several other collaborative arrangements. Baxter could make additional payments of up to $34 million upon the achievement of certain development and regulatory milestones, in addition to future payments related to contingent commercialization milestones, profit-sharing and royalties.

NOTE 6

GOODWILL AND OTHER INTANGIBLE ASSETS, NET

Goodwill

The following table is a summary of the activity in goodwill by segment.

(in millions)	Americas	EMEA	APAC	Total
December 31, 2016	$ 2,071	$ 329	$ 195	$2,595
Additions	242	38	23	$303
Currency translation and other adjustments	161	25	15	$201
December 31, 2017	$ 2,474	$ 392	$ 233	$3,099
Additions	16	17	—	33
Currency translation and other adjustments	(139)	(22)	(13)	(174)
December 31, 2018	$ 2,351	$ 387	$ 220	$2,958

As of December 31, 2018, there were no reductions in goodwill relating to impairment losses.

Other Intangible Assets, Net

The following table is a summary of the company’s other intangible assets.

(in millions)	Developed technology, including patents	Other amortized intangible assets	Indefinite-lived intangible assets	Total
December 31, 2018				
Gross other intangible assets	$ 2,115	$ 451	$ 188	$2,754
Accumulated amortization	(1,106)	(250)	—	(1,356)
Other intangible assets, net	$ 1,009	$ 201	$ 188	$1,398
December 31, 2017				
Gross other intangible assets	$ 2,002	$ 435	$ 172	$2,609
Accumulated amortization	(1,010)	(225)	—	(1,235)
Other intangible assets, net	$ 992	$ 210	$ 172	$1,374

Intangible asset amortization expense was $169 million in 2018, $154 million in 2017, and $163 million in 2016. The anticipated annual amortization expense for definite-lived intangible assets recorded as of December 31, 2018 is $172 million in 2019, $167 million in 2020, $161 million in 2021, $157 million in 2022 and $145 million in 2023.

In 2016, the company recorded an impairment charge of $27 million related to an indefinite-lived intangible asset (acquired IPR&D) relating to its in-center hemodialysis program. The asset was written down to estimated fair value and recorded in R&D expenses. Additionally, in 2016 the company recorded an impairment charge of $51 million, of which $41 million was related to a developed technology asset, relating to the company's synthetic bone repair products business which was acquired from ApaTech Limited in 2010. The assets of the business were written down to estimated fair value and the impairment charge was recorded in cost of sales.

NOTE 7

INFUSION PUMP CHARGES

In 2017, the company recorded a charge of $22 million related to a second field corrective action with respect to the SIGMA Spectrum Infusion Pump, which is predominantly sold in the United States. In 2018, the company recorded a partial reversal of the reserve of $6 million. Remediation primarily includes inspection and repair charges as well as a temporary replacement pump in a limited number of cases. The charges included estimated cash costs associated with remediation efforts and the remaining liability was insignificant as of December 31, 2018.

In 2014, the company recorded a charge of $93 million related to a field corrective action with respect to the SIGMA Spectrum Infusion Pump. FDA categorized the action as a Class 1 recall during the second quarter of 2014. Remediation primarily included software-related corrections and a replacement pump in a limited number of cases. In 2014, the company utilized $4 million of the established reserve. During 2015, the company refined its expectations relating to the costs associated with the remediation effort and recorded partial reversals of the cash and non-cash reserves totaling $26 million and $10 million, respectively. Additionally, the company utilized $13 million of the cash reserves during 2015. In 2016, the company recorded utilization of cash and non-cash reserves of $22 million and $3 million, respectively, as well as partial reversals of cash and non-cash reserves of $11 million and $1 million, respectively. As of December 31, 2016, the remediation efforts were substantially complete and the remaining costs and reserves were considered immaterial to the company.

NOTE 8

BUSINESS OPTIMIZATION CHARGES

Beginning in the second half of 2015, the company has initiated actions to transform the company's cost structure and enhance operational efficiency. These efforts include restructuring the organization, optimizing the manufacturing footprint, R&D operations and supply chain network, employing disciplined cost management, and centralizing and streamlining certain support functions. Through December 31, 2018 the company incurred cumulative pre-tax costs of $796 million related to these actions. The costs consisted primarily of employee termination, implementation costs, and accelerated depreciation. The company expects to incur additional pre-tax cash costs of approximately $75 million and capital expenditures of $50 million through the completion of these initiatives. These costs will primarily include employee termination costs, implementation costs, and accelerated depreciation.

In addition to the programs above, the company recorded additional net business optimization charges of $125 million in 2016. These charges primarily include employee termination costs, contract termination costs, asset impairments, and Gambro integration costs. Approximately 40% of these costs were non-cash. The company does not anticipate incurring any additional costs related to these 2016 programs in the future and these programs were substantially complete by the end of 2017.

The company recorded the following charges related to business optimization programs in 2018, 2017, and 2016:

years ended December 31 (in millions)	2018	2017	2016
Restructuring charges, net	$117	$70	$285
Costs to implement business optimization programs	94	89	65
Gambro integration costs	—	—	26
Accelerated depreciation	9	10	33
Total business optimization charges	$220	$169	$409

For segment reporting, business optimization charges are unallocated expenses.

Included in the restructuring charges for 2018 were employee termination costs of $100 million, which primarily consisted of a global workforce reduction program. In addition, $7 million of asset impairment charges related to facility closure costs and $10 million of other exit costs were incurred.

Included in the restructuring charges for 2017 were employee termination costs of $59 million, which primarily consisted of a global workforce reduction program. In addition, $6 million of asset impairment charges related to facility closure costs and $5 million of other exit costs were incurred.

Included in the restructuring charges for 2016 were employee termination costs of $180 million, which primarily consisted of a global workforce reduction program and $27 million related to the impairment of acquired IPR&D as described in Note 6. Restructuring charges for 2016 also included $54 million for costs associated with the discontinuation of the VIVIA home hemodialysis development program. These costs consist of contract termination costs of $21 million, asset impairments of $31 million and other exit costs of $2 million.

The company recorded the following components of restructuring costs in 2018, 2017 and 2016:

(in millions)	2018 COGS	SGA	R&D	Total
Employee termination costs	$38	$57	$ 21	$116
Contract termination and other costs	4	6	—	10
Asset impairments	1	6	—	7
Reserve adjustments				
Employee termination costs	(8)	(6)	(2)	(16)
Total restructuring charges	$35	$63	$ 19	$117

(in millions)	2017 COGS	SGA	R&D	Total
Employee termination costs	$31	$47	$ —	$78
Contract termination and other costs	—	5	—	5
Asset impairments	5	1	—	6
Reserve adjustments				
Employee termination costs	(9)	(8)	(2)	(19)
Total restructuring charges	$27	$45	$ (2)	$70

(in millions)	2016 COGS	SGA	R&D	Total
Employee termination costs	$72	$109	$ 13	$194
Contract termination and other costs	9	5	13	27
Asset impairments	38	—	40	78
Reserve adjustments				
Employee termination costs	(1)	(11)	(2)	(14)
Total restructuring charges	$118	$103	$ 64	$285

Costs to implement business optimization programs in 2018, 2017 and 2016 were $94 million, $89 million and $65 million, respectively. These costs consisted primarily of external consulting and transition costs, including employee salary and related costs. The costs were included within cost of sales, marketing and administrative expense and R&D expense.

Costs related to the integration of Gambro were included within marketing and administrative expense in 2016.

In 2018, 2017 and 2016, the company recognized accelerated depreciation primarily associated with facilities to be closed of $9 million, $10 million and $33 million, respectively. The costs were recorded within cost of sales, marketing and administrative expense and R&D expense.

The following table summarizes activity in the reserves related to the company’s business optimization initiatives.

(in millions)	
Reserve at December 31, 2015	$116
2016 charges	221
Reserve adjustments	(14)
Utilization in 2016	(164)
Currency translation	5
Reserve at December 31, 2016	164
2017 charges	83

Reserve adjustments	(19)
Utilization in 2017	(143)
Currency translation	27
Reserve at December 31, 2017	112
2018 charges	126
Reserve adjustments	(16)
Utilization in 2018	(99)
Currency translation	(22)
Reserve at December 31, 2018	$101

Reserve adjustments primarily relate to employee termination cost reserves established in prior periods.

Substantially all of the company's restructuring reserves as of December 31, 2018 relate to employee termination costs, with the remaining reserves attributable to contract termination costs. Of the $101 million liability, $90 million is included within accounts payable and accrued liabilities and $11 million is included within other long-term liabilities on the consolidated balance sheet. The reserves are expected to be substantially utilized by the end of 2019.

NOTE 9

DEBT, CREDIT FACILITIES AND LEASE COMMITMENTS

Debt Outstanding

At December 31, 2018 and 2017, the company had the following debt outstanding:

as of December 31 (in millions)	Effective interest rate in 2018	2018[1]	2017[1]
Variable-rate loan due 2020	1.0 %	$302	$300
1.7% notes due 2021	1.9 %	398	398
2.4% notes due 2022	3.7 %	202	206
1.3% notes due in 2025	1.5 %	683	714
2.6% notes due 2026	2.7 %	745	744
7.65% debentures due 2027	7.7 %	5	5
6.625% debentures due 2028	6.7 %	98	99
6.25% notes due 2037	6.3 %	265	265
3.65% notes due 2042	3.7 %	6	6
4.5% notes due 2043	4.5 %	255	255
3.5% notes due 2046	3.6 %	439	439
Other	—	77	81
Total debt and capital lease obligations		3,475	3,512
Current portion		(2)	(3)
Long-term portion		$3,473	$3,509

[1] Book values include any discounts, premiums and adjustments related to hedging instruments.

Significant Debt Issuances

In May 2017, Baxter issued €600 million of senior notes at a fixed coupon rate of 1.30% due in May 2025. The company has designated this debt as a nonderivative net investment hedge of its European operations for accounting purposes.

Debt Extinguishments

In September 2016, Baxter redeemed an aggregate of approximately $1 billion in principal amount of its 1.850% Senior Notes due 2017, 1.850% Senior Notes due 2018, 5.375% Senior Notes due 2018, 4.500% Senior Notes due 2019, 4.250% Senior Notes due 2020 and 3.200% Senior Notes due 2023. Baxter paid approximately $1 billion, including accrued and unpaid interest and tender premium, to redeem such notes. As a result of the debt redemptions, the company recognized a loss on extinguishment of debt in 2016 of approximately $52 million, which is included in other (income) expense, net.

On January 27, 2016, Baxter exchanged Retained Shares for the extinguishment of $1.45 billion aggregate principal amount outstanding under its $1.8 billion U.S. dollar-denominated revolving credit facility. This exchange extinguished the indebtedness under the facility, which was terminated in connection with such debt-for-equity exchange. There were no material prepayment penalties or breakage costs associated with the termination of the facility. Baxter recognized a net realized gain of $1.25 billion related to the Retained Shares exchanged, which is included in other (income) expense, net in 2016.

On March 16, 2016, the company exchanged Retained Shares for the extinguishment of approximately $2.2 billion in principal amount of its 0.950% Notes due May 2016, 5.900% Notes due August 2016, 1.850% Notes due January 2017, 5.375% Notes due May 2018, 1.850% Notes due June 2018, 4.500% Notes due August 2019 and 4.250% Notes due February 2020 purchased by certain third party purchasers in previously announced debt tender offers. As a result, the company recognized a net loss on extinguishment of debt totaling $101 million and a net realized gain of $2.0 billion on the Retained Shares exchanged, which are included in other (income) expense, net in 2016.

Credit Facilities

The company’s U.S. dollar-denominated revolving credit facility and Euro-denominated senior revolving credit facility have a maximum capacity of $1.5 billion and approximately €200 million, respectively, and each matures in 2020. As of December 31, 2018 and 2017, there were no borrowings outstanding under the company’s revolving credit facilities. The facilities enable the company to borrow funds on an unsecured basis at variable interest rates, and contain various covenants, including a maximum net leverage ratio and maximum interest coverage ratio. Fees under the credit facilities are 0.10% annually as of December 31, 2018 and are based on the company’s credit ratings and the total capacity of the facility.

The company also maintains other credit arrangements, which totaled $206 million at December 31, 2018, and $134 million at December 31, 2017. There were no borrowings outstanding under these arrangements at December 31, 2018 and December 31, 2017.

At December 31, 2018, the company was in compliance with the financial covenants in these agreements. The non-performance of any financial institution supporting any of the credit facilities would reduce the maximum capacity of these facilities by each institution’s respective commitment

Leases

The company leases certain facilities and equipment under capital and operating leases expiring at various dates. The leases generally provide for the company to pay taxes, maintenance, insurance and certain other operating costs of the leased property. Most of the operating leases contain renewal options. For the years ending December 31, 2018, 2017, and 2016 operating lease rent expense was $153 million, $154 million, and $174 million, respectively.

Future Minimum Lease Payments and Debt Maturities

as of and for the years ended December 31 (in millions)	Operating leases	Debt maturities and capital leases
2019	$ 122	$ 2

2020	93	304
2021	86	402
2022	71	209
2023	64	2
Thereafter	210	2,576
Total obligations and commitments	646	3,495
Discounts, premiums, and adjustments relating to hedging instruments	—	(20)
Total debt and lease obligations	$ 646	$ 3,475

NOTE 10

DERIVATIVE INSTRUMENTS AND HEDGING ACTIVITY

Foreign Currency and Interest Rate Risk Management

The company operates on a global basis and is exposed to the risk that its earnings, cash flows and equity could be adversely impacted by fluctuations in foreign exchange and interest rates. The company's hedging policy attempts to manage these risks to an acceptable level based on the company's judgment of the appropriate trade-off between risk, opportunity and costs.

The company is primarily exposed to foreign exchange risk with respect to recognized assets and liabilities, forecasted transactions and net assets denominated in the Euro, British Pound, Chinese Yuan, Korean Won, Australian Dollar, Canadian Dollar, Japanese Yen, Colombian Peso, Brazilian Real, Mexican Peso and Swedish Krona. The company manages its foreign currency exposures on a consolidated basis, which allows the company to net exposures and take advantage of any natural offsets. In addition, the company uses derivative and nonderivative instruments to further reduce the net exposure to foreign exchange risk. Gains and losses on hedging instruments offset losses and gains on the hedged transactions and reduce the earnings and equity volatility resulting from changes in foreign exchange rates. Financial market and currency volatility may limit the company's ability to cost-effectively hedge these exposures.

The company is also exposed to the risk that its earnings and cash flows could be adversely impacted by fluctuations in interest rates. The company's policy is to manage interest costs using a mix of fixed- and floating-rate debt that the company believes is appropriate.

To manage this mix in a cost-efficient manner, the company periodically enters into interest rate swaps in which the company agrees to exchange, at specified intervals, the difference between fixed and floating interest amounts calculated by reference to an agreed-upon notional amount.

The company does not hold any instruments for trading purposes and none of the company's outstanding derivative instruments contain credit-risk-related contingent features.

Cash Flow Hedges

The company may use options, including collars and purchased options, forwards and cross-currency swaps to hedge the foreign exchange risk to earnings relating to forecasted transactions and recognized assets and liabilities. The company periodically uses forward-starting interest rate swaps and treasury rate locks to hedge the risk to earnings associated with movements in interest rates relating to anticipated issuances of debt. Certain other firm commitments and forecasted transactions are also periodically hedged. Cash flow hedges primarily relate to forecasted intercompany sales denominated in foreign currencies and anticipated issuances of debt.

The notional amounts of foreign exchange contracts were $775 million and $660 million as of December 31, 2018 and 2017, respectively. The total notional amount of interest rate contracts designated as cash flow hedges was $150 million as of December 31, 2018. There were no outstanding interest rate contracts designated as cash flow hedges as of December 31, 2017. The maximum term over which the company has cash flow hedge contracts in place related to forecasted transactions at December 31, 2018 is 15 months for foreign exchange contracts and 30 years for interest rate contracts.

Fair Value Hedges

The company uses interest rate swaps to convert a portion of its fixed-rate debt into variable-rate debt. These instruments hedge the company's earnings from changes in the fair value of debt due to fluctuations in the designated benchmark interest rate.

There were no outstanding interest rate contracts designated as fair value hedges as of December 31, 2018. The total notional amount of interest rate contracts designated as fair value hedges was $200 million as of December 31, 2017.

Net Investment Hedges

In May 2017, the company issued €600 million of senior notes due May 2025. The company has designated this debt as a hedge of a portion of its net investment in its European operations and, as a result, mark to spot rate adjustments of the outstanding debt balances have been and will be recorded as a component of AOCI. As of December 31, 2018, the company had an accumulated pre-tax unrealized translation loss in AOCI of $47 million related to the Euro-denominated senior notes.

Dedesignations

If it is determined that a derivative or nonderivative hedging instrument is no longer highly effective as a hedge, the company discontinues hedge accounting prospectively. If the company removes the cash flow hedge designation because the hedged forecasted transactions are no longer probable of occurring, any gains or losses are immediately reclassified from AOCI to earnings. Gains or losses relating to terminations of effective cash flow hedges in which the forecasted transactions are still probable of occurring are deferred and recognized consistent with the loss or income recognition of the underlying hedged items.

There were no hedge dedesignations in 2018, 2017 or 2016 resulting from changes in the company's assessment of the probability that the hedged forecasted transactions would occur.

If the company terminates a fair value hedge, an amount equal to the cumulative fair value adjustment to the hedged items at the date of termination is amortized to earnings over the remaining term of the hedged item. In 2018, the company terminated an interest rate fair value hedge and the cumulative fair value adjustment to the hedged item was insignificant. There were no fair value hedges terminated in 2017. In 2016, the company terminated a total notional value of $765 million of interest rate contracts in connection with the March 2016 debt tender offers, resulting in a $34 million reduction to the debt extinguishment loss.

If the company terminates a net investment hedge, any gain or loss recognized in AOCI is not reclassified to earnings until the company sells, liquidates, or deconsolidates the foreign investments that were being hedged.

Undesignated Derivative Instruments

The company uses forward contracts to hedge earnings from the effects of foreign exchange relating to certain of the company's intercompany and third-party receivables and payables denominated in a foreign currency. These derivative instruments are generally not formally designated as hedges and the terms of these instruments generally do not exceed one month.

The total notional amount of undesignated derivative instruments was $485 million as of December 31, 2018 and $885 million as of December 31, 2017.

Gains and Losses on Derivative Instruments

The following table summarizes the income statement locations and gains and losses on the company's derivative instruments for the years ended December 31, 2018, 2017, and 2016.

	Gain (loss) recognized in OCI			Location of gain (loss) in	Gain (loss) reclassified from AOCI into income		
(in millions)	2018	2017	2016	income statement	2018	2017	2016
Cash flow hedges							
Interest rate contracts	$(3)	$(3)	$ —	Other (income) expense, net	$—	$ —	$ 9
Foreign exchange contracts	3	(24)	1	Cost of sales	(12)	(8)	(3)
Net investment hedge	32	(79)	—	Other (income) expense, net	—	—	—
Total	$32	$(106)	$ 1		$(12)	$ (8)	$ 6

(in millions)	Location of gain (loss) in income statement	Gain (loss) recognized in income 2018	2017	2016
Fair value hedges				
Interest rate contracts	Net interest expense	$ (4)	$ (3)	$ 9
Undesignated derivative instruments				
Foreign exchange contracts	Other (income) expense, net	$ (6)	$ (20)	$ 4

For the company’s fair value hedges, equal and offsetting gains of $4 million and $3 million, and losses of $9 million were recognized in net interest expense in 2018, 2017 and 2016, respectively, as adjustments to the underlying hedged items, fixed-rate debt. Ineffectiveness related to the company’s cash flow and fair value hedges for the years ended December 31, 2018, 2017 and 2016, respectively, was not material.

The following table summarizes net-of-tax activity in AOCI, a component of stockholders' equity, related to the company's cash flow hedges.

as of and for the years ended December 31 (in millions)	2018	2017	2016
Accumulated other comprehensive income (loss) balance at beginning of year	$(10)	$3	$ 7
(Loss) gain in fair value of derivatives during the year	(1)	(18)	1
Amount reclassified to earnings during the year	10	5	(5)
Accumulated other comprehensive income (loss) balance at end of year	(1)	$(10)	$ 3

As of December 31, 2018, $3 million of deferred, net after-tax gains on derivative instruments included in AOCI are expected to be recognized in earnings during the next 12 months, coinciding with when the hedged items are expected to impact earnings.

Fair Values of Derivative Instruments

The following table summarizes the classification and fair value amounts of derivative instruments reported in the consolidated balance sheet as of December 31, 2018.

	Derivatives in asset positions		Derivatives in liability positions	
(in millions)	Balance sheet location	Fair value	Balance sheet location	Fair value
Derivative instruments designated as hedges				
Interest rate contracts	Other long-term assets	—	Other long-term liabilities	3
Foreign exchange contracts	Prepaid expenses and other	22	Accounts payable and accrued liabilities	1
Foreign exchange contracts	Other	1	Other long-term liabilities	—
Total derivative instruments designated as hedges		$ 23		$ 4
Undesignated derivative instruments				
Foreign exchange contracts	Prepaid expenses and other	$ —	Accounts payable and accrued liabilities	$ 1
Total derivative instruments		$ 23		$ 5

The following table summarizes the classification and fair value amounts of derivative instruments reported in the consolidated balance sheet as of December 31, 2017.

	Derivatives in asset positions		Derivatives in liability positions	
(in millions)	Balance sheet location	Fair value	Balance sheet location	Fair value
Derivative instruments designated as hedges				
Interest rate contracts	Other long-term assets	$ 4	Other long-term liabilities	$ —
Foreign exchange contracts	Prepaid expenses and other	14	Accounts payable and accrued liabilities	3
Total derivative instruments designated as hedges		$ 18		$ 3
Undesignated derivative instruments				
Foreign exchange contracts	Prepaid expenses and other	$ 1	Accounts payable and accrued liabilities	$ 1
Total derivative instruments		$ 19		$ 4

While the company's derivatives are all subject to master netting arrangements, the company presents its assets and liabilities related to derivative instruments on a gross basis within the consolidated balance sheets. Additionally, the company is not required to post collateral for any of its outstanding derivatives.

The following table provides information on the company's derivative positions as if they were presented on a net basis, allowing for the right of offset by counterparty.

	December 31, 2018		December 31, 2017	
(in millions)	Asset	Liability	Asset	Liability
Gross amounts recognized in the consolidated balance sheet	$23	$ 5	$19	$ 4
Gross amount subject to offset in master netting arrangements not offset in the consolidated balance sheet	(5)	(5)	(4)	(4)
Total	$18	$ —	$15	$ —

NOTE 11

FINANCIAL INSTRUMENTS AND RELATED FAIR VALUE MEASUREMENTS

Receivables

For trade receivables originated in Japan, the company has entered into agreements with financial institutions in which the entire interest in and ownership of the receivable is sold. The company continues to service the receivables in this arrangement. Servicing assets or liabilities are not recognized because the company receives adequate compensation to service the sold receivables. The Japanese arrangement includes limited recourse provisions, which are not material.

The following is a summary of the activity relating to the arrangement.

as of and for the years ended December 31 (in millions)	2018	2017	2016
Sold receivables at beginning of year	$71	$68	$81
Proceeds from sales of receivables	267	270	348
Cash collections (remitted to the owners of the receivables)	(270)	(270)	(367)
Effect of currency exchange rate changes	(1)	3	6
Sold receivables at end of year	$67	$71	$68

The net losses relating to the sales of receivables were immaterial for each year.

Concentrations of Credit Risk

The company invests excess cash in certificates of deposit or money market funds and diversifies the concentration of cash among different financial institutions. With respect to financial instruments, where appropriate, the company has diversified its selection of counterparties, and has arranged collateralization and master-netting agreements to minimize the risk of loss.

The company continues to do business with foreign governments in certain countries, including Greece, Spain, Portugal and Italy, which have experienced deterioration in credit and economic conditions. As of December 31, 2018 and 2017, the company's net accounts receivable from the public sector in Greece, Spain, Portugal and Italy totaled $130 million and $149 million, respectively.

Global economic conditions and liquidity issues in certain countries have resulted, and may continue to result, in delays in the collection of receivables and credit losses. Global economic conditions, governmental actions and customer-specific factors may require the company to re-evaluate the collectability of its receivables and the company could potentially incur additional credit losses. These conditions may also impact the stability of the Euro.

Fair Value Measurements

The fair value hierarchy under the accounting standard for fair value measurements consists of the following three levels:

- Level 1 — Quoted prices in active markets that the company has the ability to access for identical assets or liabilities;
- Level 2 — Quoted prices for similar instruments in active markets, quoted prices for identical or similar instruments in markets that are not active, and model-based valuations in which all significant inputs are observable in the market; and

- Level 3 — Valuations using significant inputs that are unobservable in the market and include the use of judgment by the company's management about the assumptions market participants would use in pricing the asset or liability.

The following table summarizes the bases used to measure financial assets and liabilities that are carried at fair value on a recurring basis in the consolidated balance sheets.

		Basis of fair value measurement		
(in millions)	Balance as of December 31, 2018	Quoted prices in active markets for identical assets (Level 1)	Significant other observable inputs (Level 2)	Significant unobservable inputs (Level 3)
Assets				
Foreign exchange contracts	$ 23	$ —	$ 23	$ —
Marketable equity securities	3	3	—	—
Total assets	$ 26	$ 3	$ 23	$ —
Liabilities				
Foreign exchange contracts	$ 2	$ —	$ 2	$ —
Interest rate contracts	3	—	3	—
Contingent payments related to acquisitions	32	—	—	32
Total liabilities	$ 37	$ —	$ 5	$ 32

		Basis of fair value measurement		
(in millions)	Balance 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)
Assets				
Foreign exchange contracts	$ 15	$ —	$ 15	$ —
Interest rate contracts	4	—	4	—
Marketable equity securities	8	8	—	—
Total assets	$ 27	$ 8	$ 19	$ —

Liabilities				
Foreign exchange contracts	$ 4	$ —	$ 4	$ —
Contingent payments related to acquisitions	9	—	—	9
Total liabilities	$ 13	$ —	$ 4	$ 9

As of December 31, 2018 and 2017, cash and cash equivalents of $1.8 billion and $3.4 billion, respectively, included money market funds of approximately $0.2 billion and $0.7 billion, respectively, which are considered Level 2 in the fair value hierarchy.

For assets that are measured using quoted prices in active markets, the fair value is the published market price per unit multiplied by the number of units held, without consideration of transaction costs. The majority of the derivatives entered into by the company are valued using internal valuation techniques as no quoted market prices exist for such instruments. The principal techniques used to value these instruments are discounted cash flow and Black-Scholes models. The key inputs are considered observable and vary depending on the type of derivative, and include contractual terms, interest rate yield curves, foreign exchange rates and volatility.

Contingent payments related to acquisitions consist of milestone payments and sales-based payments, and are valued using discounted cash flow techniques. The fair value of milestone payments reflects management’s expectations of probability of payment, and increases as the probability of payment increases or expectation of timing of payments is accelerated. The fair value of sales-based payments is based upon probability-weighted future revenue estimates, and increases as revenue estimates increase, probability weighting of higher revenue scenarios increase or expectation of timing of payment is accelerated. The change in the liability for contingent payments related to Baxter’s acquisitions, which use significant unobservable inputs (Level 3) in the fair value measurement, were primarily driven by new contingent liabilities recognized as a result of the RECOTHROM and PREVELEAK acquisitions of approximately $21 million in 2018.

The following table is a reconciliation of the fair value measurements that use significant unobservable inputs (Level 3), which consist of contingent payments related to acquisitions.

(in millions)	Contingent payments
Fair value as of December 31, 2016	$ 19
Additions	—
Payments	(9)
Net gains recognized in earnings	(1)
Fair value as of December 31, 2017	9
Additions	24
Payments	(1)
Net gains recognized in earnings	—
Fair value as of December 31, 2018	$ 32

Equity investments not measured at fair value are comprised of other equity investments without readily determinable fair values and were $41 million and $43 million at December 31, 2018 and 2017, respectively. These amounts are included in Other assets.

In 2017, the company recorded $8 million of other-than-temporary impairment charges within other (income) expense, net related to the company's investments.

Book Values and Fair Values of Financial Instruments

In addition to the financial instruments that the company is required to recognize at fair value in the consolidated balance sheets, the company has certain financial instruments that are recognized at historical cost or some basis other than fair value. For these financial instruments, the following table provides the values recognized in the consolidated balance sheets and the estimated fair values.

	Book values		Fair values	
as of December 31 (in millions)	2018	2017	2018	2017
Liabilities				
Current maturities of long-term debt and lease obligations	$2	$3	$2	$3
Long-term debt and lease obligations	3,473	3,509	3,460	3,595

The following table summarizes the level within the fair value hierarchy for measurements of the estimated fair values of the financial instruments as of December 31, 2018 and 2017.

(in millions)	Balance as of December 31, 2018	Basis of fair value measurement: Quoted prices in active markets for identical assets (Level 1)	Significant other observable inputs (Level 2)	Significant unobservable inputs (Level 3)
Liabilities				
Current maturities of long-term debt and lease obligations	$ 2	$—	$ 2	$ —
Long-term debt and lease obligations	3,460	—	3,460	—
Total liabilities	$ 3,462	$—	$ 3,462	$ —

		Basis of fair value measurement		
(in millions)	Balance 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)
Liabilities				
Current maturities of long-term debt and lease obligations	$ 3	$—	$ 3	$ —
Long-term debt and lease obligations	3,595	—	3,595	—
Total liabilities	$ 3,598	$—	$ 3,598	$ —

The estimated fair values of current and long-term debt were computed by multiplying price by the notional amount of the respective debt instrument. Price is calculated using the stated terms of the respective debt instrument and yield curves commensurate with the company's credit risk. The carrying values of other financial instruments approximate their fair values due to the short-term maturities of most of these assets and liabilities.

NOTE 12

COMMITMENTS AND CONTINGENCIES

Collaborative and Other Arrangements

Refer to Note 5 for information regarding the company's unfunded contingent payments associated with collaborative and other arrangements.

Indemnifications

During the normal course of business, Baxter makes indemnities, commitments and guarantees pursuant to which the company may be required to make payments related to specific transactions. Indemnifications include: (i) intellectual property indemnities to customers in connection with the use, sales or license of products and services; (ii) indemnities to customers in connection with losses incurred while performing services on their premises; (iii) indemnities to vendors and service providers pertaining to claims based on negligence or willful misconduct; (iv) indemnities involving the representations and warranties in certain contracts; (v) contractual indemnities related to the separation and distribution as set forth in certain of the agreements entered into in connection with such transactions (including the separation and distribution agreement and the tax matters agreement with Baxalta); and (vi) contractual indemnities for its directors and certain of its executive officers for services provided to or at the

request of Baxter. In addition, under Baxter's Amended and Restated Certificate of Incorporation, and consistent with Delaware General Corporation Law, the company has agreed to indemnify its directors and officers for certain losses and expenses upon the occurrence of certain prescribed events. The majority of these indemnities, commitments and guarantees do not provide for any limitation on the maximum potential for future payments that the company could be obligated to make. To help address some of these risks, the company maintains various insurance coverages. Based on historical experience and evaluation of the agreements, the company does not believe that any significant payments related to its indemnities will occur, and therefore the company has not recorded any associated liabilities.

Legal Contingencies

Refer to Note 17 for a discussion of the company's legal contingencies.

NOTE 13

STOCKHOLDERS' EQUITY

Stock-Based Compensation

The company's stock-based compensation generally includes stock options, restricted stock units (RSUs), performance share units (PSUs) and purchases under the company's employee stock purchase plan. Shares issued relating to the company's stock-based plans are generally issued out of treasury stock.

As of December 31, 2018, approximately 30 million authorized shares are available for future awards under the company's stock-based compensation plans.

Stock Compensation Expense

Stock compensation expense was $115 million, $107 million and $115 million in 2018, 2017 and 2016, respectively. The related tax benefit recognized was $61 million in 2018, $87 million in 2017 and $34 million in 2016. Included in the benefit in 2018 and 2017 were realized excess tax benefits for stock-based compensation of $40 million and $56 million, respectively.

Stock compensation expense is recorded at the corporate level and is not allocated to the segments. Approximately 80% of stock compensation expense is classified in marketing and administrative expenses, with the remainder classified in cost of sales and R&D expenses. Costs capitalized in the consolidated balance sheets at December 31, 2018 and 2017 were not material.

Stock compensation expense is based on awards expected to vest, and therefore has been reduced by estimated forfeitures.

Stock Options

Stock options are granted to employees and non-employee directors with exercise prices equal to 100% of the market value on the date of grant. Stock options granted to employees generally vest in one-third increments over a three-year period. Stock options granted to non-employee directors generally vest immediately on the grant date and are issued with a six-month claw-back provision. Stock options typically have a contractual term of 10 years. The grant-date fair value, adjusted for estimated forfeitures, is recognized as expense on a straight-line basis over the substantive vesting period.

The fair value of stock options is determined using the Black-Scholes model. The weighted-average assumptions used in estimating the fair value of stock options granted during each year, along with the weighted-average grant-date fair values, were as follows:

years ended December 31	2018	2017	2016
Expected volatility	18 %	19 %	20 %
Expected life (in years)	5.5	5.5	5.5
Risk-free interest rate	2.6 %	2.1 %	1.4 %
Dividend yield	1.0 %	1.0 %	1.2 %
Fair value per stock option	$13	$10	$7

The following table summarizes stock option activity for the year ended December 31, 2018 and the outstanding stock options as of December 31, 2018.

(options and aggregate intrinsic values in thousands)	Options	Weighted-average	Weighted-average	Aggregate intrinsic

		exercise price	remaining contractual term (in years)	value
Outstanding as of January 1, 2018	28,208	$ 39.25		
Granted	4,062	$ 66.49		
Exercised	(5,831)	$ 36.36		
Forfeited	(999)	$ 53.25		
Expired	(126)	$ 33.98		
Outstanding as of December 31, 2018	25,314	$ 43.76	5.8	$560,657
Vested or expected to vest as of December 31, 2018	24,951	$ 43.51	5.8	$559,192
Exercisable as of December 31, 2018	16,585	$ 37.68	4.6	$466,851

The aggregate intrinsic value in the table above represents the difference between the exercise price and the company's closing stock price on the last trading day of the year. The total intrinsic value of options exercised in 2018, 2017 and 2016 was $222 million, $203 million and $162 million, respectively.

As of December 31, 2018, $54 million of unrecognized compensation cost related to stock options is expected to be recognized as expense over a weighted-average period of approximately 1.7 years.

RSUs

RSUs are granted to employees and non-employee directors. RSUs granted to employees generally vest in one-third increments over a three-year period. RSUs granted to non-employee directors generally vest immediately on the grant date and are issued with a six-month claw-back provision. The grant-date fair value, adjusted for estimated forfeitures, is recognized as expense on a straight-line basis over the substantive vesting period. The fair value of RSUs is determined based on the number of shares granted and the closing price of the company's common stock on the date of grant.

The following table summarizes nonvested RSU activity for the year ended December 31, 2018.

(share units in thousands)	Share units	Weighted-average grant-date fair value
Nonvested RSUs as of January 1, 2018	2,201	$ 45.65
Granted	629	$ 67.11
Vested	(1,025)	$ 40.43
Forfeited	(194)	$ 53.31
Nonvested RSUs as of December 31, 2018	1,611	$ 56.45

As of December 31, 2018, $54 million of unrecognized compensation cost related to RSUs is expected to be recognized as expense over a weighted-average period of approximately 1.8 years. The weighted-average grant-date fair value of RSUs granted in 2018, 2017 and 2016 was $67.11, $55.11 and $40.32, respectively. The fair value of RSUs vested in 2018, 2017 and 2016 was $69 million, $88 million and $50 million, respectively.

PSUs

The company's annual equity awards stock compensation program for senior management includes the issuance of PSUs based on adjusted operating margin as well as stock performance relative to the company's peer group. Fifty percent of the PSUs granted in 2015 were based on return on invested capital (ROIC) instead of adjusted operating margin. The vesting condition for adjusted operating margin or ROIC PSUs is set at the beginning of the year for each tranche of the award during the three-year service period. Compensation cost for the adjusted operating margin or ROIC PSUs is measured based on the fair value of the awards on the date that the specific vesting terms for each tranche of the award are established. The fair value of the awards is determined based on the quoted price of the company's stock on the grant date for each tranche of the award. The compensation cost for adjusted operating margin or ROIC PSUs is adjusted at each reporting date to reflect the estimated probability of achieving the vesting condition.

The fair value for PSUs based on stock performance relative to the company's peer group is determined using a Monte Carlo model. The assumptions used in estimating the fair value of these PSUs granted during the period, along with the grant-date fair values, were as follows:

years ended December 31	2018	2017	2016
Baxter volatility	19%	19%	20%
Peer group volatility	16%-53%	16%-54%	17%-51%
Correlation of returns	0.16-0.61	0.19-0.58	0.22-0.73
Risk-free interest rate	2.3%	1.6%	1.0%
Fair value per PSU	$ 90	$ 69	$ 51

Unrecognized compensation cost related to all unvested PSUs of $22 million at December 31, 2018 is expected to be recognized as expense over a weighted-average period of 1.4 years.

The following table summarizes nonvested PSU activity for the year ended December 31, 2018.

(share units in thousands)	Share units	Weighted-average grant-date fair value
Nonvested PSUs as of January 1, 2018	651	$ 57.08
Granted	340	$ 76.51
Vested	-	$ -
Forfeited	(78)	$ 62.34
Nonvested PSUs as of December 31, 2018	913	$ 63.88

Employee Stock Purchase Plan

Nearly all employees are eligible to participate in the company's employee stock purchase plan. The employee purchase price is 85% of the closing market price on the purchase date.

The Baxter International Inc. Employee Stock Purchase Plan provides for 10 million shares of common stock available for issuance to eligible participants, of which approximately three million shares were available for future purchases as of December 31, 2018.

During 2018, 2017, and 2016, the company issued approximately 0.8 million, 0.8 million and 1.0 million shares, respectively, under the employee stock purchase plan. The number of shares under subscription at December 31, 2018 totaled approximately 1 million.

Cash Dividends

Total cash dividends declared per common share for 2018, 2017, and 2016 were $0.73, $0.61 and $0.51, respectively.

A quarterly dividend of $0.16 per share ($0.64 on an annualized basis) was declared in February 2018 and was paid in April 2018. Quarterly dividends of $0.19 per share ($0.76 on an annualized basis) were declared in May and July of 2018 and were paid in July and October of 2018, respectively. Baxter's Board of Directors declared a quarterly dividend of $0.19 per share in November of 2018, which was paid in January of 2019.

Stock Repurchase Programs

As authorized by the Board of Directors, the company repurchases its stock depending on the company's cash flows, net debt level and market conditions. The company repurchased 35.8 million shares for $2.5 billion in cash in 2018, 9.2 million shares for $564 million in cash in 2017 and 6.3 million shares for $292 million in cash in 2016. In July 2012, the Board of Directors authorized the repurchase of up to $2 billion of the company's common stock. The Board of Directors increased this authority by an additional $1.5 billion in each of November 2016 and February 2018 and by an additional $2.0 billion in November 2018. $2.1 billion of purchase authority remained available as of December 31, 2018.

Accelerated Share Repurchase Agreement

In December 2018, the company entered into a $300 million accelerated share repurchase agreement (ASR Agreement) with an investment bank. The company funded the ASR Agreement with available cash. The ASR Agreement was executed pursuant to the 2012 Repurchase Authorization described above.

Under the ASR Agreement, 3.6 million shares were received by the company upon execution. At final settlement of the ASR Agreement, which is expected to occur, at the latest, during the second quarter of 2019, the investment bank may be required to deliver additional shares of common stock to the company or the company may be required to deliver shares of its common stock to the investment bank, with the number of shares to be delivered based on the volume-weighted average price of the company's common stock during the term of the ASR Agreement.

NOTE 14

RETIREMENT AND OTHER BENEFIT PROGRAMS

The company sponsors a number of qualified and nonqualified pension plans for eligible employees. The company also sponsors certain unfunded contributory healthcare and life insurance benefits for substantially all domestic retired employees. Newly hired

employees in the United States and Puerto Rico are not eligible to participate in the pension plans but receive a higher level of company contributions in the defined contribution plans.

In 2017, the company made a $115 million voluntary cash contribution to the qualified U.S. pension plan.

Reconciliation of Pension and OPEB Plan Obligations, Assets and Funded Status

The benefit plan information in the table below pertains to all of the company's pension and OPEB plans, both in the United States and in other countries.

	Pension benefits		OPEB	
as of and for the years ended December 31 (in millions)	2018	2017	2018	2017
Benefit obligations				
Beginning of period	$6,159	$5,717	$235	$243
Service cost	87	91	1	1
Interest cost	178	180	7	7
Participant contributions	5	5	—	—
Actuarial (gain) loss	(431)	333	(14)	2
Benefit payments	(259)	(251)	(18)	(18)
Settlements	(6)	(9)	—	—
Curtailment	(57)	—	—	—
Acquisitions	—	2	—	—
Plan amendments	—	(7)	—	—
Foreign exchange and other	(53)	98	—	—
End of period	5,623	6,159	211	235
Fair value of plan assets				
Beginning of period	5,248	4,501	—	—
Actual return on plan assets	(237)	708	—	—
Employer contributions	51	242	18	18
Participant contributions	5	5	—	—
Benefit payments	(259)	(251)	(18)	(18)
Settlements	(6)	(9)	—	—
Foreign exchange and other	(33)	52	—	—
End of period	4,769	5,248	—	—
Funded status at December 31	$(854)	$(911)	$(211)	$(235)
Amounts recognized in the consolidated balance sheets				
Noncurrent asset	$59	$65	$—	$—
Current liability	(25)	(24)	(20)	(19)
Noncurrent liability	(888)	(952)	(191)	(216)
Net liability recognized at December 31	$(854)	$(911)	$(211)	$(235)

The pension obligation information in the table above represents the projected benefit obligation (PBO). The PBO incorporates assumptions relating to future compensation levels. The accumulated benefit obligation (ABO) is the same as the PBO except that it includes no assumptions relating to future compensation levels. The ABO for all of the company's pension plans was $5.4 billion and $5.9 billion at the 2018 and 2017 measurement dates, respectively.

The information in the funded status table above represents the totals for all of the company's pension plans. The following table is information relating to the individual plans in the funded status table above that have an ABO in excess of plan assets.

as of December 31 (in millions)	2018	2017
ABO	$4,973	$5,398
Fair value of plan assets	4,244	4,674

The following table is information relating to the individual plans in the funded status table above that have a PBO in excess of plan assets (many of which also have an ABO in excess of assets, and are therefore also included in the table directly above).

as of December 31 (in millions)	2018	2017
PBO	$5,375	$5,875
Fair value of plan assets	4,461	4,899

Expected Net Pension and OPEB Plan Payments for the Next 10 Years

(in millions)	Pension benefits	OPEB
2019	$ 259	$ 20
2020	268	18
2021	281	18
2022	291	17
2023	302	16
2024 through 2028	1,624	71
Total expected net benefit payments for next 10 years	$ 3,025	$ 160

The expected net benefit payments above reflect the company's share of the total net benefits expected to be paid from the plans' assets (for funded plans) or from the company's assets (for unfunded plans). The federal subsidies relating to the Medicare Prescription Drug, Improvement and Modernization Act are not expected to be significant.

Amounts Recognized in AOCI

The pension and OPEB plans' gains or losses, prior service costs or credits, and transition assets or obligations not yet recognized in net periodic benefit cost are recognized on a net-of-tax basis in AOCI and will be amortized from AOCI to net periodic benefit cost in the future. The company utilizes the average future working lifetime as the amortization period for prior service.

The following table is a summary of the pre-tax losses included in AOCI at December 31, 2018 and December 31, 2017.

(in millions)	Pension benefits	OPEB
Actuarial loss (gain)	$ 1,604	$ (79)
Prior service credit and transition obligation	(10)	(74)
Total pre-tax loss recognized in AOCI at December 31, 2018	$ 1,594	$ (153)
Actuarial loss (gain)	$ 1,660	$ (76)
Prior service credit and transition obligation	(12)	(88)
Total pre-tax loss (gain) recognized in AOCI at December 31, 2017	$ 1,648	$ (164)

Refer to Note 15 for the net-of-tax balances included in AOCI as of each of the year-end dates. The following table is a summary of the net-of-tax amounts recorded in OCI relating to pension and OPEB plans.

years ended December 31 (in millions)	2018	2017	2016
Gain (loss) arising during the year, net of tax expense (benefit) of ($3) in 2018, $16 in 2017 and ($72) in 2016	$(26)	$50	$(191)
Amortization of loss to earnings, net of tax benefit of $12 in 2018, $46 in 2017 and $36 in 2016	58	91	94
Pension and other employee benefits (loss) gain	$32	$141	$(97)

In 2018, 2017 and 2016, OCI activity for pension and OPEB plans was primarily related to actuarial gains and losses.

Amounts Expected to be Amortized from AOCI to Net Periodic Benefit Cost in 2019

With respect to the AOCI balance at December 31, 2018, the following table is a summary of the pre-tax amounts expected to be amortized to net periodic benefit cost in 2019.

(in millions)	Pension benefits	OPEB
Actuarial loss/(gain)	$ 63	$ (12)
Prior service credit and transition obligation	(1)	(15)
Total pre-tax amount expected to be amortized from AOCI to net pension and OPEB cost in 2019	$ 62	$ (27)

Net Periodic Benefit Cost – Continuing Operations

years ended December 31 (in millions)	2018	2017	2016
Pension benefits			
Service cost	$87	$91	$93
Interest cost	178	180	183
Expected return on plan assets	(304)	(291)	(298)
Amortization of net losses and other deferred amounts	95	163	149
Other	1	—	2
Net periodic pension benefit cost	$57	$143	$129
OPEB			
Service cost	$1	$1	$2
Interest cost	7	7	8
Amortization of net loss and prior service credit	(25)	(26)	(19)
Curtailment	—	—	(4)
Net periodic OPEB cost	$(17)	$(18)	$(13)

Weighted-Average Assumptions Used in Determining Benefit Obligations at the Measurement Date

	Pension benefits		OPEB	
	2018	2017	2018	2017
Discount rate				
U.S. and Puerto Rico plans	4.31%	3.62%	4.20%	3.51%
International plans	2.02%	2.02%	n/a	n/a
Rate of compensation increase				
U.S. and Puerto Rico plans	3.66%	3.65%	n/a	n/a
International plans	3.08%	3.05%	n/a	n/a
Annual rate of increase in the per-capita cost	n/a	n/a	7.00%	6.25%
Rate decreased to	n/a	n/a	5.00%	5.00%
by the year ended	n/a	n/a	2027	2023

The assumptions above, which were used in calculating the December 31, 2018 measurement date benefit obligations, will be used in the calculation of net periodic benefit cost in 2019.

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Weighted-Average Assumptions Used in Determining Net Periodic Benefit Cost

	Pension benefits			OPEB		
	2018	2017	2016	2018	2017	2016
Discount rate						
U.S. and Puerto Rico plans	3.60%	4.09%	4.36%	3.51%	3.89%	4.12%
International plans	2.02%	2.03%	2.60%	n/a	n/a	n/a
Expected return on plan assets						
U.S. and Puerto Rico plans	6.25%	6.50%	7.00%	n/a	n/a	n/a
International plans	5.58%	5.77%	6.07%	n/a	n/a	n/a
Rate of compensation increase						
U.S. and Puerto Rico plans	3.42%	3.75%	3.75%	n/a	n/a	n/a
International plans	3.05%	3.11%	3.37%	n/a	n/a	n/a
Annual rate of increase in the per-capita cost	n/a	n/a	n/a	7.00%	6.25%	6.50%
Rate decreased to	n/a	n/a	n/a	5.00%	5.00%	5.00%
by the year ended	n/a	n/a	n/a	2027	2023	2022

The company establishes the expected return on plan assets assumption primarily based on a review of historical compound average asset returns, both company-specific and relating to the broad market (based on the company's asset allocation), as well as an analysis of current market and economic information and future expectations. The company plans to use a 6.25% assumption for its U.S. and Puerto Rico plans for 2019.

Effect of a One-Percent Change in Assumed Healthcare Cost Trend Rate on the OPEB Plan

The effect of a one-percent change in the assumed healthcare cost trend rate on the service and interest cost components of OPEB cost as well as the OPEB obligation were not significant for 2018 or 2017, respectively.

Pension Plan Assets

An investment committee of members of senior management is responsible for supervising, monitoring and evaluating the invested assets of the company's funded pension plans. The investment committee, which meets at least quarterly, abides by documented policies and procedures relating to investment goals, targeted asset allocations, risk management practices, allowable and prohibited investment holdings, diversification, use of derivatives, the relationship between plan assets and benefit obligations, and other relevant factors and considerations.

The investment committee's policies and procedures include the following:

- Ability to pay all benefits when due;
- Targeted long-term performance expectations relative to applicable market indices, such as Russell, MSCI EAFE, and other indices;
- Targeted asset allocation percentage ranges (summarized below), and periodic reviews of these allocations;
- Diversification of assets among third-party investment managers, and by geography, industry, stage of business cycle and other measures;
- Specified investment holding and transaction prohibitions (for example, private placements or other restricted securities, securities that are not traded in a sufficiently active market, short sales, certain derivatives, commodities and margin transactions);

- Specified portfolio percentage limits on holdings in a single corporate or other entity (generally 5% at time of purchase, except for holdings in U.S. government or agency securities);
- Specified average credit quality for the fixed-income securities portfolio (at least A- by Standard & Poor's or A3 by Moody's);
- Specified portfolio percentage limits on foreign holdings; and
- Periodic monitoring of investment manager performance and adherence to the investment committee's policies.

Plan assets are invested using a total return investment approach whereby a mix of equity securities, debt securities and other investments are used to preserve asset values, diversify risk and exceed the planned benchmark investment return. Investment strategies and asset allocations are based on consideration of plan liabilities, the plans' funded status and other factors, such as the plans' demographics and liability durations. Investment performance is reviewed by the investment committee on a quarterly basis and asset allocations are reviewed at least annually.

Plan assets are managed in a balanced portfolio comprised of two major components: return-seeking investments and liability hedging investments. The target allocations for plan assets are 53% in return-seeking investments and 47% in liability hedging investments and other holdings. The documented policy includes an allocation range based on each individual investment type within the major components that allows for a variance from the target allocations of approximately two to five percentage points depending on the investment type. Return-seeking investments primarily include common stock of U.S. and international companies, common/collective trust funds, mutual funds, hedge funds, and partnership investments. Liability hedging investments and other holdings primarily include cash, money market funds with an original maturity of three months or less, U.S. and foreign government and governmental agency issues, corporate bonds, municipal securities, derivative contracts and asset-backed securities.

While the investment committee provides oversight over plan assets for U.S. and international plans, the summary above is specific to the plans in the United States. The plan assets for international plans are managed and allocated by the entities in each country, with input and oversight provided by the investment committee. The plan assets for the U.S. and international plans are included in the table below.

The following tables summarize the bases used to measure the pension plan assets and liabilities that are carried at fair value on a recurring basis.

		Basis of fair value measurement			
(in millions)	Balance at December 31, 2018	Quoted prices in active markets for identical assets (Level 1)	Significant other observable inputs (Level 2)	Significant unobservable inputs (Level 3)	Measured at NAV
Assets					
Fixed income securities					
Cash and cash equivalents	$ 144	$21	$ 123	$ —	$ —
U.S. government and government agency issues	735	—	735	—	—
Corporate bonds	1,126	16	1,110	—	—
Equity securities					
Common stock:					
Large cap	541	541	—	—	—
Mid cap	298	298	—	—	—
Small cap	91	91	—	—	—
Total common stock	930	930	—	—	—

Mutual funds	353	134	219	—	—
Common/collective trust funds	919	—	209	—	710
Partnership investments	390	—	—	—	390
Other holdings	172	11	151	10	—
Collateral held on loaned securities	196	—	196	—	—
Liabilities					
Collateral to be paid on loaned securities	(196)	(34)	(162)	—	—
Fair value of pension plan assets	$ 4,769	$ 1,078	$ 2,581	$ 10	$ 1,100

		Basis of fair value measurement			
(in millions)	Balance at December 31, 2017	Quoted prices in active markets for identical assets (Level 1)	Significant other observable inputs (Level 2)	Significant unobservable inputs (Level 3)	Measured at NAV
Assets					
Fixed income securities					
Cash and cash equivalents	$ 230	$ 12	$ 218	$ —	$ —
U.S. government and government agency issues	641	—	641	—	—
Corporate bonds	1,052	16	1,036	—	—
Equity securities					
Common stock:					
Large cap	711	711	—	—	—
Mid cap	406	406	—	—	—
Small cap	89	89	—	—	—
Total common stock	1,206	1,206	—	—	—
Mutual funds	390	144	246	—	—
Common/collective trust funds	1,174	—	217	8	949
Partnership investments	413	—	—	—	413
Other holdings	142	10	122	10	—
Collateral held on loaned securities	193	—	193	—	—
Liabilities					
Collateral to be paid on loaned securities	(193)	(53)	(140)	—	—
Fair value of pension plan assets	$ 5,248	$ 1,335	$ 2,533	$ 18	$ 1,362

The following table is a reconciliation of changes in fair value measurements that used significant unobservable inputs (Level 3).

(in millions)	Total	Common/collective trust funds	Other holdings
Balance at December 31, 2016	$ 16	$ 6	$ 10
Actual return on plan assets still held at year end	2	2	—
Balance at December 31, 2017	18	8	10
Transfers out	(8)	(8)	—
Balance at December 31, 2018	$ 10	$ -	$ 10

The assets and liabilities of the company’s pension plans are valued using the following valuation methods:

Investment category	Valuation methodology
Cash and cash equivalents	These largely consist of a short-term investment fund, U.S. dollars and foreign currency. The fair value of the short-term investment fund is based on the net asset value
U.S. government and government agency issues	Values are based on reputable pricing vendors, who typically use pricing matrices or models that use observable inputs
Corporate bonds	Values are based on reputable pricing vendors, who typically use pricing matrices or models that use observable inputs
Common stock	Values are based on the closing prices on the valuation date in an active market on national and international stock exchanges
Mutual funds	Values are based on the net asset value of the units held in the respective fund which are obtained from national and international exchanges or based on the net asset value of the underlying assets of the fund provided by the fund manager
Common/collective trust funds	Values are based on the net asset value of the units held at year end

Partnership investments	Values are based on the net asset value of the participation by the company in the investment as determined by the general partner or investment manager of the respective partnership
Other holdings	The value of these assets vary by investment type, but primarily are determined by reputable pricing vendors, who use pricing matrices or models that use observable inputs
Collateral held on loaned securities	Values are based on the net asset value per unit of the fund in which the collateral is invested
Collateral to be paid on loaned securities	Values are based on the fair value of the underlying securities loaned on the valuation date

Expected Pension and OPEB Plan Funding

The company's funding policy for its pension plans is to contribute amounts sufficient to meet legal funding requirements, plus any additional amounts that the company may determine to be appropriate considering the funded status of the plans, tax deductibility, the cash flows generated by the company, and other factors. Volatility in the global financial markets could have an unfavorable impact on future funding requirements. The company has no obligation to fund its principal plans in the United States in 2019. The company continually reassesses the amount and timing of any discretionary contributions. In 2019, the company does not expect to make a contribution to its Puerto Rico pension plan and expects to make a contribution of at least $40 million to its foreign pension plans. The company expects to have net cash outflows relating to its OPEB plan of approximately $20 million in 2019.

The following table details the funded status percentage of the company's pension plans as of December 31, 2018, including certain plans that are unfunded in accordance with the guidelines of the company's funding policy outlined above.

	United States and Puerto Rico		International		
as of December 31, 2018 (in millions)	Qualified plans	Nonqualified plan	Funded plans	Unfunded plans	Total
Fair value of plan assets	$4,007	n/a	$762	n/a	$4,769
PBO	4,144	$ 207	872	$ 400	5,623
Funded status percentage	97 %	n/a	87 %	n/a	85 %

Pension Plan Amendments

In January 2018, the company announced changes to its U.S. pension plans. The company spun off the assets and liabilities of the qualified plan attributable to current employees into a new plan and will freeze the pay and service amounts used to calculate pension benefits for active participants in the U.S. pension plans as of December 31, 2022. The assets and liabilities attributable to retired and former company employees remained with the original qualified plan. Years of additional service earned and eligible compensation received after December 31, 2022 will not be included in the determination of the benefits payable to participants. These changes resulted in a $57 million decline

in the PBO upon the effective date of the changes. As a result of these changes, net periodic pension and OPEB expense decreased in 2018.

U.S. Defined Contribution Plan

Most U.S. employees are eligible to participate in a qualified defined contribution plan. Expense recognized by the company was $50 million in 2018, $45 million in 2017 and $50 million in 2016.

NOTE 15

ACCUMULATED OTHER COMPREHENSIVE INCOME

Comprehensive income includes all changes in stockholders' equity that do not arise from transactions with stockholders, and consists of net income, CTA, pension and other employee benefits, unrealized gains and losses on cash flow hedges and, prior to 2018, unrealized gains and losses on available-for-sale equity securities. As a result of recent changes in accounting guidance related to available-for-sale equity securities, the unrealized gains and losses associated with these assets are no longer recognized in AOCI beginning January 1, 2018. The following table is a net-of-tax summary of the changes in AOCI by component for the years ended December 31, 2018 and 2017.

(in millions)	CTA	Pension and other employee benefits	Hedging activities	Available-for-sale securities	Total
Gains (losses)					
Balance as of December 31, 2017	$(3,013)	$ (981)	$ (10)	$ 3	$(4,001)
Adoption of new accounting standard	—	—	—	(3)	(3)
Other comprehensive (loss) income before reclassifications	(461)	(26)	(1)	—	(488)
Amounts reclassified from AOCI	—	58	10	—	68
Net other comprehensive (loss) income	(461)	32	9	—	(420)
Balance as of December 31, 2018	$(3,474)	$ (949)	$ (1)	$ —	$(4,424)

(in millions)	CTA	Pension and other employee benefits	Hedging activities	Available-for-sale securities	Total
Gains (losses)					
Balance as of December 31, 2016	$(3,438)	$ (1,122)	$ 3	$ 1	$(4,556)
Other comprehensive income (loss) before reclassifications	396	50	(18)	(1)	427
Amounts reclassified from AOCI	29	91	5	3	128
Net other comprehensive (loss) income	425	141	(13)	2	555
Balance as of December 31, 2017	$(3,013)	$ (981)	$ (10)	$ 3	$(4,001)

The following table is a summary of the gains (losses) reclassified from AOCI to net income during the years ended December 31, 2018 and 2017.

	Amounts reclassified from AOCI [a]		
(in millions)	2018	2017	Location of impact in income statement
Translation adjustments			
Loss on Venezuela deconsolidation	$—	$(29)	Other (income) expense, net
	—	(29)	Total before tax
	—	—	Income tax expense (benefit)
	$—	$(29)	Net of tax
Amortization of pension and other employee benefits items			
Actuarial losses and other[b]	$(70)	$(137)	Other (income) expense, net
	(70)	(137)	Total before tax
	12	46	Income tax expense (benefit)
	$(58)	$(91)	Net of tax
Gains (losses) on hedging activities			
Foreign exchange contracts	$(12)	$(8)	Cost of sales
	(12)	(8)	Total before tax
	2	3	Income tax expense (benefit)
	$(10)	$(5)	Net of tax
Available-for-sale securities			
Other-than-temporary impairment of equity securities	$—	$(5)	Other (income) expense, net
	—	(5)	Total before tax
	—	2	Income tax expense (benefit)
	$—	$(3)	Net of tax
Total reclassification for the period	$(68)	$(128)	Total net of tax

(a) Amounts in parentheses indicate reductions to net income.
(b) These AOCI components are included in the computation of net periodic benefit cost disclosed in Note 14.
Refer to Note 10 for additional information regarding hedging activity and Note 14 for additional information regarding the amortization of pension and other employee benefits items.

NOTE 16

INCOME TAXES

Income from Continuing Operations Before Income Tax Expense by Category

years ended December 31 (in millions)	2018	2017	2016
United States	$16	$(291)	$3,906
International	1,677	1,508	1,048
Income from continuing operations before income taxes	$1,693	$1,217	$4,954

Income Tax Expense Related to Continuing Operations

years ended December 31 (in millions)	2018	2017	2016
Current			
United States			
Federal	$21	$8	$10
State and local	(1)	18	(3)
International	310	273	282
Current income tax expense	330	299	289
Deferred			
United States			
Federal	(234)	233	(286)
State and local	-	(7)	3
International	(33)	(32)	(18)
Deferred income tax expense (benefit)	(267)	194	(301)
Income tax expense (benefit)	$63	$493	$(12)

Deferred Tax Assets and Liabilities

as of December 31 (in millions)	2018	2017
Deferred tax assets		
Accrued expenses	$232	$269
Retirement benefits	222	248
Tax credits and net operating losses	862	834
Valuation allowances	(305)	(483)
Total deferred tax assets	1,011	868
Deferred tax liabilities		
Subsidiaries' unremitted earnings	43	35
Asset basis differences	712	705
Total deferred tax liabilities	755	740

Net deferred tax asset	$256	$128

At December 31, 2018, the company had U.S. state operating loss carryforwards totaling $418 million and tax credit carryforwards totaling $424 million. The U.S. operating loss carryforwards expire between 2019 and 2037 and the tax credits expire between 2019 and 2037. At December 31, 2018, the company had foreign operating loss carryforwards totaling $1.4 billion and foreign tax credit carryforwards totaling $51 million. The foreign operating loss carryforwards expire between 2019 and 2029 with $877 million having no expiration date. The foreign tax credits expire between 2021 and 2031 with $16 million having no expiration date. Realization of these operating loss and tax credit carryforwards depends on generating sufficient taxable income in future periods. A valuation allowance of $305 million and $483 million was recognized as of December 31, 2018 and 2017, respectively, to reduce the deferred tax assets associated with net operating loss and tax credit carryforwards because the company does not believe it is more likely than not that these assets will be fully realized prior to expiration. The company will continue to evaluate the need for additional valuation allowances and, as circumstances change, the valuation allowance may change. The narrative below indicates the December 31, 2017 provisional balances related to the enactment of the 2017 Tax Act that were adjusted in 2018.

Income Tax Expense Related to Continuing Operations Reconciliation

years ended December 31 (in millions)	2018	2017	2016
Income tax expense at U.S. statutory rate	$356	$424	$1,734
Retained shares tax free exchange gains	—	—	(1,587)
Tax incentives	(161)	(140)	(126)
State and local taxes	5	(6)	1
Foreign tax expense (benefit)	105	(82)	—
Contingent tax matters	10	(1)	(48)
Deferred tax revaluation due to 2017 Tax Act	(8)	(283)	—
Transition tax due to 2017 Tax Act	(5)	529	—
U.S. valuation allowance due to 2017 Tax Act	(194)	339	—
Stock options windfall tax benefits	(40)	(56)	—
Foreign tax credits generated	—	(246)	—
Other factors	(5)	15	14
Income tax expense (benefit)	$63	$493	$(12)

In the above reconciliation, the 2017 income tax expense associated with deferred tax revaluation, the transition tax and the U.S. valuation allowance, all of which result directly or indirectly from the enactment of the 2017 Tax Act, included, or were, provisional amounts. In 2018, the company completed its one-year measurement period adjustments to the 2017 Tax Act provisional amounts in accordance with SAB 118.

The 2017 Tax Act reduced the U.S. statutory tax rate from 35% to 21% for years after 2017. Accordingly, upon its enactment in 2017, the company remeasured its deferred tax assets and liabilities as of December 31, 2017 to reflect the reduced rate that will apply in future periods when these deferred taxes are settled or realized. The company recognized a SAB 118 provisional deferred tax benefit of $283 million to reflect the reduced U.S. tax rate and other effects of the 2017 Tax Act. In 2018, the company collected all of the necessary data to complete its analysis of the effect of the 2017 Tax Act on the remeasurement of the underlying deferred taxes and recognized an additional deferred tax benefit of $8 million.

The 2017 Tax Act requires the company to pay U.S. income taxes on accumulated foreign subsidiary earnings not previously subject to U.S. income tax at a rate of 15.5% to the extent of foreign cash and certain other net current assets and 8% on the remaining earnings. The company recognized a $529 million provisional charge in 2017 for that one-time transitional tax, the majority of which was non-cash. This charge was inclusive of relevant non-U.S. withholding taxes and U.S. state income taxes on the portion of the earnings expected to be repatriated. In 2018, after further study of the 2017 Tax Act and associated U.S. Treasury Department Proposed Regulations, and further analysis of historical earnings and profits and tax pools, as well as refinements of the cash rate portion of the charge, which was provisional due to certain foreign subsidiaries with non-calendar tax year-ends, the company reduced its one-time transitional tax expense by $5 million.

The 2017 Tax Act moves the U.S. from a worldwide system of taxation to a territorial system; additionally, the 2017 Tax Act changed the rules that enabled taxpayers to generate foreign source income related to export sales that were

eligible to utilize foreign tax credits. Consequently, the company did not believe in 2017 that it would be more likely than not able to utilize its existing foreign tax credit deferred tax assets (DTAs) within the applicable carryforward periods. As such, a provisional $339 million U.S. Valuation Allowance was recognized in respect of the company's foreign tax credit DTAs. After studying the 2017 Tax Act and U.S. Treasury Department Proposed Regulations and evaluating any elections or other opportunities that may be available, the company currently expects to be able to realize some, but not all, of the foreign tax credit DTAs up to its overall domestic loss (ODL) balance plus recurring foreign inclusions. Accordingly, the company reduced its provisional foreign tax credit DTA valuation allowance and recognized a 2018 benefit of $194 million.

The benefit from the lower U.S. federal rate was almost wholly offset by changes to deductions related to the 2017 Tax Act. These changes included lost tax benefits from the allocations of certain U.S. expenses to exempt foreign income. The company's tax provision for 2018 does not include any tax charge related to either the Global Intangible Low Taxed Income (GILTI) or Base Erosion Anti-Abuse Tax (BEAT) provisions as the company does not believe that it is subject to either. While not expecting to be subject to a tax charge under the 2017 Tax Act GILTI provisions in the near term, the company's accounting policy is to recognize this tax as a period cost.

The company previously did not recognize U.S. income tax expense related to earnings outside the United States that were deemed indefinitely reinvested. U.S. federal and state income taxes, net of applicable credits, on these foreign unremitted earnings from continuing operations of $9.3 billion as of December 31, 2016 would have been approximately $2.6 billion. As noted above, the

enactment of the 2017 Tax Act created a territorial tax system that allows companies to repatriate certain foreign earnings without incurring additional U.S. federal tax by providing for a 100% dividend exemption. Under the dividend-exemption provision, 100% of the foreign-source portion of dividends paid by certain foreign corporations to a U.S. corporate stockholder are exempt from U.S. federal taxation. As a result of the U.S. change to a territorial tax system and the incurrence of the one-time transition tax charge (discussed above), the company now plans to repatriate foreign earnings that were previously considered indefinitely reinvested. Moreover, the company continues to evaluate if any portion of its outside basis difference not attributable to earnings will reverse in a taxable manner and whether it can identify and quantify those differences and the related U.S. deferred tax charges.

Unrecognized Tax Benefits

The company classifies interest and penalties associated with income taxes in the income tax expense (benefit) line in the consolidated statements of income. Net interest and penalties recognized during 2018, 2017 and 2016 were $8 million, $3 million and $6 million, respectively. The liability recognized related to interest and penalties was $22 million and $15 million as of December 31, 2018 and 2017, respectively. The total amount of gross unrecognized tax benefits as of December 31, 2018 that, if recognized, would impact the effective tax rate is approximately $127 million.

The following table is a reconciliation of the company's unrecognized tax benefits, including those related to discontinued operations, for the years ended December 31, 2018, 2017 and 2016.

as of and for the years ended (in millions)	2018	2017	2016
Balance at beginning of the year	$108	$82	$191
Increase associated with tax positions taken during the current year	32	33	7
Increase (decrease) associated with tax positions taken during a prior year	13	2	(31)
Settlements	(5)	(6)	(75)
Decrease associated with lapses in statutes of limitations	(21)	(3)	(10)
Balance at end of the year	$127	$108	$82

Of the gross unrecognized tax benefits, $68 million and $87 million were recognized as liabilities in the consolidated balance sheets as of December 31, 2018 and 2017, respectively. The company has recognized net indemnification receivables from Baxalta in the amount of $25 million, $48 million and $28 million as of December 31, 2018, 2017 and 2016, respectively, related to the unrecognized tax benefits for which the company is the primary obligor but economically relate to Baxalta operations.

None of the positions included in the liability for uncertain tax positions related to tax positions for which the ultimate deductibility is highly certain but for which there is uncertainty about the timing of such deductibility.

Tax Incentives

The company has received tax incentives in Puerto Rico, Switzerland, Dominican Republic, Costa Rica and certain other taxing jurisdictions outside the United States. The financial impact of the reductions as compared to the statutory tax rates is indicated in the income tax expense reconciliation table above. The tax reductions as compared to the local statutory rate favorably impacted earnings from continuing operations per diluted share by $0.29 in 2018, $0.25 in 2017, and $0.23 in 2016. The Puerto Rico grant provides that the company's manufacturing operations are and will be partially exempt from local taxes until the year 2026.

Examinations of Tax Returns

As of December 31, 2018, the company had ongoing audits in the United States, Germany, Sweden, Belgium and other jurisdictions. During 2018, Baxter obtained a settlement of a 2008 through 2010 transfer pricing Competent Authority proceeding between the U.S. and Germany, resulting in the Internal Revenue Service (IRS) closing its examination on 2008. Tax years 2009 and forward remain under examination by the IRS. The company believes that it is reasonably possible that its gross unrecognized tax benefits will be reduced within the next 12 months by $12 million due principally to the resolution of U.S. examinations. While the final outcome of these matters is inherently uncertain, the company believes it has made adequate tax provisions for all years subject to examination.

NOTE 17

LEGAL PROCEEDINGS

Baxter is involved in product liability, patent, commercial, and other legal matters that arise in the normal course of the company’s business. The company records a liability when a loss is considered probable and the amount can be reasonably estimated. If the reasonable estimate of a probable loss is a range, and no amount within the range is a better estimate, the minimum amount in the range is accrued. If a loss is not probable or a probable loss cannot be reasonably estimated, no liability is recorded. As of

December 31, 2018 and 2017, the company's total recorded reserves with respect to legal matters were $34 million and $41 million, respectively, and there were no related receivables.

Baxter has established reserves for certain of the matters discussed below. The company is not able to estimate the amount or range of any loss for certain contingencies for which there is no reserve or additional loss for matters already reserved. While the liability of the company in connection with the claims cannot be estimated and the resolution thereof in any reporting period could have a significant impact on the company's results of operations and cash flows for that period, the outcome of these legal proceedings is not expected to have a material adverse effect on the company's consolidated financial position. While the company believes that it has valid defenses in the matters set forth below, litigation is inherently uncertain, excessive verdicts do occur, and the company may incur material judgments or enter into material settlements of claims.

In addition to the matters described below, the company remains subject to the risk of future administrative and legal actions. With respect to governmental and regulatory matters, these actions may lead to product recalls, injunctions, and other restrictions on the company's operations and monetary sanctions, including significant civil or criminal penalties. With respect to intellectual property, the company may be exposed to significant litigation concerning the scope of the company's and others' rights. Such litigation could result in a loss of patent protection or the ability to market products, which could lead to a significant loss of sales, or otherwise materially affect future results of operations.

Environmental

Baxter is involved as a potentially responsible party (PRP) for environmental clean-up costs at seven Superfund sites. Under the U.S. Superfund statute and many state laws, generators of hazardous waste sent to a disposal or recycling site are liable for site cleanup if contaminants from that property later leak into the environment. The laws generally provide that a PRP may be held jointly and severally liable for the costs of investigating and remediating the site. Separate from the Superfund cases noted above, Baxter is involved in an ongoing voluntary environmental remediation associated with historic operations at the company's Irvine, California, United States, facility. In 2017, the company recorded a pre-tax charge of $15 million related to a former location and included that charge within loss from discontinued operations, net of tax, on the consolidated statement of income. As of December 31, 2018 and 2017, the company's environmental reserves, which are measured on an undiscounted basis, were $19 million and $21 million, respectively. After considering these reserves, management is of the opinion that the outcome of these matters will not have a material adverse effect on the company's financial position or results of operations.

General litigation

On July 31, 2015, DaVita Inc. (f/k/a DaVita Healthcare Partners Inc.) filed suit against Baxter Healthcare Corporation in the District Court of the State of Colorado regarding an ongoing commercial dispute relating to the provision of peritoneal dialysis products. A bench trial concluded in the third quarter 2016 and the parties were awaiting the court's decision. On February 16, 2018, the parties entered into a settlement agreement providing for a full and final release of all claims and damages that were or could have been asserted in the commercial dispute in connection with their entry into a new peritoneal dialysis products supply agreement. The court granted an order to dismiss the litigation on February 21, 2018.

In November 2016, a purported antitrust class action complaint seeking monetary and injunctive relief was filed in the United States District Court for the Northern District of Illinois. The complaint alleges a conspiracy among manufacturers of IV solutions to restrict output and affect pricing in connection with a shortage of such solutions. Similar parallel actions subsequently were filed. In January 2017, a single consolidated complaint covering these matters was filed in the Northern District of Illinois. The company filed a motion to dismiss the consolidated

complaint in February 2017. The court granted the company's motion to dismiss the consolidated complaint without prejudice in July 2018. The plaintiffs filed an amended complaint on September 6, 2018. The company filed a motion to dismiss the amended complaint on November 9, 2018.

In April 2017, the company became aware of a criminal investigation by the U.S. Department of Justice, Antitrust Division and a federal grand jury in the United States District Court for the Eastern District of Pennsylvania. The company and an employee received subpoenas seeking production of documents and testimony regarding the manufacturing, selling, pricing and shortages of IV solutions and containers (including saline solutions and certain other injectable medicines sold by the company) and communications with competitors regarding the same. On November 30, 2018, the DOJ notified the company that it had closed the investigation. The New York Attorney General has also requested that Baxter provide information regarding business practices in the IV saline industry. The company is cooperating with the New York Attorney General.

Other

In the fourth quarter of 2012, the company received two investigative demands from the United States Attorney for the Western District of North Carolina for information regarding its quality and manufacturing practices and procedures at its North Cove facility. In January 2017, the parties resolved this matter by entering into a deferred prosecution agreement and a civil settlement whereby the company agreed to pay approximately $18 million and implement certain enhanced compliance measures.

In December 2016, the company received a civil investigative demand from the Commercial Litigation Branch of the United States Department of Justice (DOJ) primarily relating to contingent discount arrangements for, and other promotion of, the company's TISSEEL and ARTISS products. In April 2018, the DOJ filed a notice of its decision not to intervene and an underlying qui tam complaint (U.S. ex rel. Andrew Capp v. Baxter) was unsealed in the United States District Court for the District of Columbia. The attorney for the relator/plaintiff voluntarily dismissed the qui tam complaint on June 16, 2018. The complaint, which is now fully resolved, related to contingent discount arrangements for, and other promotion of, the company's TISSEEL, ARTISS and VERITAS products.

NOTE 18

SEGMENT INFORMATION

The company manages its business based on three geographical segments: Americas (North and South America), EMEA (Europe, Middle East and Africa) and APAC (Asia-Pacific). The company's segments provide a broad portfolio of essential healthcare products, including acute and chronic dialysis therapies; sterile IV solutions; infusion systems and devices; parenteral nutrition therapies; inhaled anesthetics; generic injectable pharmaceuticals; and surgical hemostat and sealant products.

The company uses operating income on a segment basis to make resource allocation decisions and assess the ongoing performance of the company's business segments. Intersegment sales are eliminated in consolidation.

Certain items are maintained at Corporate and are not allocated to a segment. They primarily include most of the company's debt and cash and cash equivalents and related net interest expense, foreign exchange rate fluctuations (principally relating to intercompany receivables, payables and loans denominated in a foreign currency) and the majority of the foreign currency hedging activities, corporate headquarters costs, certain research and development costs, certain Global Business Unit (GBU) support costs, stock compensation expense, nonstrategic investments and related income and expense, certain employee benefit plan costs as well as certain gains, losses, and other charges (such as business optimization, integration and separation-related costs, and asset impairments). The company's chief operating decision maker does not receive any asset information by operating segment and, accordingly, the company does not report asset information by operating segment.

Financial information for the company's segments is as follows:

for the years ended December 31 (in millions)	2018	2017	2016
Net sales			
Americas	$5,959	$5,720	$5,437
EMEA	2,961	2,731	2,697
APAC	2,207	2,110	2,029
Total net sales	$11,127	$10,561	$10,163
Operating income			
Americas	$2,412	$2,234	$2,078
EMEA	674	564	476
APAC	538	512	464
Total segment operating income	$3,624	$3,310	$3,018
Depreciation Expense			
Americas	$222	$224	$217
EMEA	176	166	178
APAC	96	85	86
Corporate and other	119	132	151
Total depreciation expense	$613	$607	$632
Capital expenditures			
Americas	$291	$267	$332
EMEA	161	161	140
APAC	128	96	103
Corporate and other	134	101	116
Total capital expenditures	$714	$625	$691

The following table is a reconciliation of segment operating income to income from continuing operations before income taxes per the consolidated statements of income.

for the years ended December 31 (in millions)	2018	2017	2016
Total segment operating income	$3,624	$3,310	$3,018
Corporate and other	(2,025)	(2,019)	(2,273)
Total operating income	1,599	1,291	745
Net interest expense	45	55	66
Other (income) expense, net	(139)	19	(4,275)
Income from continuing operations before income taxes	$1,693	$1,217	$4,954

Net Sales by GBU

The following table represents net sales by GBU.

years ended December 31	2018	2017	2016
Renal Care[1]	3,662	3,480	3,421
Medication Delivery[2]	2,669	2,698	2,596
Pharmaceuticals[3]	2,092	1,883	1,722
Clinical Nutrition[4]	877	882	858
Advanced Surgery[5]	800	707	690
Acute Therapies[6]	517	456	429
Other	510	455	447
Total Baxter	$11,127	$10,561	$10,163

[1] Renal Care includes sales of the company's peritoneal dialysis (PD), hemodialysis (HD) and additional dialysis therapies and services.

[2] Medication Delivery includes sales of the company's IV therapies, infusion pumps, administration sets and drug reconstitution devices.

[3] Pharmaceuticals includes sales of the company's premixed and oncology drug platforms, inhaled anesthesia and critical care products and pharmacy compounding services.

[4] Clinical Nutrition includes sales of the company's parenteral nutrition (PN) therapies and related products.

[5] Advanced Surgery includes sales of the company's biological products and medical devices used in surgical procedures for hemostasis, tissue sealing and adhesion prevention.

Acute Therapies includes sales of the company's continuous renal replacement therapies (CRRT) and other organ support therapies focused in the intensive care unit (ICU).

Other includes sales primarily from the company's pharmaceutical partnering business.

Geographic information

for the years ended December 31 (in millions)	2018	2017	2016
Net sales			
United States	$4,723	$4,510	$4,259
Latin America and Canada	1,236	1,210	1,178
Total Americas	$5,959	$5,720	$5,437
EMEA	2,961	2,731	2,697
APAC	2,207	2,110	2,029
Total net sales	$11,127	$10,561	$10,163

as of December 31 (in millions)	2018	2017
PP&E, net		
United States	$1,755	$1,772
EMEA	1,222	1,268
APAC	898	903
Latin America and Canada	667	645
Consolidated PP&E, net	$4,542	$4,588

NOTE 19

QUARTERLY FINANCIAL RESULTS AND MARKET FOR THE COMPANY'S STOCK (UNAUDITED)

years ended December 31 (in millions, except per share data)	First quarter	Second quarter	Third quarter	Fourth quarter	Full year
2018					
Net sales	$2,677	$ 2,842	$2,767	$2,841	$11,127
Gross margin[1]	1,114	1,239	1,236	1,192	4,781
Income from continuing operations[1]	389	343	544	354	1,630
Income from continuing operations per common share[1]					
Basic	0.72	0.64	1.02	0.67	3.05
Diluted	0.71	0.63	1.00	0.66	2.99
Loss from discontinued operations, net of tax[1]	—	—	—	(6)	(6)
Loss from discontinued operations per common share					
Basic	0.00	0.00	0.00	(0.01)	(0.01)
Diluted	0.00	0.00	0.00	(0.01)	(0.02)
Net income[1]	389	343	544	348	1,624
Net income per common share[1]					
Basic	0.72	0.64	1.02	0.66	3.04
Diluted	0.71	0.63	1.00	0.65	2.97
Cash dividends declared per common share	0.160	0.190	0.190	0.190	0.730
Market price per common share					
High	72.26	75.41	77.75	77.80	77.80
Low	62.56	63.43	70.71	61.45	61.45
2017					
Net sales	$2,475	$ 2,605	$2,707	$2,774	$10,561
Gross margin[2]	1,044	1,132	1,130	1,164	4,470
Income (loss) from continuing operations[2]	273	264	248	(61)	724
Income (loss) from continuing operations per common share[2]					
Basic	0.50	0.49	0.46	(0.11)	1.33
Diluted	0.50	0.48	0.45	(0.11)	1.30
(Loss) income from discontinued operations, net of tax	(1)	1	3	(10)	(7)
(Loss) income from discontinued operations per common share					
Basic	0.00	0.00	0.00	(0.02)	(0.01)
Diluted	(0.01)	0.00	0.00	(0.02)	(0.01)
Net income (loss)[2]	272	265	251	(71)	717
Net income (loss) per common share[2]					
Basic	0.50	0.49	0.46	(0.13)	1.32
Diluted	0.49	0.48	0.45	(0.13)	1.29
Cash dividends declared per common share	0.130	0.160	0.160	0.160	0.610
Market price per common share					
High	52.30	61.38	64.61	66.05	66.05
Low	44.44	52.29	59.50	61.45	44.44

[1] The first quarter of 2018 included a net benefit of $37 million due to a settlement of certain claims related to the acquired operations of Claris and an update to the estimated impact of U.S. federal tax reform previously made by the company offset by business optimization charges, acquisition and integration expenses and certain product litigation costs. The second quarter of 2018 included charges of $44 million related to business optimization and acquisition and integration expenses. The third quarter of 2018 included a net benefit of $138 million related to Hurricane Maria insurance recoveries, an update to the estimated impact of U.S. federal tax reform previously made by the company and an adjustment to the accrual related to the SIGMA SPECTRUM infusion pump inspection and remediation activities offset by business optimization charges, acquisition and integration expenses and European medical devices regulation costs. The fourth quarter of 2018 included charges of $34 million related to business optimization, acquisition and integration expenses, European medical devices regulation costs and an update to the estimated impact of U.S. federal tax reform previously made by the company offset by Hurricane Maria insurance recoveries and a reduction to the accrual related to the SIGMA SPECTRUM infusion pump inspections and remediation activities.

[2] The first quarter of 2017 included charges of $17 million related to business optimization, separation-related costs and historical rebate and discount adjustments. The second quarter of 2017 included charges of $57 million related to business optimization, separation-related costs, Venezuela deconsolidation costs, Claris acquisition and integration expenses and adjustments to historical product reserves. The third quarter of 2017 included charges of $82 million related to business optimization, separation-related costs, Hurricane Maria costs, Claris acquisition and integration expenses and SIGMA SPECTRUM infusion pump inspection and remediation activities. The fourth quarter of 2017 included charges of $388 million related to business optimization, separation-related costs, Claris acquisition and integration expenses, Hurricane Maria costs, litigation and contractual disputes for business arrangements in which the company is no longer engaged or a party thereto and the impact of tax reform in the United States.

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Stockholders of Baxter International Inc.

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated balance sheets of Baxter International Inc. and its subsidiaries (the "Company") as of December 31, 2018 and 2017, and the related consolidated statements of income, comprehensive income, changes in equity and cash flows for each of the three years in the period ended December 31, 2018, including the related notes and financial statement schedule listed in the index appearing under Item 15(2) (collectively referred to as the "consolidated financial statements"). We also have audited the Company's internal control over financial reporting as of December 31, 2018, based on criteria established in Internal Control - Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2018 and 2017, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2018 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2018, based on criteria established in Internal Control - Integrated Framework (2013) issued by 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 certain pension and postretirement net periodic benefit costs in 2018.

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 Assessment of 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

Chicago, Illinois

February 21, 2019

We have served as the Company's auditor since 1985.

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

Baxter carried out an evaluation, under the supervision and with the participation of its Disclosure Committee and management, including the Chief Executive Officer and Chief Financial Officer, of the effectiveness of Baxter's disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1394, as amended (the Exchange Act)) as of December 31, 2018. Baxter's disclosure controls and procedures are designed to ensure that information required to be disclosed by Baxter in the reports it files or submits under the Exchange Act is recorded, processed, summarized and reported on a timely basis and that such information is communicated to management, including the Chief Executive Officer, Chief Financial Officer and its Board of Directors, to allow timely decisions regarding required disclosure.

Based on that evaluation, the Chief Executive Officer and Chief Financial Officer concluded that the company's disclosure controls and procedures were effective as of December 31, 2018.

Management's Assessment of Internal Control Over Financial Reporting

Management is responsible for establishing and maintaining adequate 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 under the supervision of the principal executive and financial officers, and effected by the Board of Directors, management and other personnel, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with accounting principles generally accepted in the United States of America.

Management performed an assessment of the effectiveness of the company's internal control over financial reporting as of December 31, 2018. In making this assessment, management used the framework in Internal Control-Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on that assessment under the framework in Internal Control-Integrated Framework (2013), management concluded that the company's internal control over financial reporting was effective as of December 31, 2018.

The effectiveness of the company's internal control over financial reporting as of December 31, 2018 has been audited by PricewaterhouseCoopers LLP, an independent registered public accounting firm, as stated in their report which appears herein.

Changes in Internal Control over Financial Reporting

In 2017, related to its overall business optimization initiatives, the company began implementation of a business transformation project within the finance, human resources, purchasing and information technology functions which will further centralize and standardize business processes and systems across the company. The company is transitioning some processes to its shared services centers while others are moving to outsourced providers. This multi-year initiative will be conducted in phases and include modifications to the design and operation of controls over financial reporting.

With the exception of the above, there have been no changes in Baxter's internal control over financial reporting (as such term is defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) during the quarter ended December 31, 2018 that have materially affected, or are reasonably likely to materially affect, Baxter's internal control over financial reporting.

Item 9B. Other Information.

None.

PART III

Item 10. Directors, Executive Officers and Corporate Governance.

Refer to information under the captions entitled “Corporate Governance at Baxter International Inc. — Proposal 1 — Election of Directors,” “— Directors Continuing in Office,” “— Board of Directors — Nomination of Directors,” “— Cor of the Board — Audit Committee,” “— Board Responsibilities — Code of Conduct,” and “Ownership of Our Stock — Section Beneficial Ownership Reporting Compliance” in Baxter’s definitive proxy statement to be filed with the Securities and Exchange Commission and delivered to stockholders in connection with the Annual Meeting of Stockholders to be held on May 7, 2019 (the Proxy Statement), all of which information is incorporated herein by reference. Also refer to information regarding executive officers of Baxter under the caption entitled “Executive Officers of the Registrant” in Part I of this Annual Report on Form 10-K.

Item 11. Executive Compensation.

Refer to information under the captions entitled “Executive Compensation,” and “Corporate Governance at Baxter International—Director Compensation” in the Proxy Statement, all of which information is incorporated herein by reference.

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

The following table provides information relating to shares of common stock that may be issued under Baxter’s existing equity compensation plans as of December 31, 2018.

Plan Category	Number of Shares to be Issued upon Exercise of Outstanding Options, Warrants and Rights[a]	Weighted-Average Exercise Price of Outstanding Options, Warrants and Rights[b]	Number of Shares Remaining Available for Future Issuance Under Equity Compensation Plans (Excluding

					Shares Reflected in Column[(a)(b)]	
Equity Compensation Plans Approved by Stockholders	28,151,039	(1)	$ 43.83	(2)	30,292,058	(3)
Equity Compensation Plans Not Approved by Stockholders	107,427	(4)	$ 28.97		—	
Total	28,258,466	(5)	$ 43.76	(2)	30,292,058	

(1) Excludes purchase rights under the Employee Stock Purchase Plan. Under the Employee Stock Purchase Plan, eligible employees may purchase shares of common stock through payroll deductions of up to 15 percent of base pay at a purchase price equal to 85 percent of the closing market price on the purchase date (as defined by the Employee Stock Purchase Plan). A participating employee may not purchase more than $25,000 in fair market value of common stock under the Employee Stock Purchase Plan in any calendar year and may withdraw from the Employee Stock Purchase Plan at any time.

(2) Restricted stock units and performance share units are excluded when determining the weighted-average exercise price of outstanding options.

(3) Includes (i) 3,387,916 shares of common stock available for purchase under the Employee Stock Purchase Plan; (ii) 400,387 shares of common stock available under the 2007 Incentive Plan; (iii) 8,936,287 shares of common stock available under the 2011 Incentive Plan; and (iv) 17,567,468 shares of common stock available under the 2015 Incentive Plan.

(4) Includes shares of common stock issuable upon exercise of options granted under the 2001 Incentive Compensation Program. These shares were made available pursuant to an amendment thereto not approved by stockholders. These additional shares were approved by the company's Board of Directors, not the company's stockholders, although the company stockholders have approved the 2001 Incentive Compensation Program.

(5) Includes outstanding awards of 25,313,685 stock options, which have a weighted-average exercise price of $43.76 and a weighted-average remaining term of 5.8 years, 1,611,179 shares of common stock issuable upon vesting of restricted stock units, and 913,482 shares of common stock reserved for issuance in connection with performance share unit grants.

Refer to information under the captions entitled "Ownership of Our Stock — Security Ownership by Directors and Executive Officers" and "— Security Ownership by Certain Beneficial Owners" in the Proxy Statement, all of which information is incorporated herein by reference.

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

Refer to the information under the first paragraph of the caption entitled “Corporate Governance—at Baxter International Inc.—Board of Directors” and the captions entitled “Corporate Governance at Baxter International Inc.—Board of Directors—Director Independence” and “Corporate Governance at Baxter International Inc.—Other Corporate Governance Information—Certain Relationships and Related Person Transactions” in the Proxy Statement, all of which information is incorporated herein by reference.

Item 14. Principal Accountant Fees and Services.

Refer to the information under the caption entitled “Audit Matters — Audit and Non-Audit Fees” and “—Pre-Approval of Audit and Permissible Non-Audit Fees” in the Proxy Statement, all of which information is incorporated herein by reference.

PART IV

Item 15. Exhibits and Financial Statement Schedules.

The following documents are filed as a part of this report:

	All other schedules have been omitted because they are not applicable or not required.
(3)	Exhibits required by Item 601 of Regulation S-K are listed in the Exhibit Index, which is incorporated herein by reference. Exhibits in the Exhibit Index marked with a “C” in the left margin constitute management contracts or compensatory plans or arrangements contemplated by Item 15(b) of Form 10-K.

Item 16. Form 10-K Summary.

Not applicable.

EXHIBIT INDEX

	Number and Description of Exhibit
2.1	Separation and Distribution Agreement (incorporated by reference to Exhibit 2.1 to the Company's Current Report on Form 8-K, filed on July 7, 2015).
3.1	Amended and Restated Certificate of Incorporation (incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K, filed on May 10, 2013).
3.2	Certificate of Amendment to the Amended and Restated Certificate of Incorporation dated May 3, 2016 (incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K, filed on May 4, 2016).
3.3	Bylaws, as amended and restated on November 13, 2018 (incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K, filed on November 15, 2018).
4.1(P)	Form of Common Stock Certificate of the Company (incorporated by reference to Exhibit(a) to the Company's Registration Statement on Form S-16 (Registration No. 02-65269), filed on August 17, 1979).
4.2	Indenture, dated August 8, 2006, between the Company and J.P. Morgan Trust Company, National Association, as Trustee (incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K, filed on August 9, 2006).
4.3	Second Supplemental Indenture, dated December 7, 2007, between the Company and The Bank of New York Trust Company, N.A. (as successor in interest to J.P. Morgan Trust Company, National Association), as Trustee (including form of 6.250% Senior Note due 2037) (incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K, filed on December 7, 2007).
4.4	Eighth Supplemental Indenture, dated August 13, 2012, between the Company and The Bank of New York Mellon Trust Company, N.A. (as successor in interest to J.P. Morgan Trust Company, National Association), as Trustee (including forms of 2.400% Senior Notes due 2022 and 3.650% Senior Notes due 2042) (incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K, filed on August 13, 2012).
4.5	Ninth Supplemental Indenture, dated June 11, 2013, between the Company and The Bank of New York Mellon Trust Company, N.A. (as successor in interest to J.P. Morgan Trust Company, National Association), as Trustee (including form of 4.500% Senior Notes due 2043) (incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K, filed on June 11, 2013).
	Tenth Supplemental Indenture, dated August 13, 2016, between the Company and The Bank of New York Mellon Trust Company, N.A., as Trustee (including forms of 1.700% Senior Notes due 2021, 2.600% Senior Notes due 2026 and 3.500% Senior Notes due 2046) (incorporated by reference to Exhibit 4.2 to the

4.6 Company's Current Report on Form 8-K, filed on August 15, 2016).

4.7 Eleventh Supplemental Indenture, dated as of May 30, 2017, by and between the Company and The Bank of New York Mellon Trust Company, N.A., as Trustee (including form of 1.300% Senior Notes due 2025) (incorporated by reference to Exhibit 4.2 to the Company's Current Report on Form 8-K, filed on May 30, 2017).

10.1 Five-Year Credit Agreement, dated as of July 1, 2015, among Baxter International Inc. as Borrower, JPMorgan Chase Bank, National Association, as Administrative Agent and certain other financial institutions named therein (incorporated by reference to Exhibit 10.4 to the Company's Current Report on Form 8-K, filed on July 7, 2015).

10.2 Amendment No. 1 to the Five-Year Credit Agreement, dated as of October 26, 2015, among Baxter International Inc. as Borrower, JPMorgan Chase Bank, National Association, as Administrative Agent and certain other financial institutions named therein (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K, filed on October 27, 2015).

10.3 Credit Agreement, dated as of July 1, 2015, among Baxter Healthcare SA and Baxter World Trade SPRL, as Borrowers, J.P. Morgan Europe Limited, as Administrative Agent and certain other financial institutions named therein (incorporated by reference to Exhibit 10.5 to the Company's Current Report on Form 8-K, filed on July 7, 2015).

	Number and Description of Exhibit
10.4	Amendment No. 1 to the Credit Agreement, dated as of October 26, 2015, among Baxter Healthcare SA and Baxter World Trade SPRL, as Borrowers, J.P. Morgan Europe Limited, as Administrative Agent and certain other financial institutions named therein (incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K, filed on October 27, 2015).
10.5	Tax Matters Agreement, dated as of June 30, 2015, by and between Baxter International Inc. and Baxalta Incorporated (incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K, filed on July 7, 2015).
10.6	Letter Agreement, dated as of January 11, 2016, by and among Baxter International Inc., Baxalta Incorporated and Shire plc. (Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K, filed on January 11, 2016).
10.7	Support Agreement, dated as of September 29, 2015, by and among Baxter International Inc., Third Point LLC, Third Point Partners L.P., Third Point Partners Qualified L.P., Third Point Offshore Master Fund L.P., Third Point Ultra Master Fund L.P., Third Point Reinsurance Co. Ltd., Third Point Advisors LLC, Third Point Advisors II LLC, Daniel S. Loeb and Munib Islam (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K, filed on September 30, 2015).
C 10.8*	Form of Indemnification Agreement entered into with directors and officers.
C 10.9	Baxter International Inc. 2007 Incentive Plan (incorporated by reference to Appendix A to the Company's Definitive Proxy Statement on Schedule 14A, filed on March 20, 2007).
C 10.10	Baxter International Inc. Equity Plan for the 2007 Incentive Plan (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K, filed on March 16, 2007).
C 10.11	Baxter International Inc. 2011 Incentive Plan (incorporated by reference to Appendix B to the Company's Definitive Proxy Statement on Schedule 14A, filed on March 18, 2011).
C 10.12	Baxter International Inc. Equity Plan for the 2011 Incentive Plan (incorporated by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q, filed on May 3, 2011).
C 10.13	Baxter International Inc. 2015 Incentive Plan (incorporated by reference to Appendix A to the Company's Definitive Proxy Statement on Schedule 14A, filed on March 25, 2015).
C 10.14	Baxter International Inc. Equity Plan for the 2015 Incentive Plan (incorporated by reference to Exhibit 10.6 to the Company's Current Report on Form 8-K, filed on July 7, 2015).
C 10.15	Baxter International Inc. Equity Plan for José E. Almeida under the 2015 Incentive Plan (incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K, filed on October 29, 2015).
C 10.16*	

	Baxter International Inc. Directors' Deferred Compensation Plan (amended and restated effective January 1, 2018).
C 10.17	Offer Letter between Baxter International Inc. and José E. Almeida, dated as of October 28, 2015 (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K, filed on October 29, 2015).
C 10.18	Form of Severance Agreement entered into with executive officers (incorporated by reference to Exhibit 10.11 to the Company's Annual Report on Form 10-K, filed on February 21, 2014).
C 10.19	Baxter International Inc. Employee Stock Purchase Plan (as amended and restated effective July 1, 2011) (incorporated by reference to Appendix A to the Company's Definitive Proxy Statement on Schedule 14A, filed on March 18, 2011).
C 10.20	First Amendment to Baxter International Inc. Employee Stock Purchase Plan (dated as of July 15, 2016) (incorporated by reference to Exhibit 10.27 to the Company's Annual Report on Form 10-K, filed on February 23, 2017).
C 10.21*	Baxter International Inc. Non-Employee Director Compensation Plan (as amended and restated effective January 1, 2018).
C 10.22	Separation Agreement, dated as of March 2, 2017, by and between Baxter International Inc. and David Scharf (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K, filed on March 3, 2017).
C 10.23	Baxter International Inc. 2017 Equity Plan, effective as of March 2, 2017 (incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K, filed on March 3, 2017).

	Number and Description of Exhibit
C 10.24	Form of Non-Competition, Non-Solicitation and Confidentiality Agreement (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K, filed on April 14, 2017).
C 10.25	Baxter International Inc. and Subsidiaries Pension Plan (Amended and Restated effective January 5, 2018) (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K, filed on January 8, 2018).
C 10.26	Baxter International Inc. and Subsidiaries Pension Plan II (Amended and Restated effective January 5, 2018) (incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K, filed on January 8, 2018).
C 10.27	Baxter International Inc. and Subsidiaries Supplemental Pension Plan (Amended and Restated effective January 5, 2018) (incorporated by reference to Exhibit 10.3 to the Company's Current Report on Form 8-K, filed on January 8, 2018).
C 10.28	Baxter International Inc. and Subsidiaries Deferred Compensation Plan (Amended and Restated effective January 5, 2018) (incorporated by reference to Exhibit 10.4 to the Company's Current Report on Form 8-K, filed on January 8, 2018).
21*	Subsidiaries of Baxter International Inc.
23*	Consent of PricewaterhouseCoopers LLP.
31.1*	Certification of Chief Executive Officer pursuant to Rules 13a-14(a) and 15d-14(a) of the Securities Exchange Act of 1934, as amended.
31.2*	Certification of Chief Financial Officer pursuant to Rules 13a-14(a) and 15d-14(a) and 15d-14(a) of the Securities Exchange Act of 1934, as amended.
32.1*	Certification of Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.2*	Certification of Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101.INS*	XBRL Instance Document
101.SCH*	XBRL Taxonomy Extension Schema Document
101.CAL*	XBRL Taxonomy Extension Calculation Linkbase Document
101.LAB*	XBRL Taxonomy Extension Label Linkbase Document

101.PRE* XBRL Taxonomy Extension Presentation Linkbase Document

101.DEF* XBRL Taxonomy Extension Definition Linkbase Document

*Filed herewith.
CManagement contract or compensatory plan or arrangement.
(P)Paper exhibit

SIGNATURES

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

BAXTER INTERNATIONAL INC.

By: /s/ José E. Almeida
José E. Almeida
Chairman and Chief Executive Officer

DATE: February 21, 2019

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities indicated on February 21, 2019.

Signature	Title
/s/ José E. Almeida José E. Almeida	Chairman and Chief Executive Officer (principal executive officer)
/s/ James K. Saccaro James K. Saccaro	Executive Vice President and Chief Financial Officer (principal financial officer)
/s/ Brian C. Stevens Brian C. Stevens	Senior Vice President, Chief Accounting Officer and Controller (principal accounting officer)
/s/ Thomas F. Chen Thomas F. Chen	Director
/s/ John D. Forsyth John D. Forsyth	Director
/s/ James R. Gavin III, M.D., Ph.D. James R. Gavin III, M.D., Ph.D.	Director
/s/ Peter S. Hellman Peter S. Hellman	Director
/s/ Munib Islam Munib Islam	Director
/s/ Michael F. Mahoney Michael F. Mahoney	Director

Patricia B. Morrison	Director
/s/ Stephen N. Oesterle, M.D. Stephen N. Oesterle, M.D.	Director
/s/ Carole J. Shapazian Carole J. Shapazian	Director
/s/ Cathy R. Smith Cathy R. Smith	Director
/s/ Thomas T. Stallkamp Thomas T. Stallkamp	Director
/s/ Albert P. L. Stroucken Albert P. L. Stroucken	Director

Director
Amy A. Wendell

SCHEDULE II – Qualifying and Valuation accounts for each of the three years in the period ended December 31, 2018

Valuation and Qualifying Accounts (in millions)	Balance at beginning of period	Additions Charged to costs and expenses	(Credited) charged to other accounts (1)	Deductions	Balance at end of period
Year ended December 31, 2018:					
Allowance for doubtful accounts	$ 120	4	(7)	(7)	$ 110
Deferred tax asset valuation allowance	$ 483	15	(4)	(189)	$ 305
Year ended December 31, 2017:					
Allowance for doubtful accounts	$ 127	4	8	(19)	$ 120
Deferred tax asset valuation allowance	$ 150	350	—	(17)	$ 483
Year ended December 31, 2016:					
Allowance for doubtful accounts	$ 110	16	11	(10)	$ 127
Deferred tax asset valuation allowance	$ 135	16	3	(4)	$ 150

(1) Valuation accounts of acquired or divested companies and foreign currency translation adjustments. Reserves are deducted from assets to which they apply.