

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

Form 10-K

(Mark One)

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

For the fiscal year ended September 30, 2019

OR

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

Commission file number 1-12383

Rockwell Automation, Inc.

(Exact name of registrant as specified in its charter)

Delaware
*(State or other jurisdiction of
incorporation or organization)*

1201 South Second Street
(Address of principal executive offices)

Milwaukee Wisconsin

+1 (414) 382-2000
Registrant's telephone number, including area code

25-1797617
*(I.R.S. Employer
Identification No.)*

53204
(Zip Code)

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

Title of each class	Trading Symbol	Name of each exchange on which registered
Common Stock (\$1.00 par value)	ROK	New York Stock Exchange

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

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

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes No

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted 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 whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, smaller reporting company, or an emerging growth company. See definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act. (Check one):

Large Accelerated Filer	<input checked="" type="checkbox"/>	Accelerated Filer	<input type="checkbox"/>
Non-accelerated Filer	<input type="checkbox"/>	Smaller Reporting Company	<input type="checkbox"/>
		Emerging Growth Company	<input type="checkbox"/>

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

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

The aggregate market value of registrant's voting stock held by non-affiliates of registrant on March 29, 2019 was approximately \$21.7 billion. 115,546,942 shares of registrant's Common Stock, par value \$1 per share, were outstanding on October 31, 2019.

DOCUMENTS INCORPORATED BY REFERENCE

Certain information contained in the Proxy Statement for the Annual Meeting of Shareowners of registrant to be held on February 4, 2020 is incorporated by reference into Part III hereof.

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PART I

FORWARD-LOOKING STATEMENTS

This Annual Report contains statements (including certain projections and business trends) that are “forward-looking statements” as defined in the Private Securities Litigation Reform Act of 1995. Words such as “believe”, “estimate”, “project”, “plan”, “expect”, “anticipate”, “will”, “intend” and other similar expressions may identify forward-looking statements. Actual results may differ materially from those projected as a result of certain risks and uncertainties, many of which are beyond our control, including but not limited to:

- *macroeconomic factors, including global and regional business conditions, the availability and cost of capital, commodity prices, the cyclical nature of our customers’ capital spending, sovereign debt concerns and currency exchange rates;*
- *laws, regulations and governmental policies affecting our activities in the countries where we do business, including those related to tariffs, taxation, and trade controls;*
- *the availability and price of components and materials;*
- *the successful execution of our cost productivity initiatives;*
- *the availability, effectiveness and security of our information technology systems;*
- *our ability to manage and mitigate the risk related to security vulnerabilities and breaches of our products, solutions and services;*
- *the successful development of advanced technologies and demand for and market acceptance of new and existing hardware and software products;*
- *our ability to manage and mitigate the risks associated with our solutions and services businesses;*
- *competitive hardware and software products, solutions and services and pricing pressures, and our ability to provide high quality products, solutions and services;*
- *disruptions to our distribution channels or the failure of distributors to develop and maintain capabilities to sell our products;*
- *the successful integration and management of strategic transactions and achievement of the expected benefits of these transactions;*
- *a disruption of our business due to natural disasters, pandemics, acts of war, strikes, terrorism, social unrest or other causes;*
- *intellectual property infringement claims by others and the ability to protect our intellectual property;*
- *the uncertainty of claims by taxing authorities in the various jurisdictions where we do business;*
- *our ability to attract, develop, and retain qualified personnel;*
- *the uncertainties of litigation, including liabilities related to the safety and security of the hardware and software products, solutions and services we sell;*
- *risks associated with our investment in common stock of PTC Inc., including the potential for volatility in our reported quarterly earnings associated with changes in the market value of such stock;*
- *our ability to manage costs related to employee retirement and health care benefits; and*
- *other risks and uncertainties, including but not limited to those detailed from time to time in our Securities and Exchange Commission (SEC) filings.*

These forward-looking statements reflect our beliefs as of the date of filing this report. We undertake no obligation to update or revise any forward-looking statement, whether as a result of new information, future events or otherwise. See Item 1A. **Risk Factors** for more information.

Item 1. **Business**

General

Rockwell Automation, Inc. (“Rockwell Automation” or the “Company”) is a global leader in industrial automation and digital transformation. We connect the imaginations of people with the potential of technology to expand what is humanly possible, making the world more productive and more sustainable. Our hardware and software products, solutions and services are designed to meet our customers’ needs to reduce total cost of ownership, maximize asset utilization, improve time to market and reduce enterprise business risk.

The Company continues the business founded as the Allen-Bradley Company in 1903. The privately-owned Allen-Bradley Company was a leading North American manufacturer of industrial automation equipment when the former Rockwell International Corporation (RIC) purchased it in 1985.

The Company was incorporated in Delaware in connection with a tax-free reorganization completed on December 6, 1996, pursuant to which we divested our former aerospace and defense businesses (the A&D Business) to The Boeing Company (Boeing). In the reorganization, RIC contributed all of its businesses, other than the A&D Business, to the Company and distributed all capital stock of the Company to RIC's shareowners. Boeing then acquired RIC.

As used herein, the terms "we", "us", "our", "Rockwell Automation" or the "Company" include wholly-owned and controlled majority-owned subsidiaries and predecessors unless the context indicates otherwise. Information included in this Annual Report on Form 10-K refers to our continuing businesses unless otherwise indicated.

Whenever an Item of this Annual Report on Form 10-K refers to information in our Proxy Statement for our Annual Meeting of Shareowners to be held on February 4, 2020 (the Proxy Statement), or to information under specific captions in Item 7. *Management's Discussion and Analysis of Financial Condition and Results of Operations* (MD&A), or in Item 8. *Financial Statements and Supplementary Data* (the Consolidated Financial Statements), the information is incorporated in that Item by reference. All date references to years and quarters refer to our fiscal year and quarters unless otherwise stated.

Operating Segments

We have two operating segments: Architecture & Software and Control Products & Solutions. Both operating segments share a common sales organization and supply chain and conduct business globally. Major markets served by both segments consist of discrete end markets (e.g., Automotive, Semiconductor, and Warehousing & Logistics), hybrid end markets (e.g., Food & Beverage, and Life Sciences), and process end markets (e.g., Oil & Gas, Metals, and Chemicals).

Geographic Information

We do business in more than 100 countries around the world. The largest sales outside the United States on a country-of-destination basis are in China, Canada, Italy, Mexico, the United Kingdom, Germany, and Brazil. See Item 1A. *Risk Factors* for a discussion of risks associated with our global operations.

Competition

Our competitors range from large diversified corporations that may also have business interests outside of industrial automation to smaller companies that offer a limited portfolio of industrial automation products, solutions and services. Factors that influence our competitive position include the breadth of our product portfolio and scope of solutions, technology differentiation, domain expertise, installed base, distribution network, quality of hardware and software products, solutions and services, global presence and price. Major competitors include Siemens AG, ABB Ltd, Schneider Electric SA, Emerson Electric Co., Mitsubishi Electric Corp. and Honeywell International Inc.

Distribution

In most countries, we sell primarily through independent distributors in conjunction with our direct sales force. In other countries, we sell through a combination of our direct sales force and to a lesser extent, through independent distributors. Approximately 75 percent of our global sales are through independent distributors. Sales to our largest distributor in 2019, 2018 and 2017 were approximately 10 percent of our total sales.

Employees

At September 30, 2019, we had approximately 23,000 employees. Approximately 8,600 were employed in the United States.

Raw Materials

We purchase a wide range of equipment, components, finished products and materials used in our business. The raw materials essential to the manufacture of our products generally are available at competitive prices. We have a broad base of suppliers and subcontractors. We depend upon the ability of our suppliers and subcontractors to meet performance and quality specifications and delivery schedules. See Item 1A. *Risk Factors* for a discussion of risks associated with our reliance on third party suppliers.

Backlog

Our total order backlog consists of (in millions):

	September 30,	
	2019	2018
Architecture & Software	\$ 174.7	\$ 168.5
Control Products & Solutions	1,194.7	1,243.5
	<u>\$ 1,369.4</u>	<u>\$ 1,412.0</u>

Backlog is not necessarily indicative of results of operations for future periods due to the short-cycle nature of most of our sales activities. Backlog orders scheduled beyond 2020 were approximately \$225 million as of September 30, 2019. Backlog was reclassified in 2018 to conform to our current reportable segments. See Note 17 in the Consolidated Financial Statements for more information.

Environmental Protection Requirements

Information about the effect of compliance with environmental protection requirements and resolution of environmental claims is contained in Note 16 in the Consolidated Financial Statements. See Item 1A. **Risk Factors** for a discussion of risks associated with liabilities and costs related to environmental remediation.

Patents, Licenses and Trademarks

We own or license numerous patents and patent applications related to our hardware and software products and operations. While in the aggregate our patents and licenses are important in the operation of our business, we do not believe that loss or termination of any one of them would materially affect our business or financial condition. We have received various claims of patent infringement and requests for patent indemnification. We believe that none of these claims or requests will have a material adverse effect on our financial condition. See Item 1A. **Risk Factors** for a discussion of risks associated with our intellectual property.

The Company's name and its registered trademark "Rockwell Automation®" and other trademarks such as "Allen-Bradley®", "A-B®" and "PlantPAx® Process Automation System™" are important to both of our business segments. In addition, we own other important trademarks that we use, such as "ControlLogix®" and "CompactLogix®" for our control systems, "PowerFlex®" for our AC drives, and "Rockwell Software®" and "FactoryTalk®" for our software offerings.

Seasonality

Our business segments are not subject to significant seasonality. However, the calendarization of our results can vary and may be affected by the seasonal spending patterns of our customers due to their annual budgeting processes and their working schedules.

Available Information

We maintain a website at <https://www.rockwellautomation.com>. Our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and any amendments to such reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934 (the Exchange Act), as well as our annual reports to shareowners and Section 16 reports on Forms 3, 4 and 5, are available free of charge on this site through the "Investors" link as soon as reasonably practicable after we file or furnish these reports with the SEC. All reports we file with the SEC are also available free of charge via EDGAR through the SEC's website at <https://www.sec.gov>. Our Guidelines on Corporate Governance and charters for our Board committees are also available on our website. The information contained on and linked from our website is not incorporated by reference into this Annual Report on Form 10-K.

Item 1A. Risk Factors

In the ordinary course of our business, we face various strategic, operating, compliance and financial risks. These risks could have an impact on our business, financial condition, operating results and cash flows. Our most significant risks are set forth below and elsewhere in this Annual Report on Form 10-K.

Our Enterprise Risk Management (ERM) process seeks to identify and address significant risks. Our ERM process assesses, manages, and monitors risks consistent with the integrated risk framework in the *Enterprise Risk Management - Integrated Framework (2017)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). We believe that risk-taking is an inherent aspect of the pursuit of our strategy. Our goal is to manage risks prudently rather than avoid risks. We can mitigate risks and their impact on the Company only to a limited extent.

A team of senior executives prioritizes identified risks and assigns an executive to address each major identified risk area and lead action plans to manage risks. Our Board of Directors provides oversight of the ERM process and reviews significant identified risks. The Audit Committee of the Board of Directors also reviews significant financial risk exposures and the steps management has taken to monitor and manage them. Our other Board committees also play a role in risk management, as set forth in their respective charters.

Our goal is to proactively manage risks in a structured approach in conjunction with strategic planning, with the intent to preserve and enhance shareowner value. However, the risks set forth below and elsewhere in this Annual Report on Form 10-K and other risks and uncertainties could adversely affect us and cause our results to vary materially from recent results or from our anticipated future results.

Adverse changes in business or industry conditions and volatility and disruption of the capital and credit markets may result in decreases in our sales and profitability.

We are subject to macroeconomic cycles and when recessions occur, we may experience reduced, canceled or delayed orders, payment delays or defaults, supply chain disruptions or other factors as a result of the economic challenges faced by our customers, prospective customers and suppliers.

Demand for our hardware and software products is sensitive to changes in levels of industrial production and the financial performance of major industries that we serve. As economic activity slows, credit markets tighten, or sovereign debt concerns arise, companies tend to reduce their levels of capital spending, which could result in decreased demand for our products.

Our ability to access the credit markets and the costs of borrowing are affected by the strength of our credit rating and current market conditions. If our access to credit, including the commercial paper market, is adversely affected by a change in market conditions or otherwise, our cost of borrowings may increase or our ability to fund operations may be reduced.

The London Interbank Offered Rate (LIBOR) is the basis for determining the amount of our interest payments on borrowings under our \$1.25 billion unsecured revolving credit facility. In addition, we have outstanding interest rate swaps that contain a variable element based on LIBOR. The U.K. Financial Conduct Authority, which regulates LIBOR, has announced that it intends to phase out LIBOR by the end of 2021. If LIBOR ceases to exist, we may need to amend certain agreements that use LIBOR as a benchmark and we cannot predict what alternative index or other amendments may be negotiated with our counterparties. As a result, our interest expense could increase and our available cash flow for general corporate requirements may be adversely affected. Additionally, uncertainty as to the nature of a potential discontinuance or modification of LIBOR, alternative reference rates or other reforms may materially adversely affect the trading market for securities linked to such benchmarks. For additional information, see Financial Condition in MD&A.

We sell to customers around the world and are subject to the risks of doing business in many countries.

We do business in more than 100 countries around the world. Approximately 46 percent of our sales in 2019 were to customers outside the U.S. In addition, many of our manufacturing operations, suppliers and employees are located in many places around the world. The future success of our business depends in large part on growth in our sales in non-U.S. markets. Our global operations are subject to numerous financial, legal and operating risks, such as political and economic instability; prevalence of corruption in certain countries; enforcement of contract and intellectual property rights; and compliance with existing and future laws, regulations and policies, including those related to exports, imports, tariffs, embargoes and other trade restrictions, investments, taxation, product content and performance, employment and repatriation of earnings. In addition, we are affected by changes in foreign currency exchange rates, inflation rates and interest rates. The occurrence or consequences of these risks may make it more

difficult to operate our business and increase our costs, which could decrease our profitability and have an adverse effect on our financial condition.

We rely on suppliers to provide equipment, components and services.

Our business requires that we buy equipment, components and services including finished products, electronic components and commodities. Our reliance on suppliers involves certain risks, including:

- poor quality or an insecure supply chain, which could adversely affect the reliability and reputation of our hardware and software products;
- changes in the cost of these purchases due to inflation, exchange rate fluctuations, taxes, tariffs, commodity market volatility or other factors that affect our suppliers;
- embargoes, sanctions and other trade restrictions that may affect our ability to purchase from various suppliers;
- intellectual property risks such as challenges to ownership of rights or alleged infringement by suppliers; and
- shortages of components, commodities or other materials, which could adversely affect our manufacturing efficiencies and ability to make timely delivery of our products, solutions and services.

Any of these uncertainties could adversely affect our profitability and ability to compete. We also maintain several single-source supplier relationships, because either alternative sources are not available or the relationship is advantageous due to performance, quality, support, delivery, capacity, or price considerations. Unavailability of, or delivery delays for single-source components or products could adversely affect our ability to ship the related products in a timely manner. The effect of unavailability or delivery delays would be more severe if associated with our higher volume and more profitable products. Even where substitute sources of supply are available, qualifying alternative suppliers and establishing reliable supplies could cost more or result in delays and a loss of sales.

Failures or security breaches of our products, connected services, manufacturing environment, supply chain, or information technology systems could have an adverse effect on our business.

We rely heavily on information technology (IT) in our hardware and software products, solutions and services for customers, manufacturing environment, and in our enterprise infrastructure. Despite the implementation of security measures, our IT systems are vulnerable to unauthorized access by nation states, hackers, cyber-criminals, malicious insiders, and other actors who may engage in fraud, theft of confidential or proprietary information, or sabotage. Our systems could be compromised by malware (including ransomware), cyber attacks, and other events, ranging from widespread, non-targeted, global cyber threats to targeted advanced persistent threats. Given that our hardware and software products and services are used in critical infrastructure, these threats could indicate increased risk for our products, services, manufacturing, and IT infrastructure. Recent global cyber attacks have been perpetuated by compromising software updates in widely-used software products, increasing the risk that vulnerabilities or malicious content could be inserted into our products. In some cases, malware attacks were spread throughout the supply chain, moving from one company to the next via authorized network connections.

Our hardware and software products, solutions, and services are used by our direct and indirect customers in applications that may be subject to information theft, tampering, or sabotage. Careless or malicious actors could cause a customer's process to be disrupted or could cause equipment to operate in an improper manner that could result in harm to people or property. While we continue to improve the security attributes of our hardware and software products, solutions and services, we can reduce risk, not eliminate it. To a significant extent, the security of our customers' systems depends on how those systems are designed, installed, protected, configured, updated and monitored, much of which are typically outside our control.

Our business uses IT resources on a dispersed, global basis for a wide variety of functions including development, engineering, manufacturing, sales, accounting, and human resources. Our vendors, partners, employees and customers have access to, and share, information across multiple locations via various digital technologies. In addition, we rely on partners and vendors for a wide range of outsourced activities, including cloud providers, as part of our internal IT infrastructure and our commercial offerings. Secure connectivity is important to these ongoing operations. Also, our partners and vendors frequently have access to our confidential information as well as confidential information about our customers, employees, and others. We design our security architecture to reduce the risk that a compromise of our partners' infrastructure, for example a cloud platform, could lead to a compromise of our internal systems or customer networks, but this risk cannot be eliminated and vulnerabilities at third parties could result in unknown risk exposure to our business.

The current cyber threat environment indicates increased risk for all companies, including those in industrial automation and information. Like other global companies, we have experienced cyber threats and incidents, although none have been material or

had a material adverse effect on our business or financial condition. Our information security efforts, under the leadership of our Chief Information Security Officer and Chief Product Security Officer, with the support of the entire management team, include major programs designed to address security governance, product security, identification and protection of critical assets, insider risk, third-party risk, and cyber defense operations. We believe these measures reduce, but cannot eliminate, the risk of an information security incident. Any significant security incidents could have an adverse impact on sales, harm our reputation and cause us to incur legal liability and increased costs to address such events and related security concerns.

An inability to respond to changes in customer preferences could result in decreased demand for our products.

Our success depends in part on our ability to anticipate and offer hardware and software products that appeal to the changing needs and preferences of our customers in the various markets we serve. Developing new hardware and software products requires high levels of innovation, and the development process is often lengthy and costly. If we are not able to anticipate, identify, develop and market products that respond to changes in customer preferences and emerging technological and broader industry trends, demand for our products could decline.

There are inherent risks in our solutions and services businesses.

Risks inherent in the sale of solutions and services include assuming greater responsibility for successfully delivering projects that meet a particular customer specification, including defining and controlling contract scope, efficiently executing projects, and managing the performance and quality of our subcontractors and suppliers. If we are unable to manage and mitigate these risks, we could incur cost overruns, liabilities and other losses that would adversely affect our results of operations.

New legislative and regulatory actions could adversely affect our business.

Legislative and regulatory action may be taken in the various countries and other jurisdictions where we operate that may affect our business activities in these countries or may otherwise increase our costs to do business. For example, we are increasingly required to comply with various environmental and other material, product, certification and labeling laws and regulations. Our customers may also be required to comply with such legislative and regulatory requirements. These requirements could increase our costs and could potentially have an adverse effect on our ability to do business in certain jurisdictions. Changes in these requirements could impact demand for our hardware and software products, solutions and services. Compliance with state, federal and foreign privacy regulations, such as the European Union's General Data Protection Regulation (GDPR), could increase our operating costs as part of our efforts to protect and safeguard our sensitive data and personal information. Failure to maintain information privacy could result in legal liability or reputational harm.

Our industry is highly competitive.

We face strong competition in all of our market segments in several significant respects. We compete based on breadth and scope of our hardware and software product portfolio and solution and service offerings, technology differentiation, the domain expertise of our employees and partners, product performance, quality of our hardware and software products, solutions and services, knowledge of integrated systems and applications that address our customers' business challenges, pricing, delivery and customer service. The relative importance of these factors differs across the geographic markets and product areas that we serve and across our market segments. We seek to maintain acceptable pricing levels across and within geographic markets by continually developing advanced technologies for new hardware and software products and product enhancements and offering complete solutions for our customers' business problems. In addition, we continue to drive productivity to reduce our cost structure. If we fail to achieve our objectives, to keep pace with technological changes, or to provide high quality hardware and software products, solutions and services, we may lose business or experience price erosion and correspondingly lower sales and margins. We expect the level of competition to remain high in the future, which could limit our ability to maintain or increase our market share or profitability.

We rely on our distribution channel for a substantial portion of our sales.

In North America, a large percentage of our sales are through distributors. In certain other countries, the majority of our sales are also through a limited number of distributors. We depend on the capabilities and competencies of our distributors to sell our hardware and software products and services and deliver value to our customers. Disruptions to our existing distribution channel or the failure of distributors to maintain and develop the appropriate capabilities to sell our hardware and software products and services could adversely affect our sales. A disruption could result from the sale of a distributor to a competitor, financial instability of a distributor or other events.

Failure to identify, manage, complete, and integrate strategic transactions may adversely affect our business or we may not achieve the expected benefits of these transactions.

As part of our strategy, we may pursue strategic transactions, including acquisitions, joint ventures, investments, other business opportunities and purchases of technology from third parties. In order to be successful, we must identify attractive transaction opportunities, effectively complete the transaction, and manage post-closing matters, such as integration of the acquired business or technology (including related personnel) and cooperation with our joint venture and other strategic partners. We may not be able to identify or complete beneficial transaction opportunities given the intense competition for them. Even if we successfully identify and complete such transactions, we may not achieve the expected benefits of such transactions and we may not be able to successfully address risks and uncertainties inherent in such transactions, including:

- difficulties in integrating the purchased or new operations, technologies, products or services, retaining customers and achieving the expected benefits of the transaction, such as sales increases, access to technologies, cost savings and increases in geographic or product presence, in the desired time frames;
- loss of key employees or difficulties integrating personnel;
- legal and compliance issues;
- difficulties implementing and maintaining consistent standards, financial systems, internal and other controls, procedures, policies and information systems;
- difficulties maintaining relationships with our joint venture and other strategic partners (including as a result of such joint venture and other strategic partners having differing business objectives) and managing disputes with such joint venture and other strategic partners that may arise in connection with our relationships with them; and
- diversion of management's attention from other business concerns.

Future strategic transactions and technology investments could result in debt, dilution, liabilities, increased interest expense, restructuring charges, and impairment and amortization expenses related to intangible assets.

We face the potential harms of natural disasters, pandemics, acts of war, terrorism, international conflicts or other disruptions to our operations.

Our business depends on the movement of people and goods around the world. Natural disasters, pandemics, acts or threats of war or terrorism, international conflicts, power outages, fires, explosions, equipment failures, sabotage, political instability and the actions taken by governments could cause damage to or disrupt our business operations, our suppliers or our customers, and could create economic instability. Disruptions to our IT infrastructure from system failures, shutdowns, power outages, telecommunication or utility failures, and other events, including disruptions at third party IT and other service providers, could also interfere with or disrupt our operations. Although it is not possible to predict such events or their consequences, these events could decrease demand for our hardware and software products, solutions or services, increase our costs, or make it difficult or impossible for us to deliver products, solutions or services.

Intellectual property infringement claims of others and the inability to protect our intellectual property rights could harm our business and our customers.

Others may assert intellectual property infringement claims against us or our customers. We frequently provide a limited intellectual property indemnity in connection with our terms and conditions of sale to our customers and in other types of contracts with third parties. Indemnification payments and legal expenses to defend claims could be costly.

In addition, we own the rights to many patents, trademarks, brand names and trade names that are important to our business. The inability to enforce our intellectual property rights may have an adverse effect on our results of operations. Expenses related to enforcing our intellectual property rights could be significant.

Claims from taxing authorities could have an adverse effect on our income tax expense and financial condition.

We conduct business in many countries, which requires us to interpret and comply with the income tax laws and rulings in each of those taxing jurisdictions. Due to the ambiguity of tax laws among those jurisdictions as well as the uncertainty of how underlying facts may be construed, our estimates of income tax liabilities may differ from actual payments or assessments. We must successfully defend any claims from taxing authorities to avoid an adverse effect on our operating results and financial condition.

Our business success depends on attracting, developing, and retaining highly qualified personnel.

Our success depends in part on the efforts and abilities of our management team and key employees, and the effective implementation of processes and technology to increase employee engagement, productivity, and efficiency. The skills, experience and industry knowledge of our employees significantly benefit our operations and performance. Difficulty attracting, developing, and retaining members of our management team and key employees with the necessary expertise, including by offering attractive compensation, benefits, and development opportunities, could have a negative effect on our business, operating results and financial condition. We continuously evaluate, modify, and enhance our internal processes and technologies to increase employee engagement, productivity, and efficiency, and to mitigate failure risks from older technologies currently in use. Failure to identify and successfully implement new processes and technologies could add costs and complications to ongoing operations and negatively impact employee engagement, productivity, and efficiency.

Potential liabilities and costs from litigation (including asbestos claims and environmental remediation) could reduce our profitability.

Various lawsuits, claims and proceedings have been or may be asserted against us relating to the conduct of our business, including those pertaining to the safety and security of the hardware and software products, solutions and services we sell, employment, contract matters, and environmental remediation.

We have been named as a defendant in lawsuits alleging personal injury as a result of exposure to asbestos that was used in certain of our products many years ago. Our products may also be used in hazardous industrial activities, which could result in product liability claims. The uncertainties of litigation (including asbestos claims) and the uncertainties related to the collection of insurance proceeds make it difficult to predict the ultimate resolution of these lawsuits.

Our operations are subject to various environmental regulations concerning human health, the limitation and control of emissions and discharges into the air, ground, and water, the quality of air and bodies of water, and the handling, use and disposal of specified substances. Our financial responsibility to clean up contaminated property or for natural resource damages may extend to previously owned or used properties, waterways and properties owned by unrelated companies or individuals, as well as properties that we currently own and use, regardless of whether the contamination is attributable to prior owners. We have been named as a potentially responsible party at cleanup sites and may be so named in the future, and the costs associated with these current and future sites may be significant.

We have, from time to time, divested certain of our businesses. In connection with these divestitures, certain lawsuits, claims and proceedings may be instituted or asserted against us related to the period that we owned the businesses, either because we agreed to retain certain liabilities related to these periods or because such liabilities fall upon us by operation of law. In some instances, the divested business has assumed the liabilities; however, it is possible that we might be responsible for satisfying those liabilities if the divested business is unable to do so.

We own common stock in PTC Inc. and are exposed to the volatility, liquidity and other risks inherent in holding that stock.

We own common stock of PTC Inc. (PTC), a Nasdaq-listed company, that we acquired for an aggregate purchase price of approximately \$1.0 billion. We present this investment on our Consolidated Balance Sheet at its fair value at the end of each reporting period, less a valuation adjustment for periods ending prior to the registration of our shares of PTC common stock (Shares) under the Securities Act of 1933, as amended, on November 28, 2018, per a registration rights agreement entered into with PTC. The fair value of the Shares is subject to fluctuation in the future due to the volatility of the stock market, changes in general economic conditions, and the performance of PTC. We will recognize all changes in the fair value of the Shares (whether realized or unrealized) as gains or losses in our Consolidated Statement of Operations. Accordingly, changes in the fair value of the Shares can materially impact the earnings we report, which introduces volatility in our earnings that is not associated with the results of our business operations. In particular, significant declines in the fair value of the Shares would produce significant declines in our reported earnings.

While there is an established trading market for shares of PTC common stock, there are limitations on our ability to dispose of some or all of the Shares should we wish to reduce our investment. Until July 19, 2021, we are subject to contractual restrictions on our ability to transfer the Shares, subject to certain exceptions. In addition, we are subject to certain restrictions on our ability to transfer the Shares under the securities laws. Further, the reported value of the Shares does not necessarily reflect their lowest current market price. If we were forced to sell some or all of the Shares in the market, there can be no assurance that we would be able to sell them at prices equivalent to the value of the Shares that we have reported on our Consolidated Balance Sheet, and we may be forced to sell them at significantly lower prices.

Finally, our equity position in PTC is a minority position which exposes us to further risk as we are not able to exert control over PTC.

Increasing employee benefit costs could have a negative effect on our operating results and financial condition.

One important aspect of attracting and retaining qualified personnel is continuing to offer competitive employee retirement and health care benefits. The expenses we record for our pension and other postretirement benefit plans depend on factors such as changes in market interest rates, the value of plan assets, mortality assumptions and healthcare trend rates. Significant unfavorable changes in these factors would increase our expenses. Expenses related to employer-funded healthcare benefits depend on laws and regulations, which could change, as well as healthcare cost inflation. An inability to control costs related to employee and retiree benefits could negatively impact our operating results and financial condition.

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

We operate manufacturing facilities in the United States and multiple other countries. Manufacturing space occupied approximately 2.8 million square feet, of which 40 percent was in North America. Our global headquarters are located in Milwaukee, Wisconsin in a facility that we own. We lease the remaining facilities noted below. Most of our facilities are shared by operations in both segments and may be used for multiple purposes such as administrative, manufacturing, warehousing and / or distribution.

The following table sets forth information regarding our headquarter locations as of September 30, 2019:

<u>Location</u>	<u>Segment/Region</u>
Milwaukee, Wisconsin, United States	Global and North America Headquarters and Control Products & Solutions
Mayfield Heights, Ohio, United States	Architecture & Software
Capelle, Netherlands / Diegem, Belgium	Europe, Middle East and Africa
Hong Kong	Asia Pacific
Weston, Florida, United States	Latin America

The following table sets forth information regarding the manufacturing square footage of our principal locations as of September 30, 2019:

<u>Location</u>	<u>Manufacturing Square Footage</u>
Monterrey, Mexico	607,000
Mequon, Wisconsin, United States	230,000
Tecate, Mexico	225,000
Aarau, Switzerland	223,000
Twinsburg, Ohio, United States	200,000
Richland Center, Wisconsin, United States	189,000
Cambridge, Canada	165,000
Ladysmith, Wisconsin, United States	150,000
Katowice, Poland	140,000
Harbin, China	138,000
Shanghai, China	106,000
Jundiai, Brazil	95,000
Singapore	74,000

There are no major encumbrances (other than financing arrangements, which in the aggregate are not significant) on any of our plants or equipment. In our opinion, our properties have been well maintained, are in sound operating condition and contain all equipment and facilities necessary to operate at present levels. The square footage of a given manufacturing facility is not indicative of the sales contribution of the products manufactured there.

Item 3. Legal Proceedings

The information required by this Item is contained in Note 16 in the Consolidated Financial Statements within the section entitled *Other Matters*.

Item 4. Mine Safety Disclosures

Not applicable.

Item 4A. Information about our Executive Officers

The name, age, office and position held with the Company and principal occupations and employment during the past five years of each of the executive officers of the Company as of November 1, 2019 are:

Name, Office and Position, and Principal Occupations and Employment	Age
Blake D. Moret — Chairman of the Board since January 1, 2018, and President and Chief Executive Officer since July 1, 2016; previously Senior Vice President	56
Sujeet Chand — Senior Vice President and Chief Technology Officer	61
Thomas Donato — Senior Vice President since January 1, 2019; previously President, Europe, Middle East and Africa (from 2015-2018) and Vice President, Canada	47
David M. Dorgan — Vice President and Controller	55
Steven W. Etzel — Vice President and Treasurer	59
Elik I. Fooks — Senior Vice President since March 16, 2017; previously Vice President and General Manager, Sensing, Safety, and Connectivity Business	68
John A. Genovesi — Senior Vice President since January 1, 2019; previously Vice President and General Manager, Information Software Business	56
Patrick P. Goris — Senior Vice President and Chief Financial Officer since February 7, 2017; previously Vice President, Finance, Architecture and Software and (from 2013-2015) Operations and Engineering Services, and (from July 2015) Vice President, Investor Relations	48
Rebecca W. House — Senior Vice President, General Counsel and Secretary since January 3, 2017; previously Assistant General Counsel, Operations and Compliance, and Assistant Secretary at Harley-Davidson, Inc. (motorcycle manufacturer)	46
Karen L. Keegans — Senior Vice President, Human Resources since January 7, 2019; previously Chief Human Resources Officer at Pentair PLC (diversified industrial manufacturer) (from 2016-2018) and Chief Human Resources Officer, Praxair, Inc. (industrial gas)	54
Frank C. Kulaszewicz — Senior Vice President	55
John M. Miller — Vice President and Chief Intellectual Property Counsel	52
Robert B. Murphy — Senior Vice President, Connected Enterprise Consulting since July 2, 2018; previously Senior Vice President, Operations and Engineering Services (from May 2016 - July 2018) and Vice President, Manufacturing Operations	60
Christopher Nardecchia — Senior Vice President and Chief Information Officer since November 1, 2017; previously Vice President and Chief Information Officer, Global Operations and Supply Chain, Amgen, Inc. (biopharmaceutical company)	57
Ernest Nicolas — Senior Vice President, Operations and Engineering Services since November 1, 2019; previously Vice President, Global Supply Chain (from July 2018 to November 2019), Vice President, Strategic Sourcing and Supply Management (from August 2015 to July 2018), Director, Strategic Sourcing (from February 2015 to August 2015), and Regional Director, Asia Pacific Manufacturing (January 2013 to February 2015)	42
Francis S. Wlodarczyk — Senior Vice President since July 2, 2018; previously Vice President, Control and Visualization Business	54

There are no family relationships, as defined by applicable SEC rules, between any of the above executive officers and any other executive officer or director of the Company. No officer of the Company was selected pursuant to any arrangement or understanding between the officer and any person other than the Company. All executive officers are elected annually.

PART II**Item 5. Market for the Company's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities****Market Information**

Our common stock, \$1 par value, is listed on the New York Stock Exchange and trades under the symbol "ROK". On October 31, 2019, there were 15,269 shareowners of record of our common stock.

Company Purchases

The table below sets forth information with respect to purchases made by or on behalf of us of shares of our common stock during the three months ended September 30, 2019:

<u>Period</u>	<u>Total Number of Shares Purchased⁽¹⁾</u>	<u>Average Price Paid Per Share⁽²⁾</u>	<u>Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs</u>	<u>Maximum Approx. Dollar Value of Shares that May Yet Be Purchased Under the Plans or Programs⁽³⁾</u>
July 1 – 31, 2019	527,125	\$ 161.25	527,125	\$ 1,248,327,129
August 1 – 31, 2019	461,030	150.97	461,030	1,178,723,296
September 1 – 30, 2019	434,830	161.71	434,830	1,108,405,228
Total	<u>1,422,985</u>	158.06	<u>1,422,985</u>	

(1) All of the shares purchased during the quarter ended September 30, 2019 were acquired pursuant to the repurchase programs described in (3) below.

(2) Average price paid per share includes brokerage commissions.

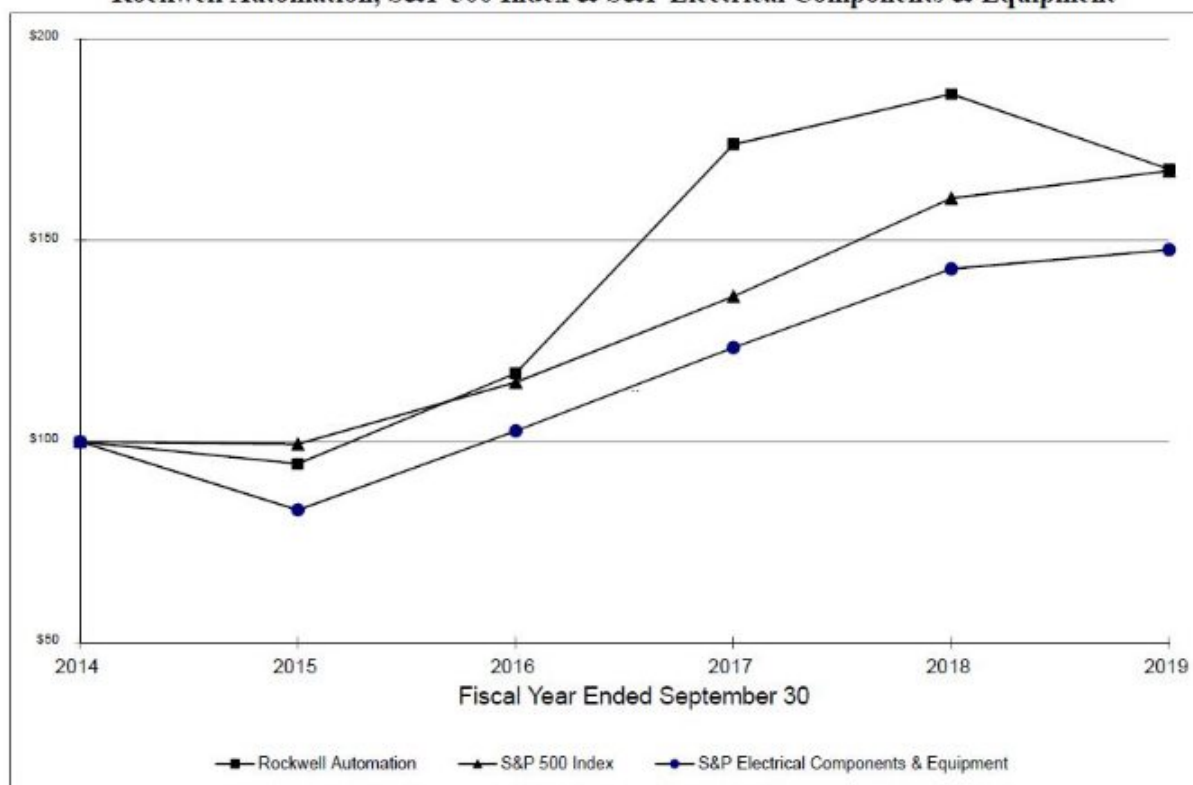
(3) On both September 6, 2018 and July 24, 2019, the Board of Directors authorized us to expend \$1.0 billion to repurchase shares of our common stock. Our repurchase programs allow us to repurchase shares at management's discretion or at our broker's discretion pursuant to a share repurchase plan subject to price and volume parameters.

Performance Graph

The following information is not deemed to be “soliciting material” or to be “filed” with the SEC or subject to Regulation 14A or 14C under the Exchange Act or to the liabilities of Section 18 of the Exchange Act, and will not be deemed to be incorporated by reference into any filing of the Company under the Securities Act of 1933, as amended, or the Exchange Act, except to the extent the Company specifically incorporates it by reference into such a filing.

The following line graph compares the cumulative total shareowner return on our Common Stock against the cumulative total return of the S&P Composite-500 Stock Index (S&P 500 Index) and the S&P Electrical Components & Equipment Index for the period of five fiscal years from October 1, 2014 to September 30, 2019, assuming in each case a fixed investment of \$100 at the respective closing prices on September 30, 2014 and reinvestment of all dividends.

**Comparison of Five-Year Cumulative Total Return
Rockwell Automation, S&P 500 Index & S&P Electrical Components & Equipment**



The cumulative total returns on Rockwell Automation Common Stock and each index as of each September 30, 2014 through 2019 plotted in the above graph are as follows:

	2014	2015	2016	2017	2018	2019
Rockwell Automation*	\$ 100.00	\$ 94.51	\$ 116.98	\$ 173.79	\$ 186.37	\$ 167.66
S&P 500 Index	100.00	99.39	114.72	136.07	160.44	167.27
S&P Electrical Components & Equipment	100.00	83.01	102.68	123.34	142.89	147.68
Cash dividends per common share	2.32	2.60	2.90	3.04	3.51	3.88

* Includes the reinvestment of all dividends in our Common Stock.

Item 6. Selected Financial Data

The following table sets forth selected consolidated financial data of our continuing operations. The data should be read in conjunction with MD&A and the Consolidated Financial Statements. The selected financial data below has been derived from our audited consolidated financial statements.

	Year Ended September 30,				
	2019	2018	2017	2016	2015
(in millions, except per share data)					
Consolidated Statement of Operations Data:					
Sales	\$ 6,694.8	\$ 6,666.0	\$ 6,311.3	\$ 5,879.5	\$ 6,307.9
Interest expense	98.2	73.0	76.2	71.3	63.7
Net income ⁽¹⁾	695.8	535.5	825.7	729.7	827.6
Earnings per share:					
Basic	5.88	4.27	6.42	5.60	6.15
Diluted	5.83	4.21	6.35	5.56	6.09
Cash dividends per share	3.88	3.51	3.04	2.90	2.60
Consolidated Balance Sheet Data:					
(at end of period)					
Total assets	\$ 6,113.0	\$ 6,262.0	\$ 7,161.7	\$ 7,101.2	\$ 6,404.7
Short-term debt and current portion of long-term debt	300.5	551.0	600.4	448.6	—
Long-term debt	1,956.4	1,225.2	1,243.4	1,516.3	1,500.9
Shareowners' equity	404.2	1,617.5	2,663.6	1,990.1	2,256.8
Other Data:					
Capital expenditures	\$ 132.8	\$ 125.5	\$ 141.7	\$ 116.9	\$ 122.9
Depreciation	126.2	136.4	138.7	143.3	133.1
Intangible asset amortization	26.0	28.2	30.2	28.9	29.4

⁽¹⁾ During the fourth quarter of fiscal 2017, we sold a product distribution business within our Control Products & Solutions segment. This business held no intellectual property and included products sold outside of our core channel and under different brands. We sold this business for approximately \$94 million and recorded a pre-tax gain of \$60.8 million, which is included within Other income (expense) in the Consolidated Statement of Operations. During fiscal 2018, we recorded a gain of \$90 million due to a change in fair value of our investment in PTC, which is included within Other income (expense) in the Consolidated Statement of Operations. During fiscal 2018, we recorded charges of \$538.3 million associated with the enactment of the Tax Cuts and Jobs Act of 2017. During fiscal 2019, we recorded a loss of \$368.5 million due to a change in fair value of our investment in PTC, which is included within Other income (expense) in the Consolidated Statement of Operations. Refer to Note 9 in the Consolidated Financial Statements for further information regarding our investment in PTC.

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

Results of Operations

Non-GAAP Measures

The following discussion includes organic sales, total segment operating earnings and margin, Adjusted Income, Adjusted EPS, Adjusted Effective Tax Rate and free cash flow, which are non-GAAP measures. See **Supplemental Sales Information** for a reconciliation of reported sales to organic sales and a discussion of why we believe this non-GAAP measure is useful to investors. See **Results of Operations** for a reconciliation of income before income taxes to total segment operating earnings and margin and a discussion of why we believe these non-GAAP measures are useful to investors. See **Results of Operations** for a reconciliation of income from continuing operations, diluted EPS from continuing operations and effective tax rate to Adjusted Income, Adjusted EPS and Adjusted Effective Tax Rate, respectively, and a discussion of why we believe these non-GAAP measures are useful to investors. See **Financial Condition** for a reconciliation of cash flows from operating activities to free cash flow and a discussion of why we believe this non-GAAP measure is useful to investors.

Overview

Rockwell Automation, Inc. is a global leader in industrial automation and digital transformation. We connect the imaginations of people with the potential of technology to expand what is humanly possible, making the world more productive and more sustainable. Overall demand for our hardware and software products, solutions and services is driven by:

- investments in manufacturing, including upgrades, modifications and expansions of existing facilities or production lines and new facilities or production lines;
- investments in basic materials production capacity, which may be related to commodity pricing levels;
- our customers' needs for faster time to market, operational productivity, asset management and reliability, and enterprise risk management;
- our customers' needs to continuously improve quality, safety and sustainability;
- industry factors that include our customers' new product introductions, demand for our customers' products or services and the regulatory and competitive environments in which our customers operate;
- levels of global industrial production and capacity utilization;
- regional factors that include local political, social, regulatory and economic circumstances; and
- the spending patterns of our customers due to their annual budgeting processes and their working schedules.

Long-term Strategy

Our strategy is to bring The Connected Enterprise to life by integrating control and information across the enterprise. We deliver customer outcomes by combining advanced industrial automation with the latest information technology. Our growth and performance strategy seeks to:

- achieve organic sales growth in excess of the automation market by expanding our served market and strengthening our competitive differentiation;
- grow market share of our core platforms;
- drive double digit growth in information solutions and connected services;
- acquire companies that serve as catalysts to organic growth by increasing our information solutions and high-value services offerings and capabilities, expanding our global presence, or enhancing our process expertise;
- enhance our market access by building our channel capability and partner network;
- deploy human and financial resources to strengthen our technology leadership and our intellectual capital business model;
- continuously improve quality and customer experience; and
- drive annual cost productivity.

By implementing the above strategy, we seek to achieve our long-term financial goals, including above-market organic sales growth, EPS growth above sales growth, return on invested capital in excess of 20 percent and free cash flow equal to about 100 percent of Adjusted Income. We expect acquisitions to add a percentage point or more per year to long-term sales growth.

Our customers face the challenge of remaining globally cost competitive and automation can help them achieve their productivity and sustainability objectives. Our value proposition is to help our customers reduce time to market, lower total cost of ownership, improve asset utilization and manage enterprise risks.

Differentiation through Technology Innovation and Domain Expertise

Our integrated control and information architecture, with Logix at its core, is an important differentiator. We are the only automation provider that can support discrete, process, batch, safety, motion and power control on the same hardware platform with the same software programming environment. Our integrated architecture is scalable with standard open communications protocols making it easier for customers to implement it more cost effectively. Our information software portfolio, combined with the software made available as a result of our strategic alliance with PTC, is the most comprehensive and flexible information platform in the industry. Through the combination of this technology and our domain expertise we help customers to achieve additional productivity benefits, such as reduced unplanned downtime, improved energy efficiency, higher quality and increased throughput yield.

Intelligent motor control is one of our core competencies and an important aspect of an automation system. These hardware and software products and solutions enhance the availability, efficiency and safe operation of our customers' critical and most energy-intensive plant assets. Our intelligent motor control offering can be integrated seamlessly with the Logix architecture.

Domain expertise refers to the industry and application knowledge required to deliver solutions and services that support customers through the entire life cycle of their automation investment. The combination of industry-specific domain expertise of our people with our innovative technologies enables us to help our customers solve their manufacturing and business challenges.

Global Expansion

As the manufacturing world continues to expand, we must be able to meet our customers' needs around the world. Approximately 60 percent of our employees and 46 percent of our sales are outside the U.S. We continue to expand our footprint in emerging markets.

As we expand in markets with considerable growth potential and shift our global footprint, we expect to continue to broaden the portfolio of hardware and software products, solutions and services that we provide to our customers in these regions. We have made significant investments to globalize our manufacturing, product development and customer-facing resources in order to be closer to our customers throughout the world. The emerging markets of Asia Pacific, including China and India, Latin America, Central and Eastern Europe and Africa are projected to be the fastest growing over the long term, due to higher levels of infrastructure investment and the growing middle-class population. We believe that increased demand for consumer products in these markets will lead to manufacturing investment and provide us with additional growth opportunities in the future.

Enhanced Market Access

Over the past decade, our investments in technology and globalization have enabled us to expand our addressed market to over \$90 billion. Our process initiative has been the most important contributor to this expansion and remains our largest growth opportunity. i

Original Equipment Manufacturers (OEMs) represent another area of addressed market expansion and an important growth opportunity. To remain competitive, OEMs need to find the optimal balance of machine cost and performance while reducing their time to market. Our scalable integrated architecture and intelligent motor control offerings, along with design productivity tools and our motion and safety products, can assist OEMs in addressing these business needs.

We have developed a powerful network of channel partners, technology partners and commercial partners that act as amplifiers to our internal capabilities and enable us to serve our customers' needs around the world.

Broad Range of Industries Served

We apply our knowledge of manufacturing applications to help customers solve their business challenges. We serve customers in a wide range of industries, which we group into three broad categories: discrete, hybrid, and process.

Discrete	Hybrid	Process
Automotive	Food & Beverage	Oil & Gas
Semiconductor	Life Sciences	Mining, Aggregates & Cement
General Industries	Household & Personal Care	Metals
Warehousing & Logistics	Tire	Chemicals
Printing & Publishing	Eco Industrial	Pulp & Paper
Marine	Water / Wastewater	Traditional Power
Glass	Mass Transit	Other Process
Fiber/Textiles	Renewable Energy	
Airports		
Aerospace		
Other Discrete		

Outsourcing and Sustainability Trends

Demand for our hardware and software products, solutions and services across all industries benefits from the outsourcing and sustainability needs of our customers. Customers increasingly desire to outsource engineering services to achieve a more flexible cost base. Our manufacturing application knowledge enables us to serve these customers globally.

We help our customers meet their sustainability needs pertaining to energy efficiency, environmental and safety goals. Customers across all industries are investing in more energy-efficient manufacturing processes and technologies, such as intelligent motor control, and energy-efficient solutions and services. In addition, environmental and safety objectives often spur customers to invest to ensure compliance and implement sustainable business practices.

Acquisitions and Investments

Our acquisition and investment strategy focuses on hardware and software products, solutions and services that will be catalytic to the organic growth of our core offerings.

In January 2019, we acquired Emulate3D, an innovative engineering software developer whose products digitally simulate and emulate industrial automation systems. This acquisition enables our customers to virtually test machine and system designs before incurring manufacturing and automation costs and committing to a final design.

In 2018, we made several investments, including in shares of PTC common stock (the “PTC Shares”). PTC is the leader in the Industrial Internet of Things and augmented reality. Our investment in and alliance with PTC is accelerating growth for both companies and enabling us to be the partner of choice for customers around the world who want to transform their physical operations with digital technology. The result will be an unmatched integrated information solution that will enable customers to achieve increased productivity, heightened plant efficiency, reduced operational risk and better system interoperability.

In November 2017, we acquired Odos Imaging Limited, a Scottish technology company that provides three-dimensional, time-of-flight sensing systems for industrial imaging applications. This acquisition enables us to expand our existing capabilities by bringing 3-D time-of-flight sensor technology to industrial applications.

We believe these acquisitions and investments will help us expand our served market and deliver value to our customers.

Continuous Improvement

Productivity and continuous improvement are important components of our culture. We have programs in place that drive ongoing process improvement, functional streamlining, material cost savings and manufacturing productivity. These are intended to improve profitability that can be used to fund investments in growth and to offset inflation. Our ongoing productivity initiatives target both cost reduction and improved asset utilization. Charges for workforce reductions and facility rationalization may be required in order to effectively execute our productivity programs.

U. S. Industrial Economic Trends

In 2019, sales in the U.S. accounted for approximately 54 percent of our total sales. The various indicators we use to gauge the direction and momentum of our served U.S. markets include:

- The Industrial Production (IP) Index, published by the Federal Reserve, which measures the real output of manufacturing, mining, and electric and gas utilities. The IP Index is expressed as a percentage of real output in a base year, currently 2012. Historically there has been a meaningful correlation between the changes in the IP Index and the level of automation investment made by our U.S. customers in their manufacturing base.
- The Manufacturing Purchasing Managers' Index (PMI), published by the Institute for Supply Management (ISM), which indicates the current and near-term state of manufacturing activity in the U.S. According to the ISM, a PMI measure above 50 indicates that the U.S. manufacturing economy is generally expanding while a measure below 50 indicates that it is generally contracting.

The table below depicts the trends in these indicators from fiscal 2017 to 2019. In the fourth quarter of fiscal 2019, the IP Index improved slightly compared to the prior quarter and the same quarter in the prior year. PMI is now below 50 and decreased compared to the prior quarter and the same quarter in the prior year.

	IP Index	PMI
Fiscal 2019 quarter ended:		
September 2019	109.5	47.8
June 2019	109.2	51.7
March 2019	109.8	55.3
December 2018	110.3	54.3
Fiscal 2018 quarter ended:		
September 2018	109.3	59.5
June 2018	107.9	60.0
March 2018	106.7	59.3
December 2017	106.1	59.3
Fiscal 2017 quarter ended:		
September 2017	104.2	60.2
June 2017	104.4	56.7
March 2017	103.0	56.6
December 2016	102.2	54.3

Note: Economic indicators are subject to revisions by the issuing organizations.

Non-U.S. Economic Trends

In 2019, sales outside the U.S. accounted for approximately 46 percent of our total sales. These customers include both indigenous companies and multinational companies with expanding global presence. In addition to the global factors previously mentioned in the “Overview” section, international demand, particularly in emerging markets, has historically been driven by the strength of the industrial economy in each region, investments in infrastructure and expanding consumer markets. We use changes in the respective countries’ gross domestic product and IP as indicators of the growth opportunities in each region where we do business.

Macroeconomic indicators have slowed during 2019 and are projected to slow further in 2020, particularly in IP and gross domestic product growth rates. The economic outlook for Europe and China has softened further amid slowing global growth, trade tension with the U.S., and continued Brexit uncertainty. Overall Latin America IP is expected to increase.

Summary of Results of Operations

In 2019, sales were \$6,694.8 million, an increase of 0.4 percent year over year. Organic sales increased 2.8 percent. Currency translation decreased sales by 2.4 percentage points. Organic sales growth was broad-based across regions and was led by strength in process end markets.

The following is a summary of our results related to key growth initiatives:

- Logix reported sales decreased 2 percent year over year in 2019 compared to 2018. Organic sales increased 1 percent, and currency translation decreased sales by 3 percentage points.
- Process control initiative reported sales increased 1 percent year over year in 2019 compared to 2018. Organic sales increased 4 percent, and currency translation decreased sales by 3 percentage points.
- Sales in emerging countries increased 1 percent year over year in 2019 compared to 2018. Organic sales in emerging countries increased 6 percent, and currency translation decreased sales in emerging countries by 5 percentage points.

The following table reflects our sales and operating results (in millions, except per share amounts):

	Year Ended September 30,		
	2019	2018	2017
Sales			
Architecture & Software	\$ 3,021.9	\$ 3,050.2	\$ 2,858.6
Control Products & Solutions	3,672.9	3,615.8	3,452.7
Total sales (a)	<u>\$ 6,694.8</u>	<u>\$ 6,666.0</u>	<u>\$ 6,311.3</u>
Segment operating earnings¹			
Architecture & Software	\$ 874.8	\$ 897.9	\$ 780.0
Control Products & Solutions	598.8	543.9	448.1
Total segment operating earnings ² (b)	1,473.6	1,441.8	1,228.1
Purchase accounting depreciation and amortization	(16.6)	(17.4)	(21.4)
General corporate — net	(108.8)	(100.0)	(95.9)
Non-operating pension and postretirement benefit credit (cost)	8.4	(23.8)	(77.6)
Costs related to unsolicited Emerson proposals	—	(11.2)	—
(Loss) gain on investments	(402.2)	123.7	—
Valuation adjustments related to the registration of PTC Shares	33.7	(33.7)	—
Gain on sale of business ³	—	—	60.8
Interest (expense) income, net	(87.1)	(48.6)	(56.6)
Income before income taxes (c)	901.0	1,330.8	1,037.4
Income tax provision ⁴	(205.2)	(795.3)	(211.7)
Net income	<u>\$ 695.8</u>	<u>\$ 535.5</u>	<u>\$ 825.7</u>
Diluted EPS	<u>\$ 5.83</u>	<u>\$ 4.21</u>	<u>\$ 6.35</u>
Adjusted EPS ⁵	<u>\$ 8.67</u>	<u>\$ 8.10</u>	<u>\$ 6.73</u>
Diluted weighted average outstanding shares	119.3	126.9	129.9
Total segment operating margin ² (b/a)	22.0%	21.6%	19.5%
Pre-tax margin (c/a)	13.5%	20.0%	16.4%

(1) See Note 17 in the Consolidated Financial Statements for the definition of segment operating earnings. Effective October 1, 2018, we realigned our reportable segments for a transfer of business activities between our segments. We also reclassified interest income from General corporate - net to Interest (expense) income - net. As a result, the prior period presentation of reportable segments has been restated to conform to the current segment reporting structure.

(2) Total segment operating earnings and total segment operating margin are non-GAAP financial measures. We exclude purchase accounting depreciation and amortization, general corporate – net, non-operating pension and postretirement benefit credit (cost), costs related to the unsolicited Emerson proposals in the first quarter of fiscal 2018, gains and losses on investments, valuation adjustments related to the registration of PTC Shares, gains and losses from the disposition of businesses, interest (expense) income - net and income tax provision because we do not consider these costs to be directly related to the operating performance of our segments. We believe that these measures are useful to investors as measures of operating performance. We use these measures to monitor and evaluate the profitability of our operating segments. Our measures of total segment operating earnings and total segment operating margin may be different from measures used by other companies.

(3) During the fourth quarter of fiscal 2017, we sold a product distribution business within our Control Products & Solutions segment. This business held no intellectual property and included products sold outside of our core channel and under different brands. We sold this business for approximately \$94 million and recorded a pre-tax gain of \$60.8 million, which is included within Other income (expense) in the Consolidated Statement of Operations.

(4) During fiscal 2018, we recorded charges of \$538.3 million associated with the enactment of the Tax Cuts and Jobs Act of 2017 (the “Tax Act”). Refer to Note 15 in the Consolidated Financial Statements for further information.

- (5) Adjusted EPS is a non-GAAP earnings measure that excludes non-operating pension and postretirement benefit cost (credit), costs related to the unsolicited Emerson proposals in the first quarter of fiscal 2018, gains and losses on investments, and valuation adjustments related to the registration of PTC Shares, including their respective tax effects and the charges associated with the enactment of the Tax Act in fiscal 2018. See *Adjusted Income, Adjusted EPS and Adjusted Effective Tax Rate Reconciliation* for more information on this non-GAAP measure.

Purchase accounting depreciation and amortization and non-operating pension and postretirement benefit (credit) cost are not allocated to our operating segments because these costs are excluded from our measurement of each segment's operating performance for internal purposes. If we were to allocate these costs, we would attribute them to each of our segments as follows (in millions):

	Year Ended September 30,		
	2019	2018	2017
Purchase accounting depreciation and amortization			
Architecture & Software	\$ 6.4	\$ 6.3	\$ 6.4
Control Products & Solutions	9.1	10.1	14.0
Non-operating pension and postretirement benefit (credit) cost			
Architecture & Software	(5.4)	7.1	27.7
Control Products & Solutions	(8.5)	11.2	43.4

Adjusted Income, Adjusted EPS and Adjusted Effective Tax Rate Reconciliation

Adjusted Income, Adjusted EPS and Adjusted Effective Tax Rate are non-GAAP earnings measures that exclude non-operating pension and postretirement benefit (credit) cost, costs related to the unsolicited Emerson proposals in the first quarter of fiscal 2018, gains and losses on investments, and valuation adjustments related to the registration of PTC Shares, including their respective tax effects, and the adjustments related to the Tax Act in fiscal 2018.

We believe that Adjusted Income, Adjusted EPS and Adjusted Effective Tax Rate provide useful information to our investors about our operating performance and allow management and investors to compare our operating performance period over period. Adjusted EPS is also used as a financial measure of performance for our annual incentive compensation. Our measures of Adjusted Income, Adjusted EPS and Adjusted Effective Tax Rate may be different from measures used by other companies. These non-GAAP measures should not be considered a substitute for income from continuing operations, diluted EPS and effective tax rate.

We have adopted ASU 2017-07, which defines operating and non-operating pension and postretirement benefit cost. Under this new standard, only the service cost component of pension and postretirement benefit cost is an operating cost. All other components of pension and postretirement benefit cost are considered to be non-operating costs. These components of net periodic pension and postretirement benefit cost primarily relate to changes in pension assets and liabilities that are the result of market performance; we consider these and other excluded costs to be unrelated to the operating performance of our business.

The following are the components of operating and non-operating pension and postretirement benefit cost (in millions):

	Year Ended September 30,		
	2019	2018	2017
Service cost	\$ 79.1	\$ 90.2	\$ 98.4
Operating pension and postretirement benefit cost	79.1	90.2	98.4
Interest cost	160.6	157.7	154.1
Expected return on plan assets	(244.7)	(244.8)	(225.2)
Amortization of prior service credit	(4.2)	(4.9)	(9.8)
Amortization of net actuarial loss	78.7	115.1	155.2
Settlements	1.2	0.7	3.3
Non-operating pension and postretirement benefit (credit) cost	(8.4)	23.8	77.6
Net periodic pension and postretirement benefit cost	\$ 70.7	\$ 114.0	\$ 176.0

The following are reconciliations of net income, diluted EPS from net income and effective tax rate to Adjusted Income, Adjusted EPS and Adjusted Effective Tax Rate, respectively (in millions, except per share amounts and percentages):

	Year Ended September 30,		
	2019	2018	2017
Net Income	\$ 695.8	\$ 535.5	\$ 825.7
Non-operating pension and postretirement benefit (credit) cost	(8.4)	23.8	77.6
Tax effect of non-operating pension and postretirement benefit (credit) cost	1.0	(7.5)	(28.0)
Costs related to unsolicited Emerson proposals	—	11.2	—
Tax effect of costs related to unsolicited Emerson proposals	—	(3.1)	—
Change in fair value of investments ¹	368.5	(90.0)	—
Tax effect of change in fair value of investments ¹	(21.7)	21.7	—
Effect of deemed repatriation of foreign earnings due to the Tax Act ²	—	395.8	—
Effect of net deferred tax asset revaluation due to the Tax Act ²	—	104.4	—
Effect of withholding taxes on previously taxed foreign earnings due to the Tax Act ²	—	38.1	—
Adjusted Income	<u>\$ 1,035.2</u>	<u>\$ 1,029.9</u>	<u>\$ 875.3</u>
Diluted EPS from net income	\$ 5.83	\$ 4.21	\$ 6.35
Non-operating pension and postretirement benefit (credit) cost	(0.07)	0.18	0.60
Tax effect of non-operating pension and postretirement benefit (credit) cost	0.01	(0.06)	(0.22)
Costs related to unsolicited Emerson proposals	—	0.09	—
Tax effect of costs related to unsolicited Emerson proposals	—	(0.02)	—
Change in fair value of investments ¹	3.08	(0.71)	—
Tax effect of change in fair value of investments ¹	(0.18)	0.17	—
Effect of deemed repatriation of foreign earnings due to the Tax Act ²	—	3.12	—
Effect of net deferred tax asset revaluation due to the Tax Act ²	—	0.82	—
Effect of withholding taxes on previously taxed foreign earnings due to the Tax Act ²	—	0.30	—
Adjusted EPS	<u>\$ 8.67</u>	<u>\$ 8.10</u>	<u>\$ 6.73</u>
Effective tax rate	22.8 %	59.8 %	20.4%
Tax effect of non-operating pension and postretirement benefit (credit) cost	0.1 %	0.3 %	1.1%
Tax effect of costs related to unsolicited Emerson proposals	— %	0.1 %	—%
Tax effect of change in fair value of investments ¹	(5.0)%	(0.4)%	—%
Effect of deemed repatriation of foreign earnings due to the Tax Act ²	— %	(29.8)%	—%
Effect of net deferred tax asset revaluation due to the Tax Act ²	— %	(7.9)%	—%
Effect of withholding taxes on previously taxed foreign earnings due to the Tax Act ²	— %	(2.8)%	—%
Adjusted Effective Tax Rate	<u>17.9 %</u>	<u>19.3 %</u>	<u>21.5%</u>

¹Includes loss (gain) on investments and valuation adjustments related to the registration of PTC Shares.

²During fiscal year 2019, the Company completed its analysis of the impact of the Tax Act with no change to the provisional amounts recorded in fiscal year 2018. See Note 15 in the Consolidated Financial Statements for further information.

2019 Compared to 2018

(in millions, except per share amounts)

	2019	2018	Change
Sales	\$ 6,694.8	\$ 6,666.0	\$ 28.8
Income before income taxes	901.0	1,330.8	(429.8)
Diluted EPS	5.83	4.21	1.62
Adjusted EPS	8.67	8.10	0.57

Sales

Sales in fiscal 2019 increased 0.4 percent compared to 2018. Organic sales increased 2.8 percent. Currency translation decreased sales by 2.4 percentage points. Including price increases relating to tariffs, pricing contributed less than two percentage points to growth.

The table below presents our sales, attributed to the geographic regions based upon country of destination, for the year ended September 30, 2019 and the percentage change from the same period a year ago:

(in millions, except percentages)	Year Ended September 30, 2019	Change vs. Year Ended September 30, 2018	Change in Organic Sales ⁽¹⁾ vs. Year Ended September 30, 2018
North America	\$ 4,014.3	1.3 %	1.6%
Europe, Middle East and Africa	1,249.8	(2.9)%	2.9%
Asia Pacific	908.6	(2.6)%	1.7%
Latin America	522.1	8.4 %	14.2%
Total sales	\$ 6,694.8	0.4 %	2.8%

(1) Organic sales are sales excluding the effect of changes in currency exchange rates, acquisitions and divestitures. See **Supplemental Sales Information** for information on this non-GAAP measure.

- Sales in North America increased year over year, led by strength in process end markets, specifically Oil & Gas, and Pulp & Paper.
- EMEA sales decreased year over year, primarily as a result of currency translation. Organic sales increased, led by strength in hybrid and process end markets, specifically Life Sciences and Tire.
- Asia Pacific sales decreased year over year, primarily as a result of currency translation. Organic sales increased, led by strength in process end markets, specifically in Oil & Gas, Mass Transit, and Water / Wastewater, partially offset by weakness in Semiconductor.
- Sales in Latin America increased year over year, led by process end markets, including Mining and Oil & Gas.

General Corporate - Net

General corporate - net expenses were \$108.8 million in fiscal 2019 compared to \$100.0 million in fiscal 2018.

Income before Income Taxes

Income before income taxes decreased 32 percent from \$1,330.8 million in 2018 to \$901.0 million in 2019, primarily due to gains and losses on investments and valuation adjustments related to the registration of PTC Shares ("PTC adjustments"). Total segment operating earnings increased 2 percent year over year from \$1,441.8 million in 2018 to \$1,473.6 million in 2019.

Income Taxes

The effective tax rate in 2019 was 22.8 percent compared to 59.8 percent in 2018. The decrease in the effective tax rate was primarily due to the prior year impact of tax expense related to the transition tax on the deemed repatriation of foreign earnings (\$395.8 million or 29.8 percent), withholding taxes on previously taxed foreign earnings (\$38.1 million or 2.8 percent), the revaluation of net deferred tax assets resulting from the Tax Act (\$104.4 million or 7.9 percent), and the impact of the lower U.S. statutory tax rate under the Tax Act.

The Adjusted Effective Tax Rate in 2019 was 17.9 percent compared to 19.3 percent in 2018. The decrease in the Adjusted Effective Tax Rate was primarily due to the lower U.S. statutory tax rate under the Tax Act.

See Note 15 in the Consolidated Financial Statements for a complete reconciliation of the United States statutory tax rate to the effective tax rate and more information on tax events in 2019 and 2018 affecting each year's respective tax rates.

Architecture & Software

The Architecture & Software operating segment contains a comprehensive portfolio of automation and information platforms, including hardware and software. This integrated portfolio is capable of controlling our customers' industrial processes and manufacturing, as well as providing connections to enterprise business systems.

Our automation platform is multi-discipline and scalable with the ability to handle applications in discrete, batch/hybrid and continuous process, drives control, motion control, machine safety and process safety. Our products include programmable automation controllers, design, visualization and simulation software, human machine interface products, networking products, industrial computers, sensing devices, machine safety devices, motion control products, and independent cart technology products.

Our information platform includes manufacturing execution system software and analytics software that enables customers to improve operational productivity and meet regulatory requirements. This platform enables enterprise visibility, reduction of unplanned downtime, and optimization of processes.

(in millions, except percentages)

	2019	2018	Change
Sales	\$ 3,021.9	\$ 3,050.2	\$ (28.3)
Segment operating earnings	874.8	897.9	(23.1)
Segment operating margin	28.9%	29.4%	(0.5) pts

Sales

Architecture & Software sales decreased 0.9 percent in 2019 compared to 2018. Organic sales increased 1.5 percent, the effects of currency translation decreased sales by 2.5 percentage points, and the current year acquisition increased sales by 0.1 percentage points. All regions experienced reported sales declines, except for Asia Pacific. Organic sales growth was led by Asia Pacific and EMEA. Logix reported sales decreased 2 percent in 2019 compared to 2018. Logix organic sales increased 1 percent, and the effects of currency translation decreased sales by 3 percentage points.

Operating Margin

Architecture & Software segment operating earnings decreased 3 percent. Operating margin was 28.9 percent in 2019 compared to 29.4 percent in 2018.

Control Products & Solutions

The Control Products & Solutions operating segment combines a comprehensive portfolio of intelligent motor control and industrial control products, value-added solutions and a complete portfolio of professionally delivered lifecycle services. This comprehensive portfolio includes:

- Low and medium voltage electro-mechanical and electronic motor starters and AC/DC variable frequency drives, motor control and circuit protection devices, operator devices, signaling devices, termination and protection devices, relays and timers and electrical control accessories.
- Value-added solutions ranging from pre-configured line to load power solutions, packaged drives, motor control centers, intelligent packaged power and engineered to order automation equipment solutions.
- Professional lifecycle services combine technology and domain expertise to help maximize customers' automation investment and provide total lifecycle support as they design, build, sustain and optimize their automation investments. This broad portfolio includes safety, security and digital transformation consulting, global automation and information project delivery capabilities, plant network, cloud, and cybersecurity services, asset management and predictive analytics, and remote, on-site and managed support services.

(in millions, except percentages)

	2019	2018	Change
Sales	\$ 3,672.9	\$ 3,615.8	\$ 57.1
Segment operating earnings	598.8	543.9	54.9
Segment operating margin	16.3%	15.0%	1.3 pts

Sales

Control Products & Solutions sales increased 1.6 percent in 2019 compared to 2018. Organic sales increased 3.8 percent, and the effects of currency translation decreased sales by 2.2 percentage points. Control Products & Solutions experienced reported and organic sales growth, led by North America and Latin America.

Product sales decreased 1 percent year over year. Product organic sales increased 1 percent, and currency translation decreased sales by approximately 2 percentage points.

Sales in our solutions and services businesses increased approximately 3 percent year over year. Organic sales in our solutions and services businesses increased 6 percent during 2019, and currency translation decreased sales by approximately 3 percentage points.

Operating Margin

Control Products & Solutions segment operating earnings increased 10 percent year over year. Segment operating margin was 16.3 percent in 2019 compared to 15.0 percent a year ago, primarily due to higher sales.

2018 Compared to 2017

(in millions, except per share amounts)

	2018	2017	Change
Sales	\$ 6,666.0	\$ 6,311.3	\$ 354.7
Income before income taxes	1,330.8	1,037.4	293.4
Diluted EPS	4.21	6.35	(2.14)
Adjusted EPS	8.10	6.73	1.37

Sales

Sales in fiscal 2018 increased 5.6 percent compared to 2017. Organic sales increased 5.5 percent. Currency translation increased sales by 1.4 percentage points, and the 2017 divestiture reduced sales by 1.3 percentage points. Pricing contributed about half of one percentage point to growth.

The table below presents our sales, attributed to the geographic regions based upon country of destination, for the year ended September 30, 2018 and the percentage change from the same period a year ago:

(in millions, except percentages)	Year Ended September 30, 2018	Change vs. Year Ended September 30, 2017	Change in Organic Sales ⁽¹⁾ vs. Year Ended September 30, 2017
North America	\$ 3,964.1	4.3%	6.0%
Europe, Middle East and Africa	1,286.8	7.8%	0.8%
Asia Pacific	933.3	7.7%	5.4%
Latin America	481.8	7.2%	14.3%
Total sales	\$ 6,666.0	5.6%	5.5%

(1) Organic sales are sales excluding the effect of changes in currency exchange rates, acquisitions and divestitures. See **Supplemental Sales Information** for information on this non-GAAP measure.

- Sales in North America increased year over year, led by strength in heavy industries.
- EMEA sales increased year over year, led by consumer industries.
- Asia Pacific sales increased year over year, led by heavy industries.
- Sales in Latin America increased year over year, led by the food and beverage and mining industries.

General Corporate - Net

General corporate - net expenses were \$100.0 million in fiscal 2018 compared to \$95.9 million in fiscal 2017.

Income before Income Taxes

Income before income taxes increased 28 percent from \$1,037.4 million in 2017 to \$1,330.8 million in 2018, primarily due to PTC adjustments, higher sales, and lower restructuring charges, partially offset by the absence of the gain on the 2017 divestiture. Total segment operating earnings increased 17 percent year over year from \$1,228.1 million in 2017 to \$1,441.8 million in 2018, primarily due to higher sales.

Income Taxes

On December 22, 2017, the Tax Act was enacted. The Tax Act significantly changed U.S. tax law by, among other things, lowering the statutory corporate income tax rate, implementing a modified territorial tax system, and imposing a one-time transition tax on accumulated earnings of foreign subsidiaries that were previously deferred from U.S. tax ("transition tax"). As a fiscal year taxpayer, certain provisions of the Tax Act impacted us in fiscal year 2018, including the change in the federal statutory rate and the transition tax, while other provisions were effective in fiscal year 2019, including the tax on global intangible low-tax income ("GILTI") of foreign subsidiaries, the deduction of foreign derived intangible income ("FDII"), and the elimination of the domestic manufacturing deduction.

The effective tax rate in 2018 was 59.8 percent compared to 20.4 percent in 2017. The increase in the effective tax rate was due to provisional expense related to the transition tax on deemed repatriation of foreign earnings (\$395.8 million or 29.8 percent), withholding taxes on previously taxed foreign earnings (\$38.1 million or 2.8 percent), and the revaluation of net deferred tax assets (\$104.4 million or 7.9 percent).

The Adjusted Effective Tax Rate in 2018 was 19.3 percent compared to 21.5 percent in 2017. The decrease in the Adjusted Effective Tax Rate was primarily due to the lower U.S. statutory tax rate under the Tax Act partially offset by lower discrete tax items in 2018.

See Note 15 in the Consolidated Financial Statements for a complete reconciliation of the United States statutory tax rate to the effective tax rate and more information on tax events in 2018 and 2017 affecting each year's respective tax rates.

Architecture & Software

(in millions, except percentages)

	2018	2017	Change
Sales	\$ 3,050.2	\$ 2,858.6	\$ 191.6
Segment operating earnings	897.9	780.0	117.9
Segment operating margin	29.4%	27.3%	2.1 pts

Sales

Architecture & Software sales increased 6.7 percent in 2018 compared to 2017. Organic sales increased 5.1 percent, the effects of currency translation increased sales by 1.6 percentage points. All regions experienced reported and organic sales growth. The United States was the strongest performing region. Logix reported sales increased 8 percent in 2018 compared to 2017. Logix organic sales increased 7 percent, and the effects of currency translation increased sales by 1 percentage point.

Operating Margin

Architecture & Software segment operating earnings increased 15 percent. Operating margin was 29.4 percent in 2018 compared to 27.3 percent in 2017, primarily due to higher sales.

Control Products & Solutions

(in millions, except percentages)

	2018	2017	Change
Sales	\$ 3,615.8	\$ 3,452.7	\$ 163.1
Segment operating earnings	543.9	448.1	95.8
Segment operating margin	15.0%	13.0%	2.0 pts

Sales

Control Products & Solutions sales increased 4.7 percent in 2018 compared to 2017. Organic sales increased 5.8 percent, the effect of currency translation increased sales by 1.3 percentage points, and the 2017 divestiture reduced sales by 2.4 percentage points. All regions experienced reported and organic sales growth, except for EMEA. The United States was the strongest performing region.

Product sales decreased 2 percent year over year. Product organic sales increased 2 percent, currency translation increased sales by approximately 1 percentage point, and the 2017 divestiture reduced sales by approximately 5 percentage points.

Sales in our solutions and services businesses increased approximately 10 percent year over year. Organic sales in our solutions and services businesses increased 9 percent during 2018, and currency translation contributed 1 percentage point to sales growth.

Operating Margin

Control Products & Solutions segment operating earnings increased 21 percent year over year. Segment operating margin was 15.0 percent in 2018 compared to 13.0 percent in 2017, primarily due to higher sales.

Financial Condition

The following is a summary of our cash flows from operating, investing and financing activities, as reflected in the Consolidated Statement of Cash Flows (in millions):

	Year Ended September 30,		
	2019	2018	2017
Cash provided by (used for):			
Operating activities	\$ 1,182.0	\$ 1,300.0	\$ 1,034.0
Investing activities	225.0	(170.4)	(516.7)
Financing activities	(985.9)	(1,888.9)	(649.6)
Effect of exchange rate changes on cash	(21.5)	(32.8)	16.8
Cash provided by (used for) continuing operations	\$ 399.6	\$ (792.1)	\$ (115.5)

The following table summarizes free cash flow, which is a non-GAAP financial measure (in millions):

	Year Ended September 30,		
	2019	2018	2017
Cash provided by continuing operating activities	\$ 1,182.0	\$ 1,300.0	\$ 1,034.0
Capital expenditures	(132.8)	(125.5)	(141.7)
Free cash flow	\$ 1,049.2	\$ 1,174.5	\$ 892.3

Our definition of free cash flow takes into consideration capital investments required to maintain our businesses' operations and execute our strategy. Cash provided by continuing operating activities adds back non-cash depreciation expense to earnings but does not reflect a charge for necessary capital expenditures. Our definition of free cash flow excludes the operating cash flows and capital expenditures related to our discontinued operations, if any. Operating, investing and financing cash flows of our discontinued operations, if any, are presented separately in our statement of cash flows. In our opinion, free cash flow provides useful information to investors regarding our ability to generate cash from business operations that is available for acquisitions and other investments, service of debt principal, dividends and share repurchases. We use free cash flow, as defined, as one measure to monitor and evaluate our performance, including as a financial measure for our annual incentive compensation. Our definition of free cash flow may differ from definitions used by other companies.

Cash provided by operating activities was \$1,182.0 million for the year ended September 30, 2019, compared to \$1,300.0 million for the year ended September 30, 2018. Free cash flow was \$1,049.2 million for the year ended September 30, 2019, compared to \$1,174.5 million for the year ended September 30, 2018. The year-over-year decreases in cash provided by operating activities and free cash flow were primarily due to an increase in working capital, a payment due to settlement of treasury locks, and higher tax payments, including a payment for taxes under the Tax Act related to deemed repatriation of foreign earnings.

We repurchased approximately 6.1 million shares of our common stock under our share repurchase program in 2019 at a total cost of \$1.0 billion. In 2018, we repurchased approximately 8.3 million shares of our common stock under our share repurchase program at a total cost of \$1.5 billion. At September 30, 2019, there were \$9.3 million of outstanding common stock share repurchases recorded in accounts payable that did not settle until 2020. At September 30, 2018, there were \$18.3 million of outstanding common stock share repurchases recorded in accounts payable that did not settle until 2019. Our decision to repurchase shares in 2020 will depend on business conditions, free cash flow generation, other cash requirements and stock price. On both September 6, 2018 and July 24, 2019, the Board of Directors authorized us to expend an additional \$1.0 billion to repurchase shares of our common stock. At September 30, 2019, we had approximately \$1,108.4 million remaining for share repurchases under our existing board authorizations. See Part II, Item 5. *Market for the Company's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities*, for additional information regarding share repurchases.

We expect future uses of cash to include working capital requirements, capital expenditures, additional contributions to our retirement plans, acquisitions of businesses and other inorganic investments, dividends to shareowners, repurchases of common stock and repayments of debt. We expect capital expenditures in 2020 to be about \$160 million. We expect to fund future uses of cash with a combination of existing cash balances and short-term investments, cash generated by operating activities, commercial paper borrowings or a new issuance of debt or other securities.

At September 30, 2019, approximately half of our cash and cash equivalents were held by non-U.S. subsidiaries. As a result of the broad changes to the U.S. international tax system under the Tax Act, in fiscal year 2018 the Company began to account for substantially all of its non-U.S. subsidiaries as being immediately subject to tax, while still concluding that earnings are indefinitely reinvested for a limited number of subsidiaries.

During fiscal 2019, we repatriated approximately \$767.3 million to the U.S. from our foreign subsidiaries. The source of these funds was cash and cash equivalents and from the liquidation of short and long-term investments.

In addition to cash generated by operating activities, we have access to existing financing sources, including the public debt markets and unsecured credit facilities with various banks.

In March 2019, we issued \$1 billion aggregate principal amount of long-term notes in a registered public offering. The offering consisted of \$425.0 million of 3.500% notes due in March 2029 (“2029 Notes”) and \$575.0 million of 4.200% notes due in March 2049 (“2049 Notes”), both issued at a discount. Net proceeds to the Company from the debt offering were \$987.6 million. We used these net proceeds primarily to repay our outstanding commercial paper, with the remaining proceeds used for general corporate purposes.

Our short-term debt obligations are primarily comprised of commercial paper borrowings. There were no commercial paper borrowings outstanding as of September 30, 2019. Commercial paper borrowings were \$550.0 million at September 30, 2018. The weighted average interest rate of the commercial paper outstanding was 2.27 percent at September 30, 2018.

On November 13, 2018, we replaced our former five-year \$1.0 billion unsecured revolving credit facility with a new five-year \$1.25 billion unsecured revolving credit facility expiring in November 2023. We can increase the aggregate amount of this credit facility by up to \$750.0 million, subject to the consent of the banks in the credit facility. We did not incur early termination penalties in connection with the termination of the former credit facility. We did not borrow against either facility during the periods ended September 30, 2019 or 2018. Borrowings under the new credit facility bear interest based on short-term money market rates in effect during the period the borrowings are outstanding. This credit facility contains covenants under which we agree to maintain an EBITDA-to-interest ratio of at least 3.0 to 1.0. The EBITDA-to-interest ratio is defined in the credit facility as the ratio of consolidated EBITDA (as defined in the facility) for the preceding four quarters to consolidated interest expense for the same period.

LIBOR is the basis for determining interest payments on borrowings under our \$1.25 billion credit facility. In addition, we have outstanding interest rate swaps that contain a variable element based on LIBOR. Banks currently reporting information used to set LIBOR will stop doing so after 2021. Various parties, including government agencies, are seeking to identify an alternative rate to replace LIBOR. We are monitoring their efforts, and we will likely amend contracts to accommodate any replacement rate where it is not already provided.

Separate short-term unsecured credit facilities of approximately \$217.1 million at September 30, 2019 were available to non-U.S. subsidiaries. Borrowings under our non-U.S. credit facilities at September 30, 2019 and 2018 were not significant. We were in compliance with all covenants under our credit facilities at September 30, 2019 and 2018. There are no significant commitment fees or compensating balance requirements under our credit facilities.

Among other uses, we can draw on our credit facility as a standby liquidity facility to repay our outstanding commercial paper as it matures. This access to funds to repay maturing commercial paper is an important factor in maintaining the short-term credit ratings set forth in the table below. Under our current policy with respect to these ratings, we expect to limit our other borrowings under our credit facility, if any, to amounts that would leave enough credit available under the facility so that we could borrow, if needed, to repay all of our then outstanding commercial paper as it matures.

The following is a summary of our credit ratings as of September 30, 2019:

Credit Rating Agency	Short Term Rating	Long Term Rating	Outlook
Standard & Poor’s	A-1	A	Stable
Moody’s	P-2	A3	Stable
Fitch Ratings	F1	A	Stable

Our ability to access the commercial paper market, and the related costs of these borrowings, is affected by the strength of our credit ratings and market conditions. We have not experienced any difficulty in accessing the commercial paper market to date. If our access to the commercial paper market is adversely affected due to a change in market conditions or otherwise, we would expect to rely on a combination of available cash and our unsecured committed credit facility to provide short-term funding. In such event, the cost of borrowings under our unsecured committed credit facility could be higher than the cost of commercial paper borrowings.

We regularly monitor the third-party depository institutions that hold our cash and cash equivalents and short-term investments. We diversify our cash and cash equivalents and short-term investments among counterparties to minimize exposure to any one of these entities. In February 2017, we began investing in investment-grade fixed income securities, including corporate debt and government obligations, to provide further diversification. Refer to Note 9 in the Consolidated Financial Statements for further discussion of these investments. Our emphasis is primarily on safety and liquidity of principal and secondarily on maximizing yield on those funds.

We use foreign currency forward exchange contracts to manage certain foreign currency risks. We enter into these contracts to hedge our exposure to foreign currency exchange rate variability in the expected future cash flows associated with certain third-party and intercompany transactions denominated in foreign currencies forecasted to occur within the next two years. We also use these contracts to hedge portions of our net investments in certain non-U.S. subsidiaries against the effect of exchange rate fluctuations on the translation of foreign currency balances to the U.S. dollar. In addition, we use foreign currency forward exchange contracts that are not designated as hedges to offset transaction gains or losses associated with some of our assets and liabilities resulting from intercompany loans or other transactions with third parties that are denominated in currencies other than our entities' functional currencies. Our foreign currency forward exchange contracts are usually denominated in currencies of major industrial countries. We diversify our foreign currency forward exchange contracts among counterparties to minimize exposure to any one of these entities.

Cash dividends to shareowners were \$459.8 million in 2019 (\$3.88 per common share), \$440.8 million in 2018 (\$3.51 per common share) and \$390.7 million in 2017 (\$3.04 per common share). Our quarterly dividend rate as of September 30, 2019 is \$0.97 per common share (\$3.88 per common share annually), which is determined at the sole discretion of our Board of Directors.

A summary of our projected contractual cash obligations at September 30, 2019 is as follows (in millions):

	Payments by Period						
	Total	2020	2021	2022	2023	2024	Thereafter
Long-term debt and interest (a)	\$ 4,461.3	\$ 394.5	\$ 92.0	\$ 92.0	\$ 92.0	\$ 92.0	\$ 3,698.8
Minimum operating lease payments	341.9	90.6	72.6	51.8	36.7	26.4	63.8
Postretirement benefits (b)	60.7	7.4	6.2	5.9	5.6	5.3	30.3
Pension funding contribution (c)	32.2	32.2	—	—	—	—	—
Purchase obligations (d)	448.1	361.8	60.0	13.4	5.6	5.5	1.8
Other long-term liabilities (e)	98.0	9.6	—	—	—	—	—
Transition tax (f)	355.9	28.7	31.2	31.2	31.1	58.4	175.3
Unrecognized tax benefits (g)	23.2	—	—	—	—	—	—
Total	\$ 5,821.3	\$ 924.8	\$ 262.0	\$ 194.3	\$ 171.0	\$ 187.6	\$ 3,970.0

(a) The amounts for long-term debt assume that the respective debt instruments will be outstanding until their scheduled maturity dates. The amounts include interest but exclude the amounts to be paid or received under interest rate swap contracts, including the \$7.0 million fair value adjustment recorded for the interest rate swap contracts at September 30, 2019 and the unamortized discount of \$46.6 million at September 30, 2019. See Note 6 in the Consolidated Financial Statements for more information regarding our long-term debt.

(b) Our postretirement benefit plans are unfunded and are subject to change. Amounts reported are estimates of future benefit payments, to the extent estimable.

- (c) Amounts reported for pension funding contributions reflect current estimates of known commitments. Contributions to our pension plans beyond 2020 will depend on future investment performance of our pension plan assets, changes in discount rate assumptions and governmental regulations in effect at the time. Amounts subsequent to 2020 are excluded from the summary above, as we are unable to make a reasonably reliable estimate of these amounts. The minimum contribution for our U.S. pension plan as required by the Employee Retirement Income Security Act (ERISA) is currently zero. We may make additional contributions to this plan at the discretion of management.
- (d) This item includes contractual commitments for capital expenditures, certain materials purchases and long-term obligations under agreements with various service providers. Included in this amount is \$250 million paid to Schlumberger in connection with the formation of Sensia on October 1, 2019.
- (e) Other long-term liabilities include environmental remediation costs, conditional asset retirement obligations and indemnification liabilities. Amounts subsequent to 2020 are excluded from the summary above, as we are unable to make a reasonably reliable estimate of when the liabilities will be paid.
- (f) Under the Tax Act, the Company may elect to pay the transition tax interest-free over eight years, with 8% due in each of the first five years, 15% in year six, 20% in year seven, and 25% in year eight.
- (g) Amount for unrecognized tax benefits includes accrued interest and penalties. We are unable to make a reasonably reliable estimate of when the liabilities for unrecognized tax benefits will be settled or paid.

Supplemental Sales Information

We translate sales of subsidiaries operating outside of the United States using exchange rates effective during the respective period. Therefore, changes in currency exchange rates affect our reported sales. Sales by acquired businesses also affect our reported sales. We believe that organic sales, defined as sales excluding the effects of changes in currency exchange rates and acquisitions, which is a non-GAAP financial measure, provides useful information to investors because it reflects regional and operating segment performance from the activities of our businesses without the effect of changes in currency exchange rates and acquisitions. We use organic sales as one measure to monitor and evaluate our regional and operating segment performance. We determine the effect of changes in currency exchange rates by translating the respective period's sales using the same currency exchange rates that were in effect during the prior year. When we acquire businesses, we exclude sales in the current period for which there are no comparable sales in the prior period. When we divest a business, we exclude sales in the prior period for which there are no comparable sales in the current period. Organic sales growth is calculated by comparing organic sales to reported sales in the prior year, excluding divestitures. We attribute sales to the geographic regions based on the country of destination.

The following is a reconciliation of our reported sales by geographic region to organic sales (in millions):

	Year Ended September 30, 2019				Year Ended September 30, 2018			
	Sales	Effect of Changes in Currency	Sales Excluding Changes in Currency	Effect of Acquisitions	Organic Sales	Sales	Effect of Divestitures	Sales Excluding Divestitures
North America	\$ 4,014.3	\$ 13.7	\$ 4,028.0	\$ (1.5)	\$ 4,026.5	\$ 3,964.1	\$ —	\$ 3,964.1
Europe, Middle East and Africa	1,249.8	74.7	1,324.5	(0.4)	1,324.1	1,286.8	—	1,286.8
Asia Pacific	908.6	40.7	949.3	(0.3)	949.0	933.3	—	933.3
Latin America	522.1	28.2	550.3	—	550.3	481.8	—	481.8
Total Company Sales	\$ 6,694.8	\$ 157.3	\$ 6,852.1	\$ (2.2)	\$ 6,849.9	\$ 6,666.0	\$ —	\$ 6,666.0

	Year Ended September 30, 2018					Year Ended September 30, 2017		
	Sales	Effect of Changes in Currency	Sales Excluding Changes in Currency	Effect of Acquisitions	Organic Sales	Sales	Effect of Divestitures	Sales Excluding Divestitures
North America	\$ 3,964.1	\$ (9.6)	\$ 3,954.5	\$ —	\$ 3,954.5	\$ 3,801.8	\$ (69.8)	\$ 3,732.0
Europe, Middle East and Africa	1,286.8	(83.7)	1,203.1	—	1,203.1	1,193.7	—	1,193.7
Asia Pacific	933.3	(19.8)	913.5	—	913.5	866.4	—	866.4
Latin America	481.8	22.9	504.7	—	504.7	449.4	(8.0)	441.4
Total Company Sales	\$ 6,666.0	\$ (90.2)	\$ 6,575.8	\$ —	\$ 6,575.8	\$ 6,311.3	\$ (77.8)	\$ 6,233.5

The following is a reconciliation of our reported sales by operating segment to organic sales (in millions):

	Year Ended September 30, 2019					Year Ended September 30, 2018		
	Sales	Effect of Changes in Currency	Sales Excluding Changes in Currency	Effect of Acquisitions	Organic Sales	Sales	Effect of Divestitures	Sales Excluding Divestitures
Architecture & Software	\$ 3,021.9	\$ 76.5	\$ 3,098.4	\$ (2.2)	\$ 3,096.2	\$ 3,050.2	\$ —	\$ 3,050.2
Control Products & Solutions	3,672.9	80.8	3,753.7	—	3,753.7	3,615.8	—	3,615.8
Total Company Sales	\$ 6,694.8	\$ 157.3	\$ 6,852.1	\$ (2.2)	\$ 6,849.9	\$ 6,666.0	\$ —	\$ 6,666.0

	Year Ended September 30, 2018					Year Ended September 30, 2017		
	Sales	Effect of Changes in Currency	Sales Excluding Changes in Currency	Effect of Acquisitions	Organic Sales	Sales	Effect of Divestitures	Sales Excluding Divestitures
Architecture & Software	\$ 3,050.2	\$ (46.1)	\$ 3,004.1	\$ —	\$ 3,004.1	\$ 2,858.6	\$ —	\$ 2,858.6
Control Products & Solutions	3,615.8	(44.1)	3,571.7	—	3,571.7	3,452.7	(77.8)	3,374.9
Total Company Sales	\$ 6,666.0	\$ (90.2)	\$ 6,575.8	\$ —	\$ 6,575.8	\$ 6,311.3	\$ (77.8)	\$ 6,233.5

Critical Accounting Estimates

We believe the following accounting estimates are the most critical to the understanding of our financial statements as they could have the most significant effect on our reported results and require subjective or complex judgments by management. Accounting principles generally accepted in the United States require us to make estimates and assumptions that affect the reported amounts of assets and liabilities at the date of the consolidated financial statements and revenues and expenses during the periods reported. These estimates are based on our best judgment about current and future conditions, but actual results could differ from those estimates. Refer to Note 1 in the Consolidated Financial Statements for information regarding our significant accounting policies.

Retirement Benefits — Pension

Pension costs and obligations are actuarially determined and are influenced by assumptions used to estimate these amounts, including the discount rate and the expected rate of return on plan assets. Changes in any of the assumptions and the amortization of differences between the assumptions and actual experience will affect the amount of pension expense in future periods.

Our global pension expense in 2019 was \$72.0 million compared to \$114.1 million in 2018. Approximately 76 percent of our 2019 global pension expense and global projected benefit obligation relates to our U.S. pension plan. The discount rate used to determine our 2019 U.S. pension expense was 4.35 percent, compared to 3.90 percent for 2018.

For 2020, our U.S. discount rate will decrease to 3.30 percent from 4.35 percent in 2019. The discount rate was set as of our September 30 measurement date and was determined by modeling a portfolio of bonds that match the expected cash flow of our benefit plans.

The changes in our discount rate has an inverse relationship with our net periodic benefit cost and projected benefit obligation. The following chart illustrates the estimated change in projected benefit obligation and annual net periodic benefit cost assuming a change of 25 basis points in the discount rate for our U.S. pension plans (in millions):

	Pension Benefits	
	Change in Projected Benefit Obligation	Change in Net Periodic Benefit Cost ⁽¹⁾
Discount rate	\$ 141.1	\$ 14.7

⁽¹⁾ Change includes both operating and non-operating pension costs.

More information regarding pension benefits is contained in Note 13 in the Consolidated Financial Statements.

Revenue Recognition — Customer Incentives

We offer various incentive programs that provide distributors and direct sale customers with cash rebates, account credits or additional hardware and software products, solutions and services based on meeting specified program criteria. Customer incentives are recognized as a reduction of sales if distributed in cash or customer account credits. Customer incentives are recognized in cost of sales for additional hardware and software products, solutions and services to be provided. We record accruals at the time of revenue recognition as a current liability within Customer returns, rebates and incentives in our Consolidated Balance Sheet or, where a right of setoff exists, as a reduction of Receivables.

Our primary incentive program provides distributors with cash rebates or account credits based on agreed amounts that vary depending on the customer to whom our distributor ultimately sells the product. A critical assumption used in estimating the accrual for this program is the time period from when revenue is recognized to when the rebate is processed. Our estimate is based primarily on historical experience. If the time period were to change by 10 percent, the effect would be an adjustment to the accrual of approximately \$12.0 million.

More information regarding our revenue recognition and returns, rebates and incentives policies are contained in Note 1 in the Consolidated Financial Statements.

Recent Accounting Pronouncements

See Note 1 in the Consolidated Financial Statements regarding recent accounting pronouncements.

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

We are exposed to market risk during the normal course of business from changes in foreign currency exchange rates and interest rates. We manage exposure to these risks through a combination of normal operating and financing activities as well as derivative financial instruments in the form of foreign currency forward exchange contracts. We sometimes use interest rate swap contracts to manage the balance of fixed and floating rate debt.

Foreign Currency Risk

We are exposed to foreign currency risks that arise from normal business operations. These risks include the translation of local currency balances of foreign subsidiaries, transaction gains and losses associated with intercompany loans with foreign subsidiaries and transactions denominated in currencies other than a location's functional currency. Our objective is to minimize our exposure to these risks through a combination of normal operating activities and the use of foreign currency forward exchange contracts. Contracts are usually denominated in currencies of major industrial countries. The fair value of our foreign currency forward exchange contracts is an asset of \$28.1 million and a liability of \$5.6 million at September 30, 2019. We enter into these contracts with major financial institutions that we believe to be creditworthy.

We do not enter into derivative financial instruments for speculative purposes. In 2019, the relative strengthening of the U.S. dollar against foreign currencies had an unfavorable impact on our sales and results of operations. In 2018, the relative weakening of the U.S. dollar against foreign currencies had a favorable impact on our sales and results of operations. While future changes in foreign currency exchange rates are difficult to predict, our sales and profitability may be adversely affected if the U.S. dollar strengthens relative to 2019 levels.

Certain of our locations have assets and liabilities denominated in currencies other than their functional currencies. We enter into foreign currency forward exchange contracts to offset the transaction gains or losses associated with some of these assets and liabilities. For such assets and liabilities without offsetting foreign currency forward exchange contracts, a 10 percent adverse change in the underlying foreign currency exchange rates would reduce our pre-tax income by approximately \$23 million.

We record all derivatives on the balance sheet at fair value regardless of the purpose for holding them. The use of foreign currency forward exchange contracts allows us to manage transactional exposure to exchange rate fluctuations as the gains or losses incurred on these contracts will offset, in whole or in part, losses or gains on the underlying foreign currency exposure. Derivatives that are not designated as hedges for accounting purposes are adjusted to fair value through earnings. For derivatives that are hedges, depending on the nature of the hedge, changes in fair value are either offset by changes in the fair value of the hedged assets, liabilities or firm commitments through earnings or recognized in other comprehensive loss until the hedged item is recognized in earnings. We recognize the ineffective portion of a derivative's change in fair value in earnings immediately. There was no impact on earnings due to ineffective hedges in 2019, 2018 or 2017. A hypothetical 10 percent adverse change in underlying foreign currency exchange rates associated with the hedged exposures and related contracts would not be significant to our financial condition or results of operations.

Interest Rate Risk

In addition to existing cash balances and cash provided by normal operating activities, we use a combination of short-term and long-term debt to finance operations. We are exposed to interest rate risk on certain of these debt obligations.

Our short-term debt obligations are primarily comprised of commercial paper borrowings. There were no commercial paper borrowings outstanding as of September 30, 2019. Commercial paper borrowings were \$550.0 million at September 30, 2018, with a weighted average interest rate of 2.27 percent and weighted average maturity period of 26 days. We have issued, and anticipate continuing to issue, additional short-term commercial paper obligations as needed. Changes in market interest rates on commercial paper borrowings affect our results of operations.

We had outstanding fixed rate long-term and current portion of long-term debt obligations with a carrying value of \$2,256.9 million at September 30, 2019 and \$1,225.2 million at September 30, 2018. The fair value of this debt was approximately \$2,680.9 million at September 30, 2019 and \$1,391.3 million at September 30, 2018. The potential increase in fair value on such fixed-rate debt obligations from a hypothetical 50 basis point decrease in market interest rates would not be significant to our results of operations or financial condition. We currently have no plans to repurchase our outstanding fixed-rate instruments before their maturity and, therefore, fluctuations in market interest rates would not have an effect on our results of operations or shareowners' equity.

In February 2015, we entered into interest rate swap contracts, which we designated as fair value hedges. These interest rate swaps effectively converted the \$600.0 million aggregate principal amount of our 2.050 percent notes payable in March 2020 ("2020 Notes") and 2.875 percent notes payable in March 2025 ("2025 Notes") to floating rate debt, each at a rate based on three-month LIBOR plus a fixed spread. The effective floating interest rates were 2.576 percent for the 2020 Notes and 2.986 percent for the 2025 Notes at September 30, 2019. The fair value of our interest rate swap contracts at September 30, 2019 was a net unrealized gain of \$7.0 million. A hypothetical 50 basis point increase in average market interest rates related to our interest rate swaps would not be significant to our results of operations or financial condition.

Item 8. Financial Statements and Supplementary Data
CONSOLIDATED BALANCE SHEET
(in millions, except per share amounts)

	September 30,	
	2019	2018
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 1,018.4	\$ 618.8
Short-term investments	39.6	290.9
Receivables	1,178.7	1,190.1
Inventories	575.7	581.6
Other current assets	173.3	149.3
Total current assets	2,985.7	2,830.7
Property, net	571.9	576.8
Goodwill	1,071.1	1,075.5
Other intangible assets, net	194.1	215.2
Deferred income taxes	364.1	179.6
Long-term investments	793.9	1,288.0
Other assets	132.2	96.2
Total	\$ 6,113.0	\$ 6,262.0
LIABILITIES AND SHAREOWNERS' EQUITY		
Current liabilities:		
Short-term debt	\$ —	\$ 551.0
Current portion of long-term debt	300.5	—
Accounts payable	694.6	713.4
Compensation and benefits	239.0	289.4
Contract liabilities	275.6	249.9
Customer returns, rebates and incentives	199.2	206.6
Other current liabilities	227.9	226.6
Total current liabilities	1,936.8	2,236.9
Long-term debt	1,956.4	1,225.2
Retirement benefits	1,231.9	605.1
Other liabilities	583.7	577.3
Commitments and contingent liabilities (Note 16)		
Shareowners' equity:		
Common stock (\$1.00 par value, shares issued: 181.4)	181.4	181.4
Additional paid-in capital	1,709.1	1,681.4
Retained earnings	6,440.2	6,198.1
Accumulated other comprehensive loss	(1,488.0)	(941.9)
Common stock in treasury, at cost (shares held: 2019, 65.7; 2018, 60.3)	(6,438.5)	(5,501.5)
Total shareowners' equity	404.2	1,617.5
Total	\$ 6,113.0	\$ 6,262.0

See Notes to Consolidated Financial Statements.

CONSOLIDATED STATEMENT OF OPERATIONS
(in millions, except per share amounts)

	Year Ended September 30,		
	2019	2018	2017
Sales			
Products and solutions	\$ 5,938.5	\$ 5,930.5	\$ 5,628.9
Services	756.3	735.5	682.4
	<u>6,694.8</u>	<u>6,666.0</u>	<u>6,311.3</u>
Cost of sales			
Products and solutions	(3,313.6)	(3,327.5)	(3,216.2)
Services	(481.1)	(453.6)	(427.2)
	<u>(3,794.7)</u>	<u>(3,781.1)</u>	<u>(3,643.4)</u>
Gross profit	2,900.1	2,884.9	2,667.9
Selling, general and administrative expenses	(1,538.5)	(1,587.9)	(1,557.6)
Other income (expense) (Note 14)	(362.4)	106.8	3.3
Interest expense	(98.2)	(73.0)	(76.2)
Income before income taxes	901.0	1,330.8	1,037.4
Income tax provision (Note 15)	(205.2)	(795.3)	(211.7)
Net income	<u>\$ 695.8</u>	<u>\$ 535.5</u>	<u>\$ 825.7</u>
Earnings per share:			
Basic	<u>\$ 5.88</u>	<u>\$ 4.27</u>	<u>\$ 6.42</u>
Diluted	<u>\$ 5.83</u>	<u>\$ 4.21</u>	<u>\$ 6.35</u>
Weighted average outstanding shares:			
Basic	<u>118.3</u>	<u>125.4</u>	<u>128.4</u>
Diluted	<u>119.3</u>	<u>126.9</u>	<u>129.9</u>

See Notes to Consolidated Financial Statements.

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME
(in millions)

	Year Ended September 30,		
	2019	2018	2017
Net income	\$ 695.8	\$ 535.5	\$ 825.7
Other comprehensive (loss) income:			
Pension and other postretirement benefit plan adjustments (net of tax benefit (expense) of \$150.0, (\$87.2) and (\$159.3))	(475.6)	268.9	312.8
Currency translation adjustments	(55.3)	(48.3)	57.2
Net change in cash flow hedges (net of tax benefit (expense) of \$5.5, (\$6.6) and \$2.8)	(17.4)	18.8	(10.3)
Net change in available-for-sale investments	2.2	(2.1)	(0.1)
Other comprehensive (loss) income	(546.1)	237.3	359.6
Comprehensive income	<u>\$ 149.7</u>	<u>\$ 772.8</u>	<u>\$ 1,185.3</u>

See Notes to Consolidated Financial Statements.

CONSOLIDATED STATEMENT OF CASH FLOWS
(in millions)

	Year Ended September 30,		
	2019	2018	2017
Operating activities:			
Net income	\$ 695.8	\$ 535.5	\$ 825.7
Adjustments to arrive at cash provided by operating activities:			
Depreciation	126.2	136.4	138.7
Amortization of intangible assets	26.0	28.2	30.2
Change in fair value of investments	368.5	(90.0)	—
Share-based compensation expense	43.1	38.5	38.5
Retirement benefit expense	70.7	114.0	176.0
Pension contributions	(30.9)	(50.3)	(254.9)
Deferred income taxes	(29.0)	170.5	33.8
Gain on sale of business	—	—	(60.8)
Net loss on disposition of property	1.8	2.5	0.1
Settlement of treasury locks	(35.7)	—	—
Changes in assets and liabilities, excluding effects of acquisitions and foreign currency adjustments:			
Receivables	(10.4)	(91.7)	(53.0)
Inventories	(4.9)	(37.4)	(30.4)
Accounts payable	14.5	67.2	81.1
Contract liabilities	12.1	12.9	21.3
Compensation and benefits	(45.2)	22.4	124.7
Income taxes	(18.8)	426.7	(22.2)
Other assets and liabilities	(1.8)	14.6	(14.8)
Cash provided by operating activities	1,182.0	1,300.0	1,034.0
Investing activities:			
Capital expenditures	(132.8)	(125.5)	(141.7)
Acquisition of businesses, net of cash acquired	(20.7)	(9.9)	(1.1)
Purchases of investments	(5.1)	(1,296.9)	(1,444.2)
Proceeds from maturities of investments	312.8	1,106.1	912.6
Proceeds from sale of investments	66.3	155.3	62.6
Proceeds from sale of business	—	—	94.0
Proceeds from sale of property	4.5	0.5	1.1
Cash provided by (used for) investing activities	225.0	(170.4)	(516.7)
Financing activities:			
Net (repayment) issuance of short-term debt	(551.0)	200.6	(98.2)
Issuance of long-term debt, net of discount and issuance costs	987.6	—	—
Repayment of long-term debt	—	(250.0)	—
Cash dividends	(459.8)	(440.8)	(390.7)
Purchases of treasury stock	(1,009.0)	(1,482.3)	(342.6)
Proceeds from the exercise of stock options	47.4	81.8	181.9
Other financing activities	(1.1)	1.8	—
Cash used for financing activities	(985.9)	(1,888.9)	(649.6)
Effect of exchange rate changes on cash	(21.5)	(32.8)	16.8
Increase (decrease) in cash and cash equivalents	399.6	(792.1)	(115.5)
Cash and cash equivalents at beginning of year	618.8	1,410.9	1,526.4
Cash and cash equivalents at end of year	\$ 1,018.4	\$ 618.8	\$ 1,410.9

See Notes to Consolidated Financial Statements.

CONSOLIDATED STATEMENT OF SHAREOWNERS' EQUITY
(in millions, except per share amounts)

	Common stock	Additional paid-in capital	Retained earnings	Accumulated other comprehensive income/(loss)	Common stock in treasury, at cost	Total shareowners' equity
Balance at September 30, 2016	\$ 181.4	\$ 1,588.2	\$ 5,668.4	\$ (1,538.8)	\$ (3,909.1)	\$ 1,990.1
Net income	—	—	825.7	—	—	825.7
Other comprehensive income (loss)	—	—	—	359.6	—	359.6
Common stock issued (including share based compensation impact)	—	49.8	—	—	166.4	216.2
Treasury stock/other	—	—	—	—	(337.3)	(337.3)
Cash dividends declared ⁽¹⁾	—	—	(390.7)	—	—	(390.7)
Balance at September 30, 2017	\$ 181.4	\$ 1,638.0	\$ 6,103.4	\$ (1,179.2)	\$ (4,080.0)	\$ 2,663.6
Net income	—	—	535.5	—	—	535.5
Other comprehensive income (loss)	—	—	—	237.3	—	237.3
Common stock issued (including share based compensation impact)	—	43.4	—	—	79.0	122.4
Treasury stock/other	—	—	—	—	(1,500.5)	(1,500.5)
Cash dividends declared ⁽¹⁾	—	—	(440.8)	—	—	(440.8)
Balance at September 30, 2018	\$ 181.4	\$ 1,681.4	\$ 6,198.1	\$ (941.9)	\$ (5,501.5)	\$ 1,617.5
Net income	—	—	695.8	—	—	695.8
Other comprehensive income (loss)	—	—	—	(546.1)	—	(546.1)
Common stock issued (including share based compensation impact)	—	27.7	—	—	63.0	90.7
Treasury stock/other	—	—	—	—	(1,000.0)	(1,000.0)
Cash dividends declared ⁽¹⁾	—	—	(459.8)	—	—	(459.8)
Adoption of accounting standard	—	—	6.1	—	—	6.1
Balance at September 30, 2019	\$ 181.4	\$ 1,709.1	\$ 6,440.2	\$ (1,488.0)	\$ (6,438.5)	\$ 404.2

⁽¹⁾ Cash dividends were \$3.88 per share in 2019; \$3.51 per share in 2018; and \$3.04 per share in 2017.

See Notes to Consolidated Financial Statements.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

1. Basis of Presentation and Accounting Policies

Rockwell Automation, Inc. (“Rockwell Automation” or “the Company”) is a global leader in industrial automation and digital transformation. We connect the imaginations of people with the potential of technology to expand what is humanly possible, making the world more productive and more sustainable.

Basis of Presentation

Our consolidated financial statements are prepared in accordance with accounting principles generally accepted in the United States (U.S. GAAP).

Principles of Consolidation

The accompanying consolidated financial statements include the accounts of the Company and its wholly-owned and controlled majority-owned subsidiaries. Intercompany accounts and transactions have been eliminated in consolidation. Investments in affiliates over which we do not have control but exercise significant influence are accounted for using the equity method of accounting. These affiliated companies are not material individually or in the aggregate to our financial position, results of operations or cash flows.

Use of Estimates

The preparation of consolidated financial statements in accordance with U.S. GAAP requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities at the date of the consolidated financial statements and revenues and expenses during the periods reported. Actual results could differ from those estimates. We use estimates in accounting for, among other items, customer returns, rebates and incentives; allowance for doubtful accounts; excess and obsolete inventory; discount valuation of PTC Inc. (“PTC”) common stock; share-based compensation; acquisitions; product warranty obligations; retirement benefits; litigation, claims and contingencies, including environmental matters, conditional asset retirement obligations and contractual indemnifications; and income taxes. We account for changes to estimates and assumptions prospectively when warranted by factually-based experience.

Revenue Recognition

On October 1, 2018, we adopted the new standard on revenue from contracts with customers using the modified retrospective method applied to contracts that were not completed as of October 1, 2018. Results for reporting periods beginning after October 1, 2018 are presented under the new standard, while prior period amounts have not been adjusted and continue to be reported in accordance with the previous standard. See Note 2 for our revenue recognition policy under the new standard. Our policy under the previous standard is as follows:

We recognize revenue when it is realized or realizable and earned. Product and solution sales consist of industrial automation and information solutions; hardware and software products; and custom-engineered systems. Service sales include multi-vendor customer technical support and repair, asset management and optimization consulting and training. All service sales recorded in the Consolidated Statement of Operations are associated with our Control Products & Solutions segment.

For approximately 85 percent of our consolidated sales, we record sales when all of the following have occurred: persuasive evidence of a sales agreement exists; pricing is fixed or determinable; collection is reasonably assured; and hardware and software products have been delivered and acceptance has occurred, as may be required according to contract terms, or services have been rendered. Within this category, we will at times enter into arrangements that involve the delivery of multiple hardware and software products and/or the performance of services, such as installation and commissioning. The timing of delivery, though varied based upon the nature of the undelivered component or service, is generally short-term in nature. For these arrangements, revenue is allocated to each deliverable based on that element’s relative selling price, provided the delivered element has value to customers on a standalone basis and, if the arrangement includes a general right of return, delivery or performance of the undelivered items is probable and substantially in our control. Relative selling price is obtained from sources such as vendor-specific objective evidence, which is based on our separate selling price for that or a similar item, or from third-party evidence such as how competitors have priced similar items. If such evidence is not available, we use our best estimate of the selling price, which includes various internal factors such as our pricing strategy and market factors.

We recognize substantially all of the remainder of our sales as construction-type contracts using either the percentage-of-completion or completed contract methods of accounting. We record sales relating to these contracts using the percentage-of-completion method when we determine that progress toward completion is reasonably and reliably estimable; we use the completed contract

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

method for all others. Under the percentage-of-completion method, we recognize sales and gross profit as work is performed using the relationship between actual costs incurred and total estimated costs at completion. Under the percentage-of-completion method, we adjust sales and gross profit for revisions of estimated total contract costs or revenue in the period the change is identified. We record estimated losses on contracts when they are identified.

We use contracts and customer purchase orders to determine the existence of a sales agreement. We use shipping documents and customer acceptance, when applicable, to verify delivery. We assess whether the fee is fixed or determinable based on the payment terms associated with the transaction and whether the sales price is subject to refund or adjustment. We assess collectibility based on the creditworthiness of the customer as determined by credit evaluations and analysis, as well as the customer's payment history.

Shipping and handling costs billed to customers are included in sales and the related costs are included in cost of sales in the Consolidated Statement of Operations.

Returns, Rebates and Incentives

Our primary incentive program provides distributors with cash rebates or account credits based on agreed amounts that vary depending on the customer to whom our distributor ultimately sells the product. We also offer various other incentive programs that provide distributors and direct sale customers with cash rebates, account credits or additional hardware and software products, solutions and services based on meeting specified program criteria. Certain distributors are offered a right to return product, subject to contractual limitations.

We record accruals for customer returns, rebates and incentives at the time of revenue recognition based primarily on historical experience. Returns are presented on the Consolidated Balance Sheet as a right of return asset and refund liability. Incentives in the form of rebates are estimated at the individual customer level and are recorded as a reduction of sales. Accruals for incentives in the form of additional hardware and software products, solutions and services are accounted for as an increase to other cost of sales and may accelerate or defer our revenue recognition.

Taxes on Revenue Producing Transactions

Taxes assessed by governmental authorities on revenue producing transactions, including sales, value added, excise and use taxes, are recorded on a net basis (excluded from revenue).

Cash and Cash Equivalents

Cash and cash equivalents include time deposits, certificates of deposit, and other fixed income securities with original maturities of three months or less at the time of purchase.

Receivables

We record an allowance for doubtful accounts based on customer-specific analysis and general matters such as current assessments of past due balances and economic conditions. Receivables are recorded net of an allowance for doubtful accounts of \$17.4 million at September 30, 2019 and \$17.1 million at September 30, 2018. In addition, receivables are recorded net of an allowance for certain customer returns, rebates and incentives of \$12.4 million at September 30, 2019 and \$8.7 million at September 30, 2018.

Inventories

Inventories are recorded at the lower of cost or market using the first-in, first-out (FIFO) or average cost methods. Market is determined on the basis of estimated realizable values.

Investments

Investments include time deposits, certificates of deposit, other fixed income securities and equity securities. Investments with original maturities longer than three months at the time of purchase and less than one year from period end are classified as short-term. All other investments are classified as long-term. Fixed income securities meeting the definition of a security are accounted for as available-for-sale and recorded at fair value. Equity securities are recorded at fair value. All other investments are recorded at cost, which approximates fair value.

Property

Property, including internal-use software, is recorded at cost. We calculate depreciation of property using the straight-line method over 5 to 40 years for buildings and improvements, 3 to 20 years for machinery and equipment and 3 to 10 years for computer hardware and internal-use software. We capitalize significant renewals and enhancements and write off replaced units. We expense maintenance and repairs, as well as renewals of minor amounts. Property acquired during the year that is accrued within accounts

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

payable or other current liabilities at year end is considered to be a non-cash investing activity and is excluded from cash used for capital expenditures in the Consolidated Statement of Cash Flows. Capital expenditures of \$26.4 million, \$43.2 million and \$29.6 million were accrued within accounts payable and other current liabilities at September 30, 2019, 2018 and 2017, respectively.

Intangible Assets

Goodwill and other intangible assets generally result from business acquisitions. We account for business acquisitions by allocating the purchase price to tangible and intangible assets acquired and liabilities assumed at their fair values; the excess of the purchase price over the allocated amount is recorded as goodwill.

We review goodwill and other intangible assets with indefinite useful lives for impairment annually or more frequently if events or circumstances indicate impairment may be present. Any excess in carrying value over the estimated fair value is charged to results of operations. We perform our annual impairment test during the second quarter of our fiscal year.

We amortize certain customer relationships on an accelerated basis over the period of which we expect the intangible asset to generate future cash flows. We amortize all other intangible assets with finite useful lives on a straight-line basis over their estimated useful lives. Useful lives assigned range from 3 to 15 years for trademarks, 8 to 20 years for customer relationships, 5 to 17 years for technology and 5 to 30 years for other intangible assets.

Intangible assets also include costs of software developed or purchased by our software business to be sold, leased or otherwise marketed. Amortization of these computer software products is calculated on a product-by-product basis as the greater of (a) the unamortized cost at the beginning of the year times the ratio of the current year gross revenue for a product to the total of the current and anticipated future gross revenue for that product or (b) the straight-line amortization over the remaining estimated economic life of the product.

Impairment of Long-Lived Assets

We evaluate the recoverability of the recorded amount of long-lived assets whenever events or changes in circumstances indicate that the recorded amount of an asset may not be fully recoverable. Impairment is assessed when the undiscounted expected future cash flows derived from an asset are less than its carrying amount. If we determine that an asset is impaired, we measure the impairment to be recognized as the amount by which the recorded amount of the asset exceeds its fair value. We report assets to be disposed of at the lower of the recorded amount or fair value less cost to sell. We determine fair value using a discounted future cash flow analysis.

Derivative Financial Instruments

We use derivative financial instruments in the form of foreign currency forward exchange contracts to manage certain foreign currency risks. We enter into these contracts to hedge our exposure to foreign currency exchange rate variability in the expected future cash flows associated with certain third-party and intercompany transactions denominated in foreign currencies forecasted to occur within the next two years. We also use these contracts to hedge portions of our net investments in certain non-U.S. subsidiaries against the effect of exchange rate fluctuations on the translation of foreign currency balances to the U.S. dollar. Additionally, we use derivative financial instruments in the form of interest rate swap contracts to manage our borrowing costs of certain long-term debt and use treasury locks to manage our potential change in interest rates in anticipation of our fixed rate debt. We designate and account for these derivative financial instruments as hedges under U.S. GAAP.

Furthermore, we use foreign currency forward exchange contracts that are not designated as hedges to offset transaction gains or losses associated with some of our assets and liabilities resulting from intercompany loans or other transactions with third parties that are denominated in currencies other than our entities' functional currencies. It is our policy to execute such instruments with global financial institutions that we believe to be creditworthy and not to enter into derivative financial instruments for speculative purposes. Foreign currency forward exchange contracts are usually denominated in currencies of major industrial countries.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)*Fair Value of Financial Instruments*

We record various financial instruments recorded at fair value. U.S. GAAP defines fair value as the price that would be received for an asset or paid to transfer a liability (exit price) in an orderly transaction between market participants in the principal or most advantageous market for the asset or liability. U.S. GAAP also classifies the inputs used to measure fair value into the following hierarchy:

Level 1: Quoted prices in active markets for identical assets or liabilities.

Level 2: Quoted prices in active markets for similar assets or liabilities, quoted prices for identical or similar assets or liabilities in markets that are not active, or inputs other than quoted prices that are observable for the asset or liability.

Level 3: Unobservable inputs for the asset or liability.

We hold financial instruments consisting of cash and short-term debt. The fair values of our cash and short-term debt approximate their carrying amounts as reported in our Consolidated Balance Sheet due to the short-term nature of these instruments.

We also hold financial instruments consisting of long-term debt, investments and derivatives. The valuation methodologies for these financial instruments are described in Notes 6, 9, 10, and 13. The methods described in these Notes may produce a fair value calculation that may not be indicative of net realizable value or reflective of future fair values. Furthermore, while we believe our valuation methods are appropriate and consistent with other market participants, the use of different methodologies or assumptions to determine the fair value of certain financial instruments could result in a different fair value measurement at the reporting date.

Foreign Currency Translation

We translate assets and liabilities of subsidiaries operating outside of the United States with a functional currency other than the U.S. dollar into U.S. dollars using exchange rates at the end of the respective period. We translate sales, costs and expenses at average exchange rates effective during the respective period. We report foreign currency translation adjustments as a component of other comprehensive income (loss). Currency transaction gains and losses are included in results of operations in the period incurred.

Research and Development Expenses

We expense research and development (R&D) costs as incurred; these costs were \$378.9 million in 2019, \$371.8 million in 2018 and \$348.2 million in 2017. We include R&D expenses in cost of sales in the Consolidated Statement of Operations.

Income Taxes

We account for uncertain tax positions by determining whether it is more likely than not that a tax position will be sustained upon examination based on the technical merits of the position. For tax positions that meet the more-likely-than-not recognition threshold, we determine the amount of benefit to recognize in the consolidated financial statements based on our assertion of the most likely outcome resulting from an examination, including the resolution of any related appeals or litigation processes.

Earnings Per Share

We present basic and diluted earnings per share (EPS) amounts. Basic EPS is calculated by dividing earnings available to common shareowners, which is income excluding the allocation to participating securities, by the weighted average number of common shares outstanding during the year, excluding unvested restricted stock. Diluted EPS amounts are based upon the weighted average number of common and common-equivalent shares outstanding during the year. We use the treasury stock method to calculate the effect of outstanding share-based compensation awards, which requires us to compute total employee proceeds as the sum of the amount the employee must pay upon exercise of the award and the amount of unearned share-based compensation costs attributed to future services. Share-based compensation awards for which the total employee proceeds of the award exceed the average market price of the same award over the period have an antidilutive effect on EPS, and accordingly, we exclude them from the calculation. Antidilutive share-based compensation awards for the years ended September 30, 2019 (1.8 million shares), 2018 (0.9 million shares) and 2017 (0.7 million shares) were excluded from the diluted EPS calculation. U.S. GAAP requires unvested share-based payment awards that contain non-forfeitable rights to dividends or dividend equivalents, whether paid or unpaid, to be treated as participating securities and included in the computation of earnings per share pursuant to the two-class method. Our participating securities are composed of unvested restricted stock and non-employee director restricted stock units.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

The following table reconciles basic and diluted EPS amounts (in millions, except per share amounts):

	2019	2018	2017
Net income	\$ 695.8	\$ 535.5	\$ 825.7
Less: Allocation to participating securities	(0.7)	(0.5)	(0.9)
Net income available to common shareowners	\$ 695.1	\$ 535.0	\$ 824.8
Basic weighted average outstanding shares	118.3	125.4	128.4
Effect of dilutive securities			
Stock options	0.9	1.3	1.2
Performance shares	0.1	0.2	0.3
Diluted weighted average outstanding shares	119.3	126.9	129.9
Earnings per share:			
Basic	\$ 5.88	\$ 4.27	\$ 6.42
Diluted	\$ 5.83	\$ 4.21	\$ 6.35

Share-Based Compensation

We recognize share-based compensation expense for equity awards on a straight-line basis over the service period of the award based on the fair value of the award as of the grant date.

Product and Workers' Compensation Liabilities

We record accruals for product and workers' compensation claims in the period in which they are probable and reasonably estimable. Our principal self-insurance programs include product liability and workers' compensation where we self-insure up to a specified dollar amount. Claims exceeding this amount up to specified limits are covered by insurance policies purchased from commercial insurers. We estimate the liability for the majority of the self-insured claims using our claims experience for the periods being valued.

Environmental Matters

We record liabilities for environmental matters in the period in which our responsibility is probable and the costs can be reasonably estimated. We make changes to the liabilities in the periods in which the estimated costs of remediation change. At third-party environmental sites where more than one potentially responsible party has been identified, we record a liability for our estimated allocable share of costs related to our involvement with the site, as well as an estimated allocable share of costs related to the involvement of insolvent or unidentified parties. If we determine that recovery from insurers or other third parties is probable and a right of setoff exists, we record the liability net of the estimated recovery. If we determine that recovery from insurers or other third parties is probable but a right of setoff does not exist, we record a liability for the total estimated costs of remediation and a receivable for the estimated recovery. At environmental sites where we are the sole responsible party, we record a liability for the total estimated costs of remediation. Ongoing operating and maintenance expenditures included in our environmental remediation obligations are discounted to present value over the probable future remediation period. Our remaining environmental remediation obligations are undiscounted due to subjectivity of timing and/or amount of future cash payments.

Conditional Asset Retirement Obligations

We record liabilities for costs related to legal obligations associated with the retirement of a tangible, long-lived asset that results from the acquisition, construction, development or the normal operation of the long-lived asset. The obligation to perform the asset retirement activity is not conditional even though the timing or method may be conditional.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)*Recently Adopted Accounting Pronouncements*

In May 2014, the Financial Accounting Standards Board (FASB) issued a new standard, referred to as Accounting Standards Codification (ASC) 606, on revenue recognition related to contracts with customers. This standard supersedes nearly all existing revenue recognition guidance and involves a five-step principles-based approach to recognizing revenue. The underlying principle is to recognize revenue when promised goods or services are transferred to customers in an amount that reflects the consideration that is expected to be received for those goods or services. The new standard also requires additional qualitative and quantitative disclosures about contracts with customers, significant judgments made in applying the revenue guidance, and assets recognized from the costs to obtain or fulfill a contract. We adopted the new revenue standard using the modified retrospective transition method, which resulted in an adjustment to the opening balance of retained earnings as of October 1, 2018, our adoption date. The information for periods prior to our adoption date has not been restated and continues to be reported under the accounting standards in effect for the period presented. See Note 2 for additional accounting policies and transition disclosures.

In March 2017, the FASB issued a new standard regarding the presentation of net periodic pension and postretirement benefit cost. This standard requires the service cost component to be reported in the income statement in the same line item as other compensation costs arising from services rendered by the related employees during the period. The other components of net periodic benefit cost are required to be presented separately from the service cost component in either a separate line item or within another appropriate line item with disclosure of where those costs are recorded. This standard also requires that only the service cost component is eligible for capitalization, when applicable. We adopted the new standard as of October 1, 2018, and applied the standard retrospectively. As a result of applying the pension standard retrospectively, the following adjustments were made to the Consolidated Statement of Operations (in millions):

	Year Ended September 30, 2018			Year Ended September 30, 2017		
	As Reported	Impact of adoption	As Restated	As Reported	Impact of adoption	As Restated
Cost of sales						
Products and solutions	\$ (3,338.6)	\$ 11.1	\$ (3,327.5)	\$ (3,254.3)	\$ 38.1	\$ (3,216.2)
Services	(455.2)	1.6	(453.6)	(432.8)	5.6	(427.2)
	(3,793.8)	12.7	(3,781.1)	(3,687.1)	43.7	(3,643.4)
Gross profit	2,872.2	12.7	2,884.9	2,624.2	43.7	2,667.9
Selling, general and administrative expenses	(1,599.0)	11.1	(1,587.9)	(1,591.5)	33.9	(1,557.6)
Other income (expense)	130.6	(23.8)	106.8	80.9	(77.6)	3.3

Effective October 1, 2018, we realigned our reportable segments for a transfer of business activities between our segments. We also reclassified interest income from General corporate - net to Interest (expense) income - net. As a result, the prior period presentation of reportable segments has been restated to conform to the current segment reporting structure. These changes did not impact the Consolidated Statement of Operations. See Note 17 for additional information about the restatements.

Recently Issued Accounting Pronouncements

In February 2016, the FASB issued a new standard on accounting for leases that requires lessees to recognize right-of-use assets and lease liabilities for most leases, among other changes to existing lease accounting guidance. The new standard also requires additional qualitative and quantitative disclosures about leasing activities. We adopted the new standard using the modified retrospective transition method, which resulted in a cumulative-effect adjustment to the opening balance of retained earnings as of October 1, 2019, our adoption date. The cumulative impact of adopting the new standard is expected to be immaterial. The estimated amount of lease right-of-use assets and corresponding lease liabilities expected to be recorded in the Consolidated Balance Sheet upon adoption is approximately \$305 million to \$335 million. We have implemented necessary changes to accounting policies, processes, controls and systems to enable compliance with this new standard.

In February 2018, the FASB issued a new standard regarding the reporting of comprehensive loss, which gives entities the option to reclassify tax effects of the Tax Cuts and Jobs Act of 2017 (the "Tax Act") stranded in accumulated other comprehensive loss into retained earnings. We adopted the new standard as of October 1, 2019 and elected to reclassify tax effects of approximately \$147 million from accumulated other comprehensive loss into retained earnings.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**2. Revenue Recognition***Adoption*

On October 1, 2018, we adopted the new standard on revenue from contracts with customers using the modified retrospective method applied to contracts that were not completed as of October 1, 2018. Results for reporting periods beginning after October 1, 2018 are presented under the new standard, while prior period amounts have not been adjusted and continue to be reported in accordance with the previous standard.

As a result of applying the modified retrospective method, the following adjustments were made to the Consolidated Balance Sheet as of October 1, 2018 (in millions):

	September 30, 2018	Impact of Adoption	October 1, 2018
ASSETS			
Current assets:			
Receivables	\$ 1,190.1	\$ 4.5	\$ 1,194.6
Other current assets	149.3	17.7	167.0
Deferred income taxes	179.6	1.2	180.8
Other assets	96.2	11.4	107.6
LIABILITIES AND SHAREOWNERS' EQUITY			
Current liabilities:			
Contract liabilities	\$ 249.9	\$ 18.7	\$ 268.6
Customer returns, rebates and incentives	206.6	4.4	211.0
Other current liabilities	226.6	5.6	232.2
Shareowners' equity:			
Retained earnings	6,198.1	6.1	6,204.2

We recorded a net increase to opening retained earnings of \$6.1 million as of October 1, 2018, which reflects the cumulative impact of adopting the new standard. The primary drivers of the impact to retained earnings were changes to the capitalization and deferral of certain contract costs and the timing of revenue, net of costs, for software licenses bundled with services and projects previously accounted for on a completed contract basis. This impact was partially offset by a deferral of revenue, net of costs, related to the allocation of revenue to hardware and software products and services provided to our customers free of charge as incentives.

Nature of Products and Services

Substantially all of our revenue is from contracts with customers. We recognize revenue as promised products are transferred to, or services are performed for, customers in an amount that reflects the consideration to which we expect to be entitled in exchange for those products and services. Our offerings consist of industrial automation and information products, solutions and services. Our products include hardware and software. Our solutions include engineered-to-order and custom-engineered systems. Our services include customer technical support and repair, asset management and optimization consulting, and training. Also included in our services is a portion of revenue related to spare parts that are managed within our services offering.

Our operations are comprised of the Architecture & Software segment and the Control Products & Solutions segment. See Note 17 for more information.

In North America, we sell primarily through independent distributors in conjunction with our direct sales force. In other countries, we sell through a combination of our direct sales force, and to a lesser extent, through independent distributors.

Performance Obligations

We use executed sales agreements and purchase orders to determine the existence of a customer contract.

For each customer contract, we determine if the products and services promised to the customer are distinct performance obligations. A product or service is distinct if both of the following criteria are met at contract inception: (i) the customer can benefit from the product or service on its own or together with other readily available resources, and (ii) our promise to transfer the product or

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

perform the service is separately identifiable from other promises in the contract. The fact that we regularly sell a product or service separately is an indicator that the customer can benefit from a product or service on its own or with other readily available resources.

The objective when assessing whether our promises to transfer products or perform services are distinct within the context of the contract is to determine whether the nature of the promise is to transfer each of those products or perform those services individually, or whether the promise is to transfer a combined item or items to which the promised products or services are inputs. If a promised product or service is not distinct, we combine that product or service with other promised products or services until it comprises a bundle of products or services that is distinct, which may result in accounting for all the products or services in a contract as a single performance obligation.

For each performance obligation in a contract, we determine whether the performance obligation is satisfied over time. A performance obligation is satisfied over time if it meets any of the following criteria: (i) the customer simultaneously receives and consumes the benefits provided by our performance as we perform, (ii) our performance creates or enhances an asset that the customer controls as the asset is created or enhanced, or (iii) our performance does not create an asset for which we have an alternative use and we have an enforceable right to payment for performance completed to date. If one or more of these criteria are met, then we recognize revenue over time using a method that depicts performance. If none of the criteria are met, then control transfers to the customer at a point in time and we recognize revenue at that point in time.

Our products represent standard, catalog products for which we have an alternative use, and therefore we recognize revenue at a point in time when control of the product transfers to the customer. For the majority of our products, control transfers upon shipment, though for some contracts control may transfer upon delivery. Our product revenue also includes revenue from software licenses. When these licenses are determined to be distinct performance obligations, we recognize the related revenue at a point in time when the customer is provided the right to use the license. Product-type contracts are generally one year or less in length.

We offer a wide variety of solutions and services to our customers, for which we recognize revenue over time or at a point in time based on the contract as well as the type of solution or service. If one or more of the three criteria above for over-time revenue recognition are met, we recognize revenue over time as cost is incurred, as work is performed, or based on time elapsed, depending on the type of customer contract. If none of these criteria are met, we recognize revenue at a point in time when control of the asset being created or enhanced transfers to the customer, typically upon delivery. More than half of our solutions and services revenue is from contracts that are one year or less in length. For certain solutions and services offerings, when we have the right to invoice our customers in an amount that corresponds to our performance completed to date, we apply the practical expedient to measure progress and recognize revenue based on the amount for which we have the right to invoice the customer.

When assessing whether we have an alternative use for an asset, we consider both contractual and practical limitations. These include: (i) the level and cost of customization of the asset that is required to meet a customer's needs, (ii) the activities, cost, and profit margin after any rework that would be required before the asset could be directed for another use, and (iii) the portion of the asset that could not be reworked for an alternative use.

At times we provide products and services free of charge to our customers as incentives when the customers purchase other products or services. These represent distinct performance obligations. As such, we allocate revenue to them based on relative standalone selling price.

Most of our global warranties are assurance in nature and do not represent distinct performance obligations. See Note 8 for additional information and disclosures. We occasionally offer extended warranties to our customers that are considered a distinct performance obligation, to which we allocate revenue which is recognized over the extended warranty period.

We account for shipping and handling activities performed after control of a product has been transferred to the customer as a fulfillment cost. As such, we have applied the practical expedient and we accrue for the costs of shipping and handling activities if revenue is recognized before contractually agreed shipping and handling activities occur.

Unfulfilled Performance Obligations

As of September 30, 2019, we expect to recognize approximately \$485 million of revenue in future periods from unfulfilled performance obligations from existing contracts with customers. We expect to recognize revenue of approximately \$310 million of our remaining performance obligations over the next 12 months with the remaining balance recognized thereafter.

We have applied the practical expedient to exclude the value of remaining performance obligations for (i) contracts with an original term of one year or less and (ii) contracts for which we recognize revenue in proportion to the amount we have the right to invoice for services performed. The amounts above also do not include the impact of contract renewal options that are unexercised as of September 30, 2019.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)*Transaction Price*

The transaction price is the amount of consideration to which we expect to be entitled in exchange for transferring products to, or performing services for, a customer. We estimate the transaction price at contract inception, and update the estimate each reporting period for any changes in circumstances. In some cases a contract may involve variable consideration, including rebates, credits, allowances for returns or other similar items that generally decrease the transaction price. We use historical experience to estimate variable consideration, including any constraint.

The transaction price (including any discounts and variable consideration) is allocated between separate products and services based on their relative standalone selling prices. The standalone selling prices are determined based on the prices at which we separately sell each good or service. For items that are not sold separately, we estimate the standalone selling price using available information such as market reference points and other observable data.

We have elected the practical expedient to exclude sales taxes and other similar taxes from the measurement of the transaction price.

Significant Payment Terms

Our standard payment terms vary globally but do not result in a significant delay between the timing of invoice and payment. We occasionally negotiate other payment terms during the contracting process. We do not typically include significant financing components in our contracts with customers. We have elected the practical expedient to not adjust the transaction price for the period between transfer of products or performance of services and customer payment if expected to be one year or less.

For most of our products, we invoice at the time of shipment and we do not typically have significant contract balances. For our solutions and services as well as some of our products, timing may differ between revenue recognition and billing. Depending on the terms agreed to with the customer, we may invoice in advance of performance or we may invoice after performance. When revenue recognition exceeds billing we recognize a receivable, and when billing exceeds revenue recognition we recognize a contract liability.

Disaggregation of Revenue

The following series of tables present our revenue disaggregation by geographic region and types of products or services, and also present these disaggregation categories for our two operating segments. We attribute sales to the geographic regions based on the country of destination.

The following reflects the disaggregation of our revenues by operating segment and by geographic region (in millions):

	Year Ended September 30, 2019		
	Architecture & Software	Control Products & Solutions	Total
North America	\$ 1,752.1	\$ 2,262.2	\$ 4,014.3
Europe, Middle East and Africa (EMEA)	654.2	595.6	1,249.8
Asia Pacific	426.4	482.2	908.6
Latin America	189.2	332.9	522.1
Total Company Sales	\$ 3,021.9	\$ 3,672.9	\$ 6,694.8

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

The following reflects the disaggregation of our revenues by operating segment and by major types of products or services (in millions):

	Year Ended September 30, 2019		
	Architecture & Software	Control Products & Solutions	Total
Products	\$ 3,021.9	\$ 1,469.1	\$ 4,491.0
Solutions & Services	—	2,203.8	2,203.8
Total Company Sales	<u>\$ 3,021.9</u>	<u>\$ 3,672.9</u>	<u>\$ 6,694.8</u>

Contract Balances

Contract liabilities primarily relate to consideration received in advance of performance under the contract. We do not have significant contract assets as of September 30, 2019.

Below is a summary of our contract liabilities balance:

	September 30, 2019
Balance as of beginning of fiscal year	\$ 268.6
Balance as of end of period	275.6

The most significant changes in our contract liabilities balance during the twelve months ended September 30, 2019 were due to amounts billed, partially offset by revenue recognized that was included in the contract liabilities balance at the beginning of the period.

In the twelve months ended September 30, 2019, we recognized revenue of approximately \$248.0 million that was included in the opening contract liabilities balance. We did not have a material amount of revenue recognized in the twelve months ended September 30, 2019 from performance obligations satisfied or partially satisfied in previous periods.

Costs to Obtain and Fulfill a Contract

We capitalize and amortize certain incremental costs to obtain and fulfill contracts. These costs primarily consist of incentives paid to sales personnel, which are considered incremental costs to obtain customer contracts. We elected the practical expedient to expense incremental costs to obtain a contract when the contract has a duration of one year or less. Our capitalized contract costs, which are included in other assets in our Consolidated Balance Sheet, are not significant. There was no impairment loss in relation to capitalized costs in the period.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)
Dual Reporting

In accordance with ASC 606, the disclosure of the impact of adoption to the Consolidated Balance Sheet was as follows (in millions):

	September 30, 2019		
	As reported	Impact of Adoption	Balances without adoption of ASC 606
ASSETS			
Current assets:			
Receivables	\$ 1,178.7	\$ (3.0)	\$ 1,175.7
Other current assets	173.3	(15.9)	157.4
Deferred income taxes	364.1	(1.2)	362.9
Other assets	132.2	(10.2)	122.0
LIABILITIES AND SHAREOWNERS' EQUITY			
Current liabilities:			
Contract liabilities	\$ 275.6	\$ (19.7)	\$ 255.9
Customer returns, rebates and incentives	199.2	(1.7)	197.5
Other current liabilities	227.9	(4.0)	223.9
Shareowners' equity:			
Retained earnings	6,440.2	(5.3)	6,434.9
Accumulated other comprehensive loss	(1,488.0)	0.4	(1,487.6)

In accordance with ASC 606, the disclosure of the impact of adoption to the Consolidated Statement of Operations was as follows (in millions):

	Year Ended September 30, 2019		
	As reported	Impact of Adoption	Balances without adoption of ASC 606
Sales			
Products and solutions	\$ 5,938.5	\$ 7.1	\$ 5,945.6
Services	756.3	(16.1)	740.2
Cost of sales			
Products and solutions	(3,313.6)	(8.3)	(3,321.9)
Services	(481.1)	18.6	(462.5)
Income tax provision	(205.2)	(0.5)	(205.7)

In accordance with ASC 606, the disclosure of the impact of adoption to the Consolidated Statement of Comprehensive Income was as follows (in millions):

	Year Ended September 30, 2019		
	As reported	Impact of Adoption	Balances without adoption of ASC 606
Net income	\$ 695.8	\$ 0.8	\$ 696.6
Other comprehensive income (loss), net of tax:			
Currency translation adjustments	(55.3)	0.4	(54.9)

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

In accordance with ASC 606, the disclosure of the impact of adoption to the Consolidated Statement of Cash Flows was as follows (in millions):

	Year Ended September 30, 2019		
	As reported	Impact of Adoption	Balances without adoption of ASC 606
Operating activities:			
Net income	\$ 695.8	\$ 0.8	\$ 696.6
Deferred income taxes	(29.0)	0.1	(28.9)
Receivables	(10.4)	(1.5)	(11.9)
Contract liabilities	12.1	(2.6)	9.5
Income taxes	(18.8)	(2.1)	(20.9)
Other assets and liabilities	(1.8)	5.3	3.5

In accordance with ASC 606, the disclosure of the impact of adoption to the Consolidated Statement of Shareowners' Equity was as follows (in millions):

	Year Ended September 30, 2019		
	As reported	Impact of Adoption	Balances without adoption of ASC 606
Retained earnings			
Beginning balance	\$ 6,204.2	\$ (6.1)	\$ 6,198.1
Net income	695.8	0.8	696.6
Accumulated other comprehensive loss			
Other comprehensive income	(1,488.0)	0.4	(1,487.6)

3. Goodwill and Other Intangible Assets

Changes in the carrying amount of goodwill were (in millions):

	Architecture & Software	Control Products & Solutions	Total
Balance as of September 30, 2017	\$ 417.2	\$ 660.5	\$ 1,077.7
Acquisition of businesses	6.8	—	6.8
Translation	(1.7)	(7.3)	(9.0)
Balance as of September 30, 2018	422.3	653.2	1,075.5
Acquisition of business	14.6	—	14.6
Translation	(4.6)	(14.4)	(19.0)
Balance as of September 30, 2019	\$ 432.3	\$ 638.8	\$ 1,071.1

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Other intangible assets consist of (in millions):

	September 30, 2019		
	Carrying Amount	Accumulated Amortization	Net
Amortized intangible assets:			
Computer software products	\$ 190.6	\$ 128.3	\$ 62.3
Customer relationships	110.5	69.2	41.3
Technology	110.4	69.5	40.9
Trademarks	31.4	26.4	5.0
Other	10.6	9.7	0.9
Total amortized intangible assets	453.5	303.1	150.4
Allen-Bradley® trademark not subject to amortization	43.7	—	43.7
Total	\$ 497.2	\$ 303.1	\$ 194.1

	September 30, 2018		
	Carrying Amount	Accumulated Amortization	Net
Amortized intangible assets:			
Computer software products	\$ 190.9	\$ 118.1	\$ 72.8
Customer relationships	112.9	66.2	46.7
Technology	106.8	64.0	42.8
Trademarks	32.0	24.0	8.0
Other	11.2	10.0	1.2
Total amortized intangible assets	453.8	282.3	171.5
Allen-Bradley® trademark not subject to amortization	43.7	—	43.7
Total	\$ 497.5	\$ 282.3	\$ 215.2

Computer software products represent costs of computer software to be sold, leased or otherwise marketed. Computer software products amortization expense was \$10.4 million in 2019, \$11.8 million in 2018 and \$9.8 million in 2017.

Estimated amortization expense is \$23.4 million in 2020, \$22.6 million in 2021, \$19.9 million in 2022, \$18.7 million in 2023 and \$16.8 million in 2024.

We performed our annual evaluation of goodwill and indefinite life intangible assets for impairment as required by U.S. GAAP during the second quarter of 2019 and concluded that these assets are not impaired.

4. Inventories

Inventories consist of (in millions):

	September 30,	
	2019	2018
Finished goods	\$ 223.7	\$ 224.3
Work in process	178.4	180.0
Raw materials	173.6	177.3
Inventories	\$ 575.7	\$ 581.6

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

5. Property, net

Property consists of (in millions):

	September 30,	
	2019	2018
Land	\$ 4.1	\$ 5.3
Buildings and improvements	373.8	359.6
Machinery and equipment	1,154.5	1,164.2
Internal-use software	489.5	497.8
Construction in progress	116.0	111.3
Total	2,137.9	2,138.2
Less accumulated depreciation	(1,566.0)	(1,561.4)
Property, net	<u>\$ 571.9</u>	<u>\$ 576.8</u>

6. Long-term and Short-term Debt

Long-term debt consists of (in millions):

	September 30,	
	2019	2018
2.050% notes, payable in March 2020	\$ 299.4	\$ 294.6
2.875% notes, payable in March 2025	307.6	281.4
6.70% debentures, payable in January 2028	250.0	250.0
3.500% notes, payable in March 2029	425.0	—
6.25% debentures, payable in December 2037	250.0	250.0
4.200% notes, payable in March 2049	575.0	—
5.20% debentures, payable in January 2098	200.0	200.0
Unamortized discount, capitalized lease obligations and other	(50.1)	(50.8)
Total	2,256.9	1,225.2
Less current portion	(300.5)	—
Long-term debt	<u>\$ 1,956.4</u>	<u>\$ 1,225.2</u>

In March 2019, we issued \$1 billion aggregate principal amount of long-term notes in a registered public offering. The offering consisted of \$425.0 million of 3.500% notes due in March 2029 (“2029 Notes”) and \$575.0 million of 4.200% notes due in March 2049 (“2049 Notes”), both issued at a discount. Net proceeds to the Company from the debt offering were \$987.6 million. We used these net proceeds primarily to repay our outstanding commercial paper, with the remaining proceeds used for general corporate purposes.

We entered into treasury locks to manage the potential change in interest rates in anticipation of the issuance of \$1.0 billion of fixed rate debt in March 2019. Treasury locks are accounted for as cash flow hedges. The effective differentials paid on these treasury locks was initially recorded in Accumulated Other Comprehensive Loss, net of tax effect.

As a result of the changes in the interest rates on the treasury locks between the time we entered into the treasury locks and the time we priced and issued the 2029 Notes and 2049 Notes, the Company made a payment of \$35.7 million to the counterparty on March 1, 2019. The \$35.7 million loss on the settlement of the treasury locks was recorded in Accumulated Other Comprehensive Loss and is being amortized over the term of the 2029 Notes and 2049 Notes, and recognized as an adjustment to interest expense in the Consolidated Statement of Operations.

In February 2015, upon issuance of our notes payable in March 2020 (“2020 Notes”) and March 2025 (“2025 Notes”), we entered into fixed-to-floating interest rate swap contracts with multiple banks that effectively converted the \$600.0 million aggregate principal amount of 2020 Notes and 2025 Notes to floating rate debt, each at a rate based on three-month LIBOR plus a fixed spread. The effective floating interest rates were 2.576 percent for the 2020 Notes and 2.986 percent for the 2025 Notes at September 30, 2019. The aggregate fair value of the interest rate swap contracts at September 30, 2019 was a net unrealized gain of \$7.0 million. We have designated these swaps as fair value hedges. The individual contracts are recorded in Other assets and

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

Other current liabilities in the Consolidated Balance Sheet with corresponding adjustments to the carrying value of the underlying debt. Additional information related to our interest rate swap contracts is included in Note 10.

On November 13, 2018, we replaced our former five-year \$1.0 billion unsecured revolving credit facility with a new five-year \$1.25 billion unsecured revolving credit facility expiring in November 2023. We can increase the aggregate amount of this credit facility by up to \$750.0 million, subject to the consent of the banks in the credit facility. We did not incur early termination penalties in connection with the termination of the former credit facility. We did not borrow against either facility during the periods ended September 30, 2019 or 2018. Borrowings under the new credit facility bear interest based on short-term money market rates in effect during the period the borrowings are outstanding. This credit facility contains covenants under which we agree to maintain an EBITDA-to-interest ratio of at least 3.0 to 1.0. The EBITDA-to-interest ratio is defined in the credit facility as the ratio of consolidated EBITDA (as defined in the facility) for the preceding four quarters to consolidated interest expense for the same period.

Interest payments were \$97.5 million during 2019, \$75.5 million during 2018 and \$74.2 million during 2017.

Long-term debt is not measured at fair value. The following table presents the carrying amounts and estimated fair values of long-term debt not measured at fair value in the Consolidated Balance Sheet (in millions):

	September 30, 2019		September 30, 2018	
	Carrying Value	Fair Value	Carrying Value	Fair Value
Current portion of long-term debt	\$ 300.5	\$ 300.1	\$ —	\$ —
Long-term debt	1,956.4	2,380.8	1,225.2	1,391.3

We base the fair value of long-term debt upon quoted market prices for the same or similar issues and therefore consider this a Level 2 fair value measurement. The fair value of long-term debt considers the terms of the debt excluding the impact of derivative and hedging activity. The carrying amount of a portion of our long-term debt is impacted by fixed-to-floating interest rate swap contracts that are designated as fair value hedges. Refer to Note 1 for further information regarding levels in the fair value hierarchy.

Our short-term debt obligations are primarily comprised of commercial paper borrowings. There were no commercial paper borrowings outstanding as of September 30, 2019. Commercial paper borrowings were \$550.0 million at September 30, 2018. The weighted average interest rate of the commercial paper outstanding was 2.27 percent at September 30, 2018.

7. Other Current Liabilities

Other current liabilities consist of (in millions):

	September 30,	
	2019	2018
Unrealized losses on foreign exchange contracts (Note 10)	\$ 5.4	\$ 6.2
Product warranty obligations (Note 8)	25.2	27.9
Taxes other than income taxes	43.8	40.9
Accrued interest	15.5	12.3
Income taxes payable	62.9	74.4
Other	75.1	64.9
Other current liabilities	\$ 227.9	\$ 226.6

8. Product Warranty Obligations

We record a liability for product warranty obligations at the time of sale to a customer based upon historical warranty experience. Most of our products are covered under a warranty period that runs for twelve months from either the date of sale or installation. We also record a liability for specific warranty matters when they become known and reasonably estimable.

Changes in product warranty obligations were (in millions):

	September 30,	
	2019	2018
Beginning balance	\$ 27.9	\$ 28.5
Warranties recorded at time of sale	21.3	25.5
Adjustments to pre-existing warranties	(5.6)	(2.6)
Settlements of warranty claims	(18.4)	(23.5)
Ending balance	<u>\$ 25.2</u>	<u>\$ 27.9</u>

9. Investments

Our investments consist of (in millions):

	September 30,	
	2019	2018
Fixed income securities	\$ 43.9	\$ 419.0
Equity securities	721.5	1,090.0
Other	68.1	69.9
Total investments	833.5	1,578.9
Less short-term investments	(39.6)	(290.9)
Long-term investments	<u>\$ 793.9</u>	<u>\$ 1,288.0</u>

We record investments in fixed income and equity securities, classified as available-for-sale investments or trading investments, at fair value.

Available-for-sale Investments

We invest in certificates of deposit, time deposits, commercial paper and other fixed income securities which are classified as available-for-sale. Unrealized gains and losses on available-for-sale investments are included in our Consolidated Balance Sheet as a component of accumulated other comprehensive loss, net of any deferred taxes. Realized gains and losses are included in net income.

Our available-for-sale investments consist of (in millions):

	September 30,	
	2019	2018
Certificates of deposit and time deposits	\$ 0.6	\$ 169.6
Corporate debt securities	31.8	158.4
Government securities	6.3	65.8
Asset-backed securities	5.2	25.2
Total	<u>\$ 43.9</u>	<u>\$ 419.0</u>

Pre-tax gross unrealized losses on available-for-sale investments were not material as of September 30, 2019. Pre-tax gross realized gains and losses on available-for-sale investments were not material for the years ended September 30, 2019 and 2018. At September 30, 2019, there were no outstanding purchases of available-for-sale investments recorded in accounts payable.

We evaluated all available-for-sale investments for which the fair value was less than amortized cost for impairment on an individual security basis at September 30, 2019. This assessment included consideration of our intent and ability to hold the security and the

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

credit risks specific to each security. We determined that the declines in fair value of these investments were not other than temporary as of September 30, 2019, and accordingly we did not recognize any impairment charges in net income.

The table below summarizes the contractual maturities of our investments as of September 30, 2019 (in millions). Actual maturities may differ from the contractual maturities below as borrowers may have the right to prepay certain obligations.

	Fair Value
Less than one year	\$ 39.6
Due in one to five years	4.3
Total	\$ 43.9

Classification of our available-for-sale investments as current or noncurrent is based on the nature of the investment and when the investment is reasonably expected to be realized. These investments were included in the following line items within the Consolidated Balance Sheet (in millions):

	September 30,	
	2019	2018
Short-term investments	\$ 39.6	\$ 290.9
Long-term investments	4.3	128.1
Total	\$ 43.9	\$ 419.0

Equity Securities

On July 19, 2018, we purchased 10,582,010 shares of PTC common stock (the “PTC Shares”) in a private placement at a purchase price of \$94.50 per share for an aggregate purchase price of approximately \$1.0 billion (the “Purchase”). The PTC Shares are considered equity securities. For a period of approximately 3 years after the Purchase we are subject to entity-specific transfer restrictions subject to certain exceptions. Since the first anniversary of the Purchase, the Company has had the ability to transfer, in the aggregate in any 90-day period, a number of Shares equal to up to 1.0% of PTC’s total outstanding shares of common stock as of the first day in such 90-day period, but no more than 2.0% of PTC’s total outstanding shares of common stock in each of the second year and the third year after the Purchase.

The PTC Shares are recorded at fair value. At September 30, 2019, the fair value of the PTC Shares was \$721.5 million, which was recorded in long-term investments in the Consolidated Balance Sheet. For the year ended September 30, 2019, a loss of \$368.5 million related to the PTC Shares was recorded in other income (expense) in the Consolidated Statement of Operations. During fiscal 2019, the PTC Shares were registered by PTC under the Securities Act of 1933, as amended, and the discount for lack of marketability was reversed.

Fair Value of Investments

We recognize all available-for-sale and trading investments at fair value in the Consolidated Balance Sheet. The valuation methodologies used for our investments measured at fair value are described below.

Certificates of deposit and time deposits — These investments are recorded at cost, which approximates fair value.

Commercial paper — These investments are recorded at amortized cost, which approximates fair value.

Corporate debt securities — Valued at either the yields currently available on comparable securities of issuers with similar credit ratings or valued under a discounted cash flow approach that maximizes observable inputs, such as current yields of similar instruments, but includes adjustments for certain risks that may not be observable such as credit and liquidity risks.

Government securities — Valued at the most recent closing price on the active market on which the individual securities are traded or, absent an active market, utilizing observable inputs such as closing prices in less frequently traded markets.

Asset-backed securities — Valued using a discounted cash flow approach that maximizes observable inputs, such as current yields of benchmark instruments, but includes adjustments for certain risks that may not be observable such as credit and liquidity risks.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

Equity securities — Prior to their registration, the PTC Shares were valued using the most recent closing price of PTC common stock quoted on Nasdaq, less a temporary discount for lack of marketability. The discount for lack of marketability was calculated using a put-option model which included observable and unobservable inputs and was categorized as Level 3 in the fair value hierarchy. As a result of the registration of the PTC Shares and reversal of the discount during fiscal 2019, these securities are now valued using the most recent closing price as quoted on Nasdaq and were transferred from Level 3 to Level 1.

Refer to Note 1 for further information regarding levels in the fair value hierarchy. We did not have any other transfers between levels of fair value measurements during the periods presented.

Fair values of our investments were (in millions):

	September 30, 2019			
	Level 1	Level 2	Level 3	Total
Certificates of deposit and time deposits	\$ —	\$ 0.6	\$ —	\$ 0.6
Corporate debt securities	—	31.8	—	31.8
Government securities	6.3	—	—	6.3
Asset-backed securities	—	5.2	—	5.2
Equity securities	721.5	—	—	721.5
Total	\$ 727.8	\$ 37.6	\$ —	\$ 765.4

	September 30, 2018			
	Level 1	Level 2	Level 3	Total
Certificates of deposit and time deposits	\$ —	\$ 169.6	\$ —	\$ 169.6
Corporate debt securities	—	158.4	—	158.4
Government securities	55.7	10.1	—	65.8
Asset-backed securities	—	25.2	—	25.2
Equity securities	—	—	1,090.0	1,090.0
Total	\$ 55.7	\$ 363.3	\$ 1,090.0	\$ 1,509.0

The table below sets forth a summary of changes in the fair value of our Level 3 investments (in millions):

	Fair Value
Balance September 30, 2018	\$ 1,090.0
Unrealized loss	(149.0)
Transfer to Level 1 upon registration of PTC Shares on November 28, 2018	(941.0)
Balance September 30, 2019	\$ —

10. Derivative Instruments

We use foreign currency forward exchange contracts and foreign currency denominated debt obligations to manage certain foreign currency risks. We also use interest rate swap contracts and treasury locks to manage risks associated with interest rate fluctuations. The following information explains how we use and value these types of derivative instruments and how they impact our consolidated financial statements.

Additional information related to the impacts of cash flow hedges on other comprehensive income (loss) is included in Note 11.

Types of Derivative Instruments and Hedging Activities
Cash Flow Hedges

We enter into foreign currency forward exchange contracts to hedge our exposure to foreign currency exchange rate variability in the expected future cash flows associated with certain third-party and intercompany transactions denominated in foreign currencies forecasted to occur within the next two years (cash flow hedges). We report in other comprehensive income (loss) the effective portion of the gain or loss on derivative financial instruments that we designate and that qualify as cash flow hedges. We reclassify

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

these gains or losses into earnings in the same periods when the hedged transactions affect earnings. To the extent forward exchange contracts designated as cash flow hedges are ineffective, changes in value are recorded in earnings through the maturity date. There was no impact on earnings due to ineffective cash flow hedges. At September 30, 2019, we had a U.S. dollar-equivalent gross notional amount of \$774.0 million of foreign currency forward exchange contracts designated as cash flow hedges. We entered into treasury locks to manage the potential change in interest rates in anticipation of the issuance of \$1.0 billion of fixed rate debt in March 2019. Treasury locks are accounted for as cash flow hedges since they hedge the risk of an increase in treasury rates for the forecasted interest payments of an anticipated fixed-rate debt issuance.

The pre-tax amount of gains (losses) recorded in other comprehensive income (loss) related to cash flow hedges that would have been recorded in the Consolidated Statement of Operations had they not been so designated was (in millions):

	2019	2018	2017
Forward exchange contracts	\$ 29.5	\$ 11.8	\$ (16.1)
Treasury locks	(35.7)	—	—

The pre-tax amount of gains (losses) reclassified from accumulated other comprehensive loss into the Consolidated Statement of Operations related to derivative forward exchange contracts designated as cash flow hedges, which offset the related gains and losses on the hedged items during the periods presented, was (in millions):

	2019	2018	2017
Sales	\$ 1.0	\$ 2.4	\$ 0.3
Cost of sales	18.2	(17.2)	(2.8)
Selling, general and administrative expenses	(1.3)	1.2	(0.5)
Interest expense	(1.2)	—	—
Total	\$ 16.7	\$ (13.6)	\$ (3.0)

Approximately \$15.7 million of pre-tax net unrealized gains on cash flow hedges as of September 30, 2019 will be reclassified into earnings during the next twelve months. We expect that these net unrealized gains will be offset when the hedged items are recognized in earnings.

Net Investment Hedges

We use foreign currency forward exchange contracts and foreign currency denominated debt obligations to hedge portions of our net investments in non-U.S. subsidiaries (net investment hedges) against the effect of exchange rate fluctuations on the translation of foreign currency balances to the U.S. dollar. For all instruments that are designated as net investment hedges and meet effectiveness requirements, the net changes in value of the designated hedging instruments are recorded in accumulated other comprehensive loss within shareowners' equity where they offset gains and losses recorded on our net investments globally. To the extent forward exchange contracts or foreign currency denominated debt designated as net investment hedges are ineffective, changes in value are recorded in earnings through the maturity date. There was no impact on earnings due to ineffective net investment hedges. At September 30, 2019, we had a gross notional amount of \$110.3 million of foreign currency forward exchange contracts designated as net investment hedges.

The pre-tax amount of (losses) gains recorded in other comprehensive income (loss) related to net investment hedges that would have been recorded in the Consolidated Statement of Operations had they not been so designated was (in millions):

	2019	2018	2017
Forward exchange contracts	\$ (4.9)	\$ 1.1	\$ (16.3)

Fair Value Hedges

We use interest rate swap contracts to manage the borrowing costs of certain long-term debt. In February 2015, we issued \$600.0 million aggregate principal amount of fixed rate notes. Upon issuance of these notes, we entered into fixed-to-floating interest rate swap contracts that effectively convert these notes from fixed rate debt to floating rate debt. We designate these contracts as fair value hedges because they hedge the changes in fair value of the fixed rate notes resulting from changes in interest rates. The changes in value of these fair value hedges are recorded as gains or losses in interest expense and are offset by the losses or gains on the underlying debt instruments, which are also recorded in interest expense. There was no impact on earnings due to ineffective fair value hedges. At September 30, 2019, the aggregate notional value of our interest rate swaps designated as fair value hedges was \$600.0 million.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

The pre-tax amount of net gains (losses) recognized within the Consolidated Statement of Operations related to derivative instruments designated as fair value hedges, which fully offset the related net gains and losses on the hedged debt instruments during the periods presented, was (in millions):

	2019	2018	2017
Interest income (expense)	\$ 30.9	\$ (19.3)	\$ (24.1)

Derivatives Not Designated as Hedging Instruments

Certain of our locations have assets and liabilities denominated in currencies other than their functional currencies resulting from intercompany loans and other transactions with third parties denominated in foreign currencies. We enter into foreign currency forward exchange contracts that we do not designate as hedging instruments to offset the transaction gains or losses associated with some of these assets and liabilities. Gains and losses on derivative financial instruments for which we do not elect hedge accounting are recognized in the Consolidated Statement of Operations in each period, based on the change in the fair value of the derivative financial instruments. At September 30, 2019, we had a U.S. dollar-equivalent gross notional amount of \$318.1 million of foreign currency forward exchange contracts not designated as hedging instruments.

The pre-tax amount of gains (losses) from forward exchange contracts not designated as hedging instruments recognized in the Consolidated Statement of Operations was (in millions):

	2019	2018	2017
Cost of sales	\$ (0.4)	\$ 1.0	\$ (1.8)
Other income (expense)	1.6	(0.1)	(8.6)
Total	<u>\$ 1.2</u>	<u>\$ 0.9</u>	<u>\$ (10.4)</u>

Fair Value of Derivative Instruments

We recognize all derivative financial instruments as either assets or liabilities at fair value in the Consolidated Balance Sheet. We value our forward exchange contracts using a market approach. We use a valuation model based on inputs including forward and spot prices for currency and interest rate curves. We did not change our valuation techniques during fiscal 2019, 2018 or 2017. It is our policy to execute such instruments with major financial institutions that we believe to be creditworthy and not to enter into derivative financial instruments for speculative purposes. We diversify our foreign currency forward exchange contracts among counterparties to minimize exposure to any one of these entities. Our foreign currency forward exchange contracts are usually denominated in currencies of major industrial countries. The U.S. dollar-equivalent gross notional amount of our forward exchange contracts totaled \$1,202.4 million at September 30, 2019. Currency pairs (buy/sell) comprising the most significant contract notional values were Euro/United States dollar (USD), USD/Canadian dollar, USD/Swiss franc, and USD/Singapore dollar. Refer to Note 1 for further information regarding levels in the fair value hierarchy.

We value interest rate swap contracts using a market approach based on observable market inputs including publicized swap curves.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

The fair value of our derivatives and their location in our Consolidated Balance Sheet were (in millions):

Derivatives Designated as Hedging Instruments	Balance Sheet Location	Fair Value (Level 2)	
		September 30, 2019	September 30, 2018
Forward exchange contracts	Other current assets	\$ 20.3	\$ 15.8
Forward exchange contracts	Other assets	3.0	1.9
Forward exchange contracts	Other current liabilities	(4.5)	(5.1)
Forward exchange contracts	Other liabilities	(0.4)	(0.7)
Interest rate swap contracts	Other assets	7.6	—
Interest rate swap contracts	Other current liabilities	(0.6)	—
Interest rate swap contracts	Other liabilities	—	(24.0)
Total		\$ 25.4	\$ (12.1)

Derivatives Not Designated as Hedging Instruments	Balance Sheet Location	Fair Value (Level 2)	
		September 30, 2019	September 30, 2018
Forward exchange contracts	Other current assets	\$ 4.8	\$ 3.4
Forward exchange contracts	Other assets	—	0.6
Forward exchange contracts	Other current liabilities	(0.9)	(1.1)
Total		\$ 3.9	\$ 2.9

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)
11. Shareowners' Equity
Common Stock

At September 30, 2019, the authorized stock of the Company consisted of one billion shares of common stock, par value \$1.00 per share, and 25 million shares of preferred stock, without par value. At September 30, 2019, 8.7 million shares of authorized common stock were reserved for various incentive plans.

Changes in outstanding common shares are summarized as follows (in millions):

	2019	2018	2017
Beginning balance	121.0	128.4	128.5
Treasury stock purchases	(6.1)	(8.3)	(2.3)
Common stock issued (including share based compensation impact)	0.8	0.9	2.2
Ending balance	115.7	121.0	128.4

At September 30, 2019 and 2018, there were \$9.3 million and \$18.3 million, of outstanding common stock share repurchases recorded in accounts payable, respectively

Accumulated Other Comprehensive Loss

Changes in accumulated other comprehensive loss by component were (in millions):

	Pension and other postretirement benefit plan adjustments, net of tax (Note 13)	Accumulated currency translation adjustments, net of tax	Net unrealized gains (losses) on cash flow hedges, net of tax	Net unrealized gains (losses) on available- for-sale investments, net of tax	Total accumulated other comprehensive loss, net of tax
Balance as of September 30, 2016	\$ (1,239.8)	\$ (294.9)	\$ (4.1)	\$ —	\$ (1,538.8)
Other comprehensive income (loss) before reclassifications	215.2	57.2	(12.3)	(0.1)	260.0
Amounts reclassified from accumulated other comprehensive loss	97.6	—	2.0	—	99.6
Other comprehensive income (loss)	312.8	57.2	(10.3)	(0.1)	359.6
Balance as of September 30, 2017	\$ (927.0)	\$ (237.7)	\$ (14.4)	\$ (0.1)	\$ (1,179.2)
Other comprehensive income (loss) before reclassifications	188.4	(48.3)	8.7	(2.1)	146.7
Amounts reclassified from accumulated other comprehensive loss	80.5	—	10.1	—	90.6
Other comprehensive income (loss)	268.9	(48.3)	18.8	(2.1)	237.3
Balance as of September 30, 2018	\$ (658.1)	\$ (286.0)	\$ 4.4	\$ (2.2)	\$ (941.9)
Other comprehensive income (loss) before reclassifications	(532.1)	(55.3)	(5.3)	2.2	(590.5)
Amounts reclassified from accumulated other comprehensive loss	56.5	—	(12.1)	—	44.4
Other comprehensive income (loss)	(475.6)	(55.3)	(17.4)	2.2	(546.1)
Balance as of September 30, 2019	\$ (1,133.7)	\$ (341.3)	\$ (13.0)	\$ —	\$ (1,488.0)

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

The reclassifications out of accumulated other comprehensive loss to the Consolidated Statement of Operations were (in millions):

	Year Ended September 30,			Affected Line in the Consolidated Statement of Operations
	2019	2018	2017	
Pension and other postretirement benefit plan adjustments:				
Amortization of prior service credit	\$ (4.2)	\$ (4.9)	\$ (9.8)	(a)
Amortization of net actuarial loss	78.7	115.1	155.2	(a)
Settlements	1.2	0.7	2.8	(a)
	75.7	110.9	148.2	Income before income taxes
	(19.2)	(30.4)	(50.6)	Income tax provision
	\$ 56.5	\$ 80.5	\$ 97.6	Net income
Net unrealized (gains) losses on cash flow hedges:				
Forward exchange contracts	\$ (1.0)	\$ (2.4)	\$ (0.3)	Sales
Forward exchange contracts	(18.2)	17.2	2.8	Cost of sales
Forward exchange contracts	1.3	(1.2)	0.5	Selling, general and administrative expenses
Treasury locks related to 2019 debt issuance	1.2	—	—	Interest expense
	(16.7)	13.6	3.0	Income before income taxes
	4.6	(3.5)	(1.0)	Income tax provision
	\$ (12.1)	\$ 10.1	\$ 2.0	Net income
Total reclassifications	\$ 44.4	\$ 90.6	\$ 99.6	Net income

(a) Reclassified from accumulated other comprehensive loss into cost of sales and selling, general and administrative expenses. These components are included in the computation of net periodic benefit costs. See Note 13 for further information.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**12. Share-Based Compensation**

During 2019, 2018 and 2017, we recognized \$43.1 million, \$38.5 million and \$38.5 million of pre-tax share-based compensation expense, respectively. The total income tax benefit related to share-based compensation expense was \$6.9 million, \$9.6 million and \$12.3 million during 2019, 2018 and 2017, respectively. We recognize compensation expense on grants of share-based compensation awards on a straight-line basis over the service period of each award recipient. As of September 30, 2019, total unrecognized compensation cost related to share-based compensation awards was \$43.1 million, net of estimated forfeitures, which we expect to recognize over a weighted average period of approximately 1.9 years.

Our 2012 Long-Term Incentives Plan, as amended (“2012 Plan”), authorizes us to deliver up to 11.8 million shares of our common stock upon exercise of stock options, upon grant, or in payment of stock appreciation rights, performance shares, performance units, restricted stock units or restricted stock. Our 2003 Directors Stock Plan, as amended, authorizes us to deliver up to 0.5 million shares of our common stock upon exercise of stock options, upon grant, or in payment of restricted stock units. Shares relating to awards under our 2012 Plan, or 2008 Long-Term Incentives Plan, as amended, that terminate by expiration, forfeiture, cancellation or otherwise without the issuance or delivery of shares will be available for further awards under the 2012 Plan. Approximately 3.4 million shares under our 2012 Plan and 0.2 million shares under our 2003 Directors Stock Plan remain available for future grant or payment at September 30, 2019. We use treasury stock to deliver shares of our common stock under these plans. Our 2012 Plan does not permit share-based compensation awards to be granted after February 7, 2022.

Stock Options

We have granted non-qualified and incentive stock options to purchase our common stock under various incentive plans at prices equal to the fair market value of the stock on the grant dates. The exercise price for stock options granted under the plans may be paid in cash, already-owned shares of common stock or a combination of cash and such shares. Stock options expire ten years after the grant date and vest ratably over three years.

The per-share weighted average fair value of stock options granted during the years ended September 30, 2019, 2018 and 2017 was \$32.46, \$35.29 and \$25.70, respectively. The total intrinsic value of stock options exercised was \$35.8 million, \$71.0 million and \$141.1 million during 2019, 2018 and 2017, respectively. We estimated the fair value of each stock option on the date of grant using the Black-Scholes pricing model and the following assumptions:

	2019	2018	2017
Average risk-free interest rate	2.79%	2.14%	1.85%
Expected dividend yield	2.27%	1.75%	2.21%
Expected volatility	23%	22%	24%
Expected term (years)	5.0	5.0	5.1

The average risk-free interest rate is based on U.S. Treasury security rates corresponding to the expected term in effect as of the grant date. The expected dividend yield is based on the expected annual dividend as a percentage of the market value of our common stock as of the grant date. We determined expected volatility using daily historical volatility of our stock price over the most recent period corresponding to the expected term as of the grant date. We determined the expected term of the stock options using historical data adjusted for the estimated exercise dates of unexercised options.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

A summary of stock option activity for the year ended September 30, 2019 is:

	Shares (in thousands)	Wtd. Avg. Exercise Price	Wtd. Avg. Remaining Contractual Term (years)	Aggregate Intrinsic Value of In-The-Money Options (in millions)
Outstanding at October 1, 2018	3,914	\$ 127.50		
Granted	969	171.15		
Exercised	(481)	98.43		
Forfeited	(91)	171.53		
Canceled	(13)	173.07		
Outstanding at September 30, 2019	<u>4,298</u>	139.53	6.7	\$ 108.6
Vested or expected to vest at September 30, 2019	<u>3,129</u>	115.01	5.4	155.8
Exercisable at September 30, 2019	<u>2,520</u>	116.75	5.5	121.1

Performance Share Awards

Certain officers and key employees are also eligible to receive shares of our common stock in payment of performance share awards granted to them. Grantees of performance shares will be eligible to receive shares of our common stock depending upon our total shareholder return, assuming reinvestment of all dividends, relative to the performance of companies in the S&P 500 Index over a three-year period. The number of shares actually earned will range from zero percent to 200 percent of the targeted number of performance shares for the three-year performance periods and will be paid, to the extent earned, in the fiscal quarter following the end of the applicable three-year performance period.

A summary of performance share activity for the year ended September 30, 2019 is as follows:

	Performance Shares (in thousands)	Wtd. Avg. Grant Date Share Fair Value
Outstanding at October 1, 2018	150	\$ 143.94
Granted ⁽¹⁾	57	155.04
Adjustment for performance results achieved ⁽²⁾	72	178.06
Vested and issued	(145)	132.85
Forfeited	(7)	190.37
Outstanding at September 30, 2019	<u>127</u>	178.40

(1) Performance shares granted assuming achievement of performance goals at target.

(2) Adjustments were due to the number of shares vested under fiscal 2016 awards at the end of the three-year performance period ended September 30, 2018 being higher than the target number of shares.

The following table summarizes information about performance shares vested during the years ended September 30, 2019, 2018 and 2017:

	2019	2018	2017
Percent payout	200%	187%	10%
Shares vested (in thousands)	145	139	6
Total fair value of shares vested (in millions)	\$ 25.8	\$ 26.5	\$ 0.9

For the three-year performance period ending September 30, 2019, the payout will be 77 percent of the target number of shares, with a maximum of approximately 28,000 shares to be delivered in payment under the awards in December 2019.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

The per-share fair value of performance share awards granted during the years ended September 30, 2019, 2018 and 2017 was \$155.04, \$219.04 and \$174.37, respectively, which we determined using a Monte Carlo simulation and the following assumptions:

	2019	2018	2017
Average risk-free interest rate	2.77%	1.88%	1.35%
Expected dividend yield	2.24%	1.72%	2.20%
Expected volatility	23%	22%	23%

The average risk-free interest rate is based on the three-year U.S. Treasury security rate in effect as of the grant date. The expected dividend yield is based on the expected annual dividend as a percentage of the market value of our common stock as of the grant date. The expected volatilities were determined using daily historical volatility for the most recent three-year period as of the grant date.

Restricted Stock and Restricted Stock Units

We grant restricted stock and restricted stock units to certain employees, and non-employee directors may elect to receive a portion of their compensation in restricted stock units. Restrictions on employee restricted stock and employee restricted stock units generally lapse over periods ranging from one to four years. Director restricted stock units generally are payable upon retirement. We value restricted stock and restricted stock units at the closing market value of our common stock on the date of grant. The weighted average fair value of restricted stock and restricted stock unit awards granted during the years ended September 30, 2019, 2018 and 2017 was \$170.75, \$188.41 and \$138.32, respectively. The total fair value of shares vested during the years ended September 30, 2019, 2018, and 2017 was \$7.8 million, \$7.2 million, and \$7.6 million, respectively.

A summary of restricted stock and restricted stock unit activity for the year ended September 30, 2019 is as follows:

	Restricted Stock and Restricted Stock Units (in thousands)	Wtd. Avg. Grant Date Share Fair Value
Outstanding at October 1, 2018	146	\$ 141.35
Granted	48	170.75
Vested	(44)	108.40
Forfeited	(8)	167.94
Outstanding at September 30, 2019	142	\$ 160.14

We also granted approximately 6,000 shares of unrestricted common stock to non-employee directors during the year ended September 30, 2019. The weighted average grant date fair value of the unrestricted stock awards granted during the years ended September 30, 2019, 2018, and 2017 was \$182.39, \$183.76 and \$129.68, respectively.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)
13. Retirement Benefits

We sponsor funded and unfunded pension plans and other postretirement benefit plans for our employees. The pension plans provide for monthly pension payments to eligible employees after retirement. Pension benefits for salaried employees generally are based on years of credited service and average earnings. Pension benefits for hourly employees are primarily based on specified benefit amounts and years of service. Effective July 1, 2010, we closed participation in our U.S. and Canada pension plans to employees hired after June 30, 2010. Employees hired after June 30, 2010 are instead eligible to participate in defined contribution plans. Effective October 1, 2010, we also closed participation in our U.K. pension plan to employees hired after September 30, 2010 and these employees are now eligible for a defined contribution plan. Benefits to be provided to plan participants hired before July 1, 2010 or October 1, 2010, respectively, are not affected by these changes. Our policy with respect to funding our pension obligations is to fund at a minimum the amount required by applicable laws and governmental regulations. We were not required to make contributions to satisfy minimum funding requirements in our U.S. pension plans in 2019, 2018 or 2017. We did not make voluntary contributions to our U.S. qualified pension plan in 2019 or 2018. We made a voluntary contribution of \$200.0 million to our U.S. qualified pension plan in 2017.

We sponsor various defined contribution savings plans that allow eligible employees to contribute a portion of their income in accordance with plan specific guidelines. We contribute to savings plans and/or will match a percentage of the employee contributions up to certain limits. The Company contributions to defined contribution plans are based on age and years of service and range from 3% to 7% of eligible compensation. Expense related to these plans was \$53.1 million in 2019, \$47.0 million in 2018 and \$41.5 million in 2017.

Other postretirement benefits are primarily in the form of retirement medical plans that cover most of our employees in the U.S. and Canada and provide for the payment of certain medical costs of eligible employees and dependents after retirement.

Net Periodic Benefit Cost

The components of net periodic benefit cost (income) are (in millions):

	Pension Benefits			Other Postretirement Benefits		
	2019	2018	2017	2019	2018	2017
Service cost	\$ 78.2	\$ 88.9	\$ 97.0	\$ 0.9	\$ 1.3	\$ 1.4
Interest cost	158.3	155.3	151.6	2.3	2.4	2.5
Expected return on plan assets	(244.7)	(244.8)	(225.2)	—	—	—
Amortization:						
Prior service cost (credit)	1.2	0.6	(3.7)	(5.4)	(5.5)	(6.1)
Net actuarial loss	77.8	113.4	152.9	0.9	1.7	2.3
Settlements	1.2	0.7	3.3	—	—	—
Net periodic benefit cost (income)	\$ 72.0	\$ 114.1	\$ 175.9	\$ (1.3)	\$ (0.1)	\$ 0.1

The service cost component is included in Cost of sales and Selling, general and administrative expenses in the Consolidated Statement of Operations. All other components are included in Other income (expense) in the Consolidated Statement of Operations.

Significant assumptions used in determining net periodic benefit cost (income) are (in weighted averages):

	Pension Benefits			Other Postretirement Benefits		
	2019	2018	2017	2019	2018	2017
U.S. Plans						
Discount rate	4.35%	3.90%	3.75%	4.15%	3.40%	3.10%
Expected return on plan assets	7.50%	7.50%	7.50%	—	—	—
Compensation increase rate	3.50%	3.50%	3.50%	—	—	—
Non-U.S. Plans						
Discount rate	2.48%	2.30%	1.77%	3.30%	3.20%	2.80%
Expected return on plan assets	5.22%	5.19%	5.12%	—	—	—
Compensation increase rate	3.02%	2.99%	2.86%	—	—	—

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)
Net Benefit Obligation

Benefit obligation, plan assets, funded status and net liability information is summarized as follows (in millions):

	Pension Benefits		Other Postretirement Benefits	
	2019	2018	2019	2018
Benefit obligation at beginning of year	\$ 4,259.5	\$ 4,585.0	\$ 62.4	\$ 77.8
Service cost	78.2	88.9	0.9	1.3
Interest cost	158.3	155.3	2.3	2.4
Actuarial losses (gains)	720.4	(257.1)	4.7	(8.5)
Plan amendments	(4.9)	(0.3)	—	—
Plan participant contributions	3.4	3.7	3.4	3.4
Benefits paid	(263.1)	(277.7)	(12.8)	(13.5)
Settlements	(6.2)	(10.4)	—	—
Curtailments	—	(3.5)	—	—
Currency translation and other	(38.3)	(24.4)	(0.2)	(0.5)
Benefit obligation at end of year	4,907.3	4,259.5	60.7	62.4
Plan assets at beginning of year	3,754.8	3,788.3	—	—
Actual return on plan assets	263.6	220.6	—	—
Company contributions	30.9	50.3	9.4	10.1
Plan participant contributions	3.4	3.7	3.4	3.4
Benefits paid	(263.1)	(277.7)	(12.8)	(13.5)
Settlements	(6.2)	(10.4)	—	—
Currency translation and other	(30.3)	(20.0)	—	—
Plan assets at end of year	3,753.1	3,754.8	—	—
Funded status of plans	\$ (1,154.2)	\$ (504.7)	\$ (60.7)	\$ (62.4)
Net amount on balance sheet consists of:				
Other assets	\$ 6.5	\$ 30.6	\$ —	\$ —
Compensation and benefits	(12.7)	(12.3)	(7.3)	(10.1)
Retirement benefits	(1,148.0)	(523.0)	(53.4)	(52.3)
Net amount on balance sheet	\$ (1,154.2)	\$ (504.7)	\$ (60.7)	\$ (62.4)

The actuarial losses recorded in 2019 were primarily the result of a decrease in the discount rate for U.S. Plans, which decreased from 4.35% in 2018 to 3.30% in 2019. The actuarial gains recorded in 2018 were primarily the result of an increase in the discount rate for U.S. Plans, which increased from 3.90% in 2017 to 4.35% in 2018. Approximately 76 percent of our 2019 global projected benefit obligation relates to our U.S. pension plan.

Amounts included in accumulated other comprehensive loss, net of tax, which have not yet been recognized in net periodic benefit cost are as follows (in millions):

	Pension Benefits		Other Postretirement Benefits	
	2019	2018	2019	2018
Prior service cost (credit)	\$ 2.7	\$ 4.3	\$ (4.1)	\$ (8.2)
Net actuarial loss	1,127.7	657.6	7.4	4.4
Total	\$ 1,130.4	\$ 661.9	\$ 3.3	\$ (3.8)

During 2019, we recognized prior service credits of \$4.2 million (\$3.2 million net of tax) and net actuarial losses of \$78.7 million (\$59.7 million net of tax) in pension and other postretirement net periodic benefit cost, which were included in accumulated other comprehensive loss at September 30, 2018.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

The accumulated benefit obligation for our pension plans was \$4,548.8 million and \$3,962.3 million at September 30, 2019 and 2018, respectively.

Information regarding our pension plans with projected benefit obligations in excess of the fair value of plan assets (underfunded plans) are as follows (in millions):

	<u>2019</u>	<u>2018</u>
Projected benefit obligation	\$ 4,607.4	\$ 3,755.5
Fair value of plan assets	3,446.7	3,220.2

Information regarding our pension plans with accumulated benefit obligations in excess of the fair value of plan assets (underfunded plans) are as follows (in millions):

	<u>2019</u>	<u>2018</u>
Accumulated benefit obligation	\$ 4,019.7	\$ 679.7
Fair value of plan assets	3,205.2	392.9

Significant assumptions used in determining the benefit obligations are (in weighted averages):

	<u>Pension Benefits</u>		<u>Other Postretirement Benefits</u>	
	<u>2019</u>	<u>2018</u>	<u>2019</u>	<u>2018</u>
U.S. Plans				
Discount rate	3.30%	4.35%	2.90%	4.15%
Compensation increase rate	3.40%	3.50%	—	—
Health care cost trend rate ⁽¹⁾	—	—	6.50%	6.50%
Non-U.S. Plans				
Discount rate	1.60%	2.48%	2.65%	3.30%
Compensation increase rate	3.06%	3.02%	—	—
Health care cost trend rate ⁽¹⁾	—	—	4.50%	4.50%

⁽¹⁾ The health care cost trend rate reflects the estimated increase in gross medical claims costs. As a result of the plan amendment adopted effective October 1, 2002, our effective per person retiree medical cost increase is zero percent beginning in 2005 for the majority of our postretirement benefit plans. For our other plans, we assume the gross health care cost trend rate will decrease to 5.00% in 2021 for U.S. Plans and will not change in 2020 for Non-U.S. Plans.

Estimated Future Payments

We expect to contribute \$32.2 million related to our global pension plans and \$7.4 million to our postretirement benefit plans in 2020.

The following benefit payments, which include employees' expected future service, as applicable, are expected to be paid (in millions):

	<u>Pension Benefits</u>	<u>Other Postretirement Benefits</u>
2020	\$ 322.2	\$ 7.4
2021	305.6	6.2
2022	322.6	5.9
2023	298.5	5.6
2024	299.7	5.3
2025-2029	1,475.1	21.0

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)*Plan Assets*

In determining the expected long-term rate of return on assets assumption, we consider actual returns on plan assets over the long term, adjusted for forward-looking considerations, such as inflation, interest rates, equity performance and the active management of the plan's invested assets. We also considered our current and expected mix of plan assets in setting this assumption. This resulted in the selection of the weighted average long-term rate of return on assets assumption. Our global weighted-average targeted and actual asset allocations at September 30, by asset category, are:

Asset Category	Allocation		Target	September 30,	
	Range		Allocations	2019	2018
Equity securities	40%	– 65%	54%	49%	53%
Debt securities	30%	– 50%	39%	44%	39%
Other	0%	– 15%	7%	7%	8%

The investment objective for pension funds related to our defined benefit plans is to meet the plan's benefit obligations, while maximizing the long-term growth of assets without undue risk. We strive to achieve this objective by investing plan assets within target allocation ranges and diversification within asset categories. Target allocation ranges are guidelines that are adjusted periodically based on ongoing monitoring by plan fiduciaries. Investment risk is controlled by rebalancing to target allocations on a periodic basis and ongoing monitoring of investment manager performance relative to the investment guidelines established for each manager.

As of September 30, 2019 and 2018, our pension plans do not directly own our common stock.

In certain countries where we operate, there are no legal requirements or financial incentives provided to companies to pre-fund pension obligations. In these instances, we typically make benefit payments directly from cash as they become due, rather than by creating a separate pension fund.

The valuation methodologies used for our pension plans' investments measured at fair value are described as follows. There have been no changes in the methodologies used at September 30, 2019 and 2018.

Common stock — Valued at the closing price reported on the active market on which the individual securities are traded.

Mutual funds — Valued at the net asset value (NAV) reported by the fund.

Corporate debt — Valued at either the yields currently available on comparable securities of issuers with similar credit ratings or valued under a discounted cash flow approach that maximizes observable inputs, such as current yields of similar instruments, but includes adjustments for certain risks that may not be observable such as credit and liquidity risks.

Government securities — Valued at the most recent closing price on the active market on which the individual securities are traded or, absent an active market, utilizing observable inputs such as closing prices in less frequently traded markets.

Common collective trusts — Valued at the NAV as determined by the custodian of the fund. The NAV is based on the fair value of the underlying assets owned by the fund, minus its liabilities then divided by the number of units outstanding.

Private equity and alternative equity — Valued at the estimated fair value, as determined by the respective fund manager, based on the NAV of the investment units held at year end, which is subject to judgment.

Real estate funds — Consists of the real estate funds, which provide an indirect investment into a diversified and multi-sector portfolio of property assets. Publicly-traded real estate funds are valued at the most recent closing price reported on the SIX Swiss Exchange. The remainder is valued at the estimated fair value, as determined by the respective fund manager, based on the NAV of the investment units held at year end, which is subject to judgment.

Insurance contracts — Valued at the aggregate amount of accumulated contribution and investment income less amounts used to make benefit payments and administrative expenses which approximates fair value.

Other — Consists of other fixed income investments and common collective trusts with a mix of equity and fixed income underlying assets. Other fixed income investments are valued at the most recent closing price reported in the markets in which the individual securities are traded, which may be infrequently.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Refer to Note 1 for further information regarding levels in the fair value hierarchy.

In accordance with ASC Subtopic 820-10, certain investments that are measured at fair value using the NAV (or its equivalent) practical expedient have not been classified in the fair value hierarchy. The fair value amounts presented in this table are intended to permit reconciliation of the fair value hierarchy to the line items presented in the consolidated financial statements.

The following table presents our pension plans' investments measured at fair value as of September 30, 2019:

	Level 1	Level 2	Level 3	Total
U.S. Plans				
Cash and cash equivalents	\$ 2.6	\$ —	\$ —	\$ 2.6
Equity securities:				
Mutual funds	129.7	—	—	129.7
Common stock	919.7	—	—	919.7
Common collective trusts	—	419.0	—	419.0
Fixed income securities:				
Corporate debt	—	698.7	—	698.7
Government securities	285.1	130.0	—	415.1
Common collective trusts	—	138.4	—	138.4
Other types of investments:				
Insurance contracts	—	—	0.9	0.9
Total U.S. Plans investments in fair value hierarchy	\$ 1,337.1	\$ 1,386.1	\$ 0.9	2,724.1
U.S. Plans investments measured at NAV:				
Private equity				31.6
Alternative equity				25.6
Total U.S. Plans investments				2,781.3
Non-U.S. Plans				
Cash and cash equivalents	\$ 16.6	\$ —	\$ —	16.6
Equity securities:				
Common stock	63.4	—	—	63.4
Common collective trusts	—	304.5	—	304.5
Fixed income securities:				
Corporate debt	—	61.2	—	61.2
Government securities	1.3	—	—	1.3
Common collective trusts	—	329.7	—	329.7
Other types of investments:				
Real estate funds	—	85.1	—	85.1
Insurance contracts	—	—	95.4	95.4
Other	—	—	4.5	4.5
Total Non-U.S. Plans investments in fair value hierarchy	\$ 81.3	\$ 780.5	\$ 99.9	961.7
Non-U.S. Plans investments measured at NAV:				
Real estate funds				10.1
Total Non-U.S. Plans investments				971.8
Total investments measured at fair value				\$ 3,753.1

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

The following table presents our pension plans' investments measured at fair value as of September 30, 2018:

	Level 1	Level 2	Level 3	Total
U.S. Plans				
Cash and cash equivalents	\$ 2.0	\$ —	\$ —	\$ 2.0
Equity securities:				
Mutual funds	222.1	—	—	222.1
Common stock	964.7	—	—	964.7
Common collective trusts	—	422.2	—	422.2
Fixed income securities:				
Corporate debt	—	627.7	—	627.7
Government securities	242.9	105.8	—	348.7
Common collective trusts	—	141.4	—	141.4
Other types of investments:				
Insurance contracts	—	—	0.9	0.9
Total U.S. Plans investments in fair value hierarchy	\$ 1,431.7	\$ 1,297.1	\$ 0.9	2,729.7
U.S. Plans investments measured at NAV:				
Private equity				36.5
Alternative equity				61.1
Total U.S. Plans investments				2,827.3
Non-U.S. Plans				
Cash and cash equivalents	\$ 12.8	\$ —	\$ —	12.8
Equity securities:				
Common stock	59.2	—	—	59.2
Common collective trusts	—	320.7	—	320.7
Fixed income securities:				
Corporate debt	—	33.8	—	33.8
Government securities	1.1	15.5	—	16.6
Common collective trusts	—	310.4	—	310.4
Other types of investments:				
Real estate funds	—	80.5	—	80.5
Insurance contracts	—	—	79.1	79.1
Other	—	—	4.6	4.6
Total Non-U.S. Plans investments in fair value hierarchy	\$ 73.1	\$ 760.9	\$ 83.7	917.7
Non-U.S. Plans investments measured at NAV:				
Real estate funds				9.8
Total Non-U.S. Plans investments				927.5
Total investments measured at fair value				\$ 3,754.8

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

The table below sets forth a summary of changes in fair market value of our pension plans' Level 3 assets for the year ended September 30, 2019:

	Balance October 1, 2018	Realized Gains (Losses)	Unrealized Gains (Losses)	Purchases, Sales, Issuances, and Settlements, Net	Balance September 30, 2019
U.S. Plans					
Insurance contracts	\$ 0.9	\$ —	\$ —	\$ —	\$ 0.9
Non-U.S. Plans					
Insurance contracts	79.1	—	14.3	2.0	95.4
Other	4.6	—	(0.1)	—	4.5
	<u>\$ 84.6</u>	<u>\$ —</u>	<u>\$ 14.2</u>	<u>\$ 2.0</u>	<u>\$ 100.8</u>

The table below sets forth a summary of changes in fair market value of our pension plans' Level 3 assets for the year ended September 30, 2018:

	Balance October 1, 2017	Realized Gains (Losses)	Unrealized Gains (Losses)	Purchases, Sales, Issuances, and Settlements, Net	Balance September 30, 2018
U.S. Plans					
Insurance contracts	\$ 0.9	\$ —	\$ —	\$ —	\$ 0.9
Non-U.S. Plans					
Insurance contracts	71.5	—	(0.4)	8.0	79.1
Other	4.8	—	(0.2)	—	4.6
	<u>\$ 77.2</u>	<u>\$ —</u>	<u>\$ (0.6)</u>	<u>\$ 8.0</u>	<u>\$ 84.6</u>

14. Other Income (Expense)

The components of other income (expense) are (in millions):

	2019	2018	2017
Gain on sale of business	\$ —	\$ —	\$ 60.8
Change in fair value of investments	(368.5)	90.0	—
Interest income	11.1	24.4	19.6
Royalty income	10.2	9.7	8.9
Legacy product liability and environmental (charges) benefit	(22.1)	2.6	(8.3)
Non-operating pension and postretirement benefit credit (cost)	8.4	(23.8)	(77.6)
Other	(1.5)	3.9	(0.1)
Other income (expense)	<u>\$ (362.4)</u>	<u>\$ 106.8</u>	<u>\$ 3.3</u>

In September 2017, we sold W Interconnections, Inc. and subsidiaries, which was included within our Control Products & Solutions segment, for approximately \$94.0 million. We recorded a pre-tax gain of \$60.8 million as a result of this divestiture, which is included within Other income (expense) in the Consolidated Statement of Operations. The change in fair value of investments includes the gain (loss) on investments and valuation adjustments related to the registration of PTC Shares. Additional information related to our investments is included in Note 9.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

15. Income Taxes

Selected income tax data (in millions):

	2019	2018	2017
Components of income before income taxes:			
United States	\$ 280.8	\$ 721.6	\$ 547.2
Non-United States	620.2	609.2	490.2
Total	<u>\$ 901.0</u>	<u>\$ 1,330.8</u>	<u>\$ 1,037.4</u>
Components of the income tax provision:			
Current:			
United States	\$ 105.6	\$ 475.3	\$ 67.3
Non-United States	112.1	131.4	109.9
State and local	16.5	18.1	0.7
Total current	<u>234.2</u>	<u>624.8</u>	<u>177.9</u>
Deferred:			
United States	(27.0)	118.6	44.6
Non-United States	(0.1)	48.0	(14.1)
State and local	(1.9)	3.9	3.3
Total deferred	<u>(29.0)</u>	<u>170.5</u>	<u>33.8</u>
Income tax provision	<u>\$ 205.2</u>	<u>\$ 795.3</u>	<u>\$ 211.7</u>
Total income taxes paid	<u>\$ 293.3</u>	<u>\$ 222.9</u>	<u>\$ 211.9</u>

Tax Act

On December 22, 2017, the Tax Act was enacted. The Tax Act significantly changed U.S. tax law by, among other things, lowering the statutory corporate income tax rate, implementing a modified territorial tax system, and imposing a one-time transition tax on accumulated earnings of foreign subsidiaries that were previously deferred from U.S. tax ("transition tax"). As a fiscal year taxpayer, certain provisions of the Tax Act impacted us in fiscal year 2018, including the change in the federal statutory rate and the one-time transition tax, while other provisions became effective in fiscal year 2019, including the tax on global intangible low-tax income ("GILTI") of foreign subsidiaries, the deduction for foreign derived intangible income ("FDII"), and the elimination of the domestic manufacturing deduction.

The FASB allows companies to adopt an accounting policy to either recognize deferred taxes on GILTI or treat it as a cost in the year incurred. The Company has adopted an accounting policy to treat tax on GILTI as a tax cost in the year incurred.

Our base rate reflects the change in the U.S. federal statutory rate from 35 percent to 21 percent resulting from the enactment of the Tax Act. The statutory rate for our fiscal year 2019 is 21 percent.

In December 2017, the SEC issued Staff Accounting Bulletin No. 118 ("SAB 118"), which provides guidance on how a company may recognize provisional estimates related to the effects of the Tax Act. During the first quarter of fiscal year 2019, the Company completed its analysis of the impact of the Tax Act in accordance with SAB 118 and the amounts are no longer considered provisional. This resulted in no change to the provisional amounts recorded in fiscal year 2018 related to the revaluation of U.S. deferred tax assets and liabilities and the one-time transition tax liability on earnings of our foreign subsidiaries that were previously deferred from U.S. income tax.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)*Effective Tax Rate Reconciliation*

The reconciliation between the U.S. federal statutory rate and our effective tax rate was:

	2019	2018	2017
Statutory tax rate	21.0 %	24.5 %	35.0 %
State and local income taxes	0.1	1.0	0.7
Non-United States taxes	(4.8)	(4.4)	(9.3)
Repatriation of foreign earnings	2.8	4.2	0.5
Foreign-derived intangible income	(1.6)	—	—
Impact of the Tax Act	—	36.6	—
Foreign currency transaction loss	—	—	(1.9)
Change in valuation allowance ^(a)	7.6	0.7	0.1
Share-based compensation	(0.9)	(1.3)	(2.8)
Research and development tax credit	(1.2)	(1.3)	(0.6)
Other	(0.2)	(0.2)	(1.3)
Effective income tax rate	<u>22.8 %</u>	<u>59.8 %</u>	<u>20.4 %</u>

^(a) During fiscal year 2019, we recorded a valuation allowance against deferred tax assets associated with the loss in fair value of the PTC Shares. This resulted in an increase to the effective tax rate of 7.5% and a corresponding valuation allowance of \$67.3 million, as described further in the table below.

We operate in certain non-U.S. tax jurisdictions under government-sponsored tax incentive programs, which may be extended if certain additional requirements are met. The program which generates the primary benefit will expire in 2022. The tax benefit attributable to these programs was \$55.1 million (\$0.46 per diluted share) in 2019, \$52.3 million (\$0.41 per diluted share) in 2018 and \$43.4 million (\$0.33 per diluted share) in 2017.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)
Deferred Taxes

The tax effects of temporary differences that give rise to our net deferred income tax assets (liabilities) were (in millions):

	2019	2018
Deferred income tax assets:		
Compensation and benefits	\$ 6.0	\$ 6.5
Inventory	11.1	11.5
Returns, rebates and incentives	29.8	34.0
Retirement benefits	298.5	141.5
Environmental remediation and other site-related costs	26.2	20.7
Share-based compensation	21.6	19.6
Other accruals and reserves	46.9	49.7
Investments	69.6	—
Net operating loss carryforwards	18.5	19.6
Tax credit carryforwards	16.5	17.9
Capital loss carryforwards	9.5	10.0
Other	10.7	4.6
Subtotal	564.9	335.6
Valuation allowance	(93.8)	(27.0)
Net deferred income tax assets	471.1	308.6
Deferred income tax liabilities:		
Property	(55.8)	(54.7)
Intangible assets	(24.4)	(25.3)
Investments	—	(21.7)
Unremitted earnings of foreign subsidiaries	(25.5)	(22.7)
Other	(1.3)	(4.6)
Deferred income tax liabilities	(107.0)	(129.0)
Total net deferred income tax assets	\$ 364.1	\$ 179.6

We believe it is more likely than not that we will realize our deferred tax assets through the reduction of future taxable income, other than for the deferred tax assets reflected below.

Tax attributes and related valuation allowances at September 30, 2019 were (in millions):

Tax attributes and related valuation allowances	Tax Benefit Amount	Valuation Allowance	Carryforward Period Ends
Non-United States net operating loss carryforward	\$ 7.2	\$ 7.2	2020 - 2028
Non-United States net operating loss carryforward	3.3	3.1	Indefinite
Non-United States capital loss carryforward	9.5	9.5	Indefinite
United States net operating loss carryforward	0.4	—	2020 - 2036
State and local net operating loss carryforward	7.6	1.4	2020 - 2037
State tax credit carryforward	16.5	0.7	2020 - 2034
Subtotal	44.5	21.9	
Other deferred tax assets	71.9	71.9	Indefinite
Total	\$ 116.4	\$ 93.8	

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)*Unrecognized Tax Benefits*

A reconciliation of our gross unrecognized tax benefits, excluding interest and penalties, is as follows (in millions):

	2019	2018	2017
Gross unrecognized tax benefits balance at beginning of year	\$ 20.1	\$ 31.1	\$ 32.4
Additions based on tax positions related to the current year	—	—	1.9
Additions based on tax positions related to prior years	—	3.0	10.8
Reductions based on tax positions related to prior years	—	(1.1)	(0.1)
Reductions related to settlements with taxing authorities	—	(11.3)	(7.7)
Reductions related to lapses of statute of limitations	(0.2)	(1.6)	(6.3)
Effect of foreign currency translation	—	—	0.1
Gross unrecognized tax benefits balance at end of year	<u>\$ 19.9</u>	<u>\$ 20.1</u>	<u>\$ 31.1</u>

The amount of gross unrecognized tax benefits that would reduce our effective tax rate if recognized was \$19.9 million, \$20.1 million and \$31.1 million at September 30, 2019, 2018 and 2017, respectively.

Accrued interest and penalties related to unrecognized tax benefits were \$3.3 million and \$2.5 million at September 30, 2019 and 2018, respectively. We recognize interest and penalties related to unrecognized tax benefits in the income tax provision. Benefits (expense) recognized were \$(0.8) million, \$1.5 million and \$1.2 million in 2019, 2018 and 2017, respectively.

We believe it is reasonably possible that the amount of gross unrecognized tax benefits could be reduced by up to \$18.5 million in the next 12 months as a result of the resolution of tax matters in various global jurisdictions and the lapses of statutes of limitations. If all of the unrecognized tax benefits were recognized, the net reduction to our income tax provision, including the recognition of interest and penalties and offsetting tax assets, could be up to \$19.8 million.

We conduct business globally and are routinely audited by the various tax jurisdictions in which we operate. We are no longer subject to U.S. federal income tax examinations for years before 2016 and are no longer subject to state, local and non-U.S. income tax examinations for years before 2009.

16. Commitments and Contingent Liabilities*Environmental Matters*

Federal, state and local requirements relating to the discharge of substances into the environment, the disposal of hazardous wastes and other activities affecting the environment have and will continue to have an effect on our manufacturing operations. Thus far, compliance with environmental requirements and resolution of environmental claims have been accomplished without material effect on our business, financial condition or results of operations.

We have been designated as a potentially responsible party at 13 Superfund sites, excluding sites as to which our records disclose no involvement or as to which our potential liability has been finally determined and assumed by third parties. In addition, various other lawsuits, claims and proceedings have been asserted against us seeking remediation of alleged environmental impairments, principally at previously owned properties.

Based on our assessment, we believe that our expenditures for environmental capital investment and remediation necessary to comply with present regulations governing environmental protection and other expenditures for the resolution of environmental claims will not have a material effect on our business, financial condition or results of operations. We cannot assess the possible effect of compliance with future requirements. Environmental remediation cost liabilities, net of related expected recoveries, were \$56.3 million and \$52.2 million as of September 30, 2019 and 2018, respectively.

Conditional Asset Retirement Obligations

We accrue for costs related to a legal obligation associated with the retirement of a tangible long-lived asset that results from the acquisition, construction, development or the normal operation of the long-lived asset. The obligation to perform the asset retirement activity is not conditional even though the timing or method may be conditional. Identified conditional asset retirement obligations include asbestos abatement and remediation of soil contamination beneath current and previously divested facilities. We estimate

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

conditional asset retirement obligations using site-specific knowledge and historical industry expertise. There have been no significant changes in liabilities incurred, liabilities settled, accretion expense or revisions in estimated cash flows for the periods ended September 30, 2019 and 2018. Conditional asset retirement obligations, net of related expected recoveries, were \$21.5 million and \$21.6 million as of September 30, 2019 and 2018, respectively.

Other Matters

Various other lawsuits, claims and proceedings have been or may be instituted or asserted against us relating to the conduct of our business, including those pertaining to product liability, environmental, safety and health, intellectual property, employment and contract matters. Although the outcome of litigation cannot be predicted with certainty and some lawsuits, claims or proceedings may be disposed of unfavorably to us, we believe the disposition of matters that are pending or have been asserted will not have a material effect on our business, financial condition or results of operations. The following outlines additional background for obligations associated with asbestos, divested businesses and intellectual property.

We (including our subsidiaries) have been named as a defendant in lawsuits alleging personal injury as a result of exposure to asbestos that was used in certain components of our products many years ago, including products from divested businesses for which we have agreed to defend and indemnify claims. Currently there are a few thousand claimants in lawsuits that name us as defendants, together with hundreds of other companies. But in all cases, for those claimants who do show that they worked with our products or products of divested businesses for which we are responsible, we nevertheless believe we have meritorious defenses, in substantial part due to the integrity of the products, the encapsulated nature of any asbestos-containing components, and the lack of any impairing medical condition on the part of many claimants. We defend those cases vigorously. Historically, we have been dismissed from the vast majority of these claims with no payment to claimants.

Additionally, we have maintained insurance coverage that includes indemnity and defense costs, over and above self-insured retentions, for many of these claims. We believe these arrangements will provide substantial coverage for future defense and indemnity costs for these asbestos claims throughout the remaining life of asbestos liability. The uncertainties of asbestos claim litigation make it difficult to predict accurately the ultimate outcome of asbestos claims. That uncertainty is increased by the possibility of adverse rulings or new legislation affecting asbestos claim litigation or the settlement process. Subject to these uncertainties and based on our experience defending asbestos claims, we do not believe these lawsuits will have a material effect on our business, financial condition or results of operations.

We have, from time to time, divested certain of our businesses. In connection with these divestitures, certain lawsuits, claims and proceedings may be instituted or asserted against us related to the period that we owned the businesses, either because we agreed to retain certain liabilities related to these periods or because such liabilities fall upon us by operation of law. In some instances the divested business has assumed the liabilities; however, it is possible that we might be responsible to satisfy those liabilities if the divested business is unable to do so. We do not believe these liabilities will have a material effect on our business, financial condition or results of operations.

In many countries we provide a limited intellectual property indemnity as part of our terms and conditions of sale. We also at times provide limited intellectual property indemnities in other contracts with third parties, such as contracts concerning the development and manufacture of our hardware and software products. As of September 30, 2019, we were not aware of any material indemnification claims that were probable or reasonably possible of an unfavorable outcome. Historically, claims that have been made under the indemnification agreements have not had a material impact on our business, financial condition or results of operations; however, to the extent that valid indemnification claims arise in the future, future payments by us could be significant and could have a material adverse effect on our business, financial condition or results of operations in a particular period.

Lease Commitments

Rental expense was \$119.0 million in 2019, \$120.3 million in 2018 and \$115.1 million in 2017. As of September 30, 2019, minimum future rental commitments under operating leases having noncancelable lease terms in excess of one year are payable as follows (in millions):

2020	\$	90.6
2021		72.6
2022		51.8
2023		36.7
2024		26.4
Thereafter		63.8
Total	\$	<u>341.9</u>

Commitments from third parties under sublease agreements having noncancelable lease terms in excess of one year were not significant as of September 30, 2019. Most leases contain renewal options for varying periods, and certain leases include options to purchase the leased property.

17. Business Segment Information

Rockwell Automation, Inc. is a global leader in industrial automation and digital transformation. We connect the imaginations of people with the potential of technology to expand what is humanly possible, making the world more productive and more sustainable. We determine our operating segments based on the information used by our chief operating decision maker, our Chief Executive Officer, to allocate resources and assess performance. Based upon this information, we organize our hardware and software products, solutions and services into two operating segments: Architecture & Software and Control Products & Solutions.

Architecture & Software

The Architecture & Software operating segment contains a comprehensive portfolio of automation and information platforms, including hardware and software. This integrated portfolio is capable of controlling our customers' industrial processes and manufacturing, as well as providing connections to enterprise business systems.

Our automation platform is multi-discipline and scalable with the ability to handle applications in discrete, batch/hybrid and continuous process, drives control, motion control, machine safety and process safety. Our products include programmable automation controllers, design, visualization and simulation software, human machine interface products, networking products, industrial computers, sensing devices, machine safety devices, motion control products, and independent cart technology products.

Our information platform includes manufacturing execution system software and analytics software that enables customers to improve operational productivity and meet regulatory requirements. This platform enables enterprise visibility, reduction of unplanned downtime, and optimization of processes.

Control Products & Solutions

The Control Products & Solutions operating segment combines a comprehensive portfolio of intelligent motor control and industrial control products, value-added solutions and a complete portfolio of professionally delivered lifecycle services. This comprehensive portfolio includes:

- Low and medium voltage electro-mechanical and electronic motor starters and AC/DC variable frequency drives, motor control and circuit protection devices, operator devices, signaling devices, termination and protection devices, relays and timers and electrical control accessories.
- Value-added solutions ranging from pre-configured line to load power solutions, packaged drives, motor control centers, intelligent packaged power and engineered to order automation equipment solutions.
- Professional lifecycle services combine technology and domain expertise to help maximize customers' automation investment and provide total lifecycle support as they design, build, sustain and optimize their automation investments. This broad portfolio includes safety, security and digital transformation consulting, global automation and information project delivery capabilities, plant network, cloud, and cybersecurity services, asset management and predictive analytics, and remote, on-site and managed support services.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

The following tables reflect the sales and operating results of our reportable segments (in millions):

	2019	2018	2017
Sales:			
Architecture & Software	\$ 3,021.9	\$ 3,050.2	\$ 2,858.6
Control Products & Solutions	3,672.9	3,615.8	3,452.7
Total	<u>\$ 6,694.8</u>	<u>\$ 6,666.0</u>	<u>\$ 6,311.3</u>
Segment operating earnings:			
Architecture & Software	\$ 874.8	\$ 897.9	\$ 780.0
Control Products & Solutions	598.8	543.9	448.1
Total	<u>1,473.6</u>	<u>1,441.8</u>	<u>1,228.1</u>
Purchase accounting depreciation and amortization	(16.6)	(17.4)	(21.4)
General corporate - net	(108.8)	(100.0)	(95.9)
Non-operating pension and postretirement benefit credit (cost)	8.4	(23.8)	(77.6)
Gain on sale of business	—	—	60.8
Costs related to unsolicited Emerson proposals	—	(11.2)	—
(Loss) gain on investments	(402.2)	123.7	—
Valuation adjustments related to the registration of PTC Shares	33.7	(33.7)	—
Interest (expense) income - net	(87.1)	(48.6)	(56.6)
Income before income taxes	<u>\$ 901.0</u>	<u>\$ 1,330.8</u>	<u>\$ 1,037.4</u>

Effective October 1, 2018, we realigned our reportable segments for a transfer of business activities between our segments. We also reclassified interest income from General corporate - net to Interest (expense) income - net and retrospectively applied the requirements of the new pension standard, reclassifying the non-operating pension and postretirement benefit cost out of segment operating earnings. As a result, the prior period presentation of reportable segments has been restated to conform to the current segment reporting structure. These changes did not impact the Consolidated Statement of Operations.

Among other considerations, we evaluate performance and allocate resources based upon segment operating earnings before income taxes, costs related to the unsolicited Emerson proposals in the first quarter of fiscal 2018, interest (expense) income - net, costs related to corporate offices, non-operating pension and postretirement benefit credit (cost), certain corporate initiatives, gains and losses on investments, valuation adjustments related to the registration of PTC Shares, gains and losses from the disposition of businesses, and purchase accounting depreciation and amortization. Depending on the product, intersegment sales within a single legal entity are either at cost or cost plus a mark-up, which does not necessarily represent a market price. Sales between legal entities are at an appropriate transfer price. We allocate costs related to shared segment operating activities to the segments using a methodology consistent with the expected benefit.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

The following tables summarize the identifiable assets at September 30, 2019, 2018 and 2017 and the provision for depreciation and amortization and the amount of capital expenditures for property for the years then ended for each of the reportable segments and Corporate (in millions):

	2019	2018	2017
Identifiable assets:			
Architecture & Software	\$ 1,410.5	\$ 1,788.9	\$ 2,482.8
Control Products & Solutions	2,114.8	2,094.9	2,078.2
Corporate	2,587.7	2,378.2	2,600.7
Total	<u>\$ 6,113.0</u>	<u>\$ 6,262.0</u>	<u>\$ 7,161.7</u>
Depreciation and amortization:			
Architecture & Software	\$ 63.8	\$ 72.5	\$ 69.3
Control Products & Solutions	69.6	72.4	75.0
Corporate	2.2	2.3	3.2
Total	135.6	147.2	147.5
Purchase accounting depreciation and amortization	16.6	17.4	21.4
Total	<u>\$ 152.2</u>	<u>\$ 164.6</u>	<u>\$ 168.9</u>
Capital expenditures for property:			
Architecture & Software	\$ 57.7	\$ 29.4	\$ 30.0
Control Products & Solutions	68.9	38.5	42.1
Corporate	6.2	57.6	69.6
Total	<u>\$ 132.8</u>	<u>\$ 125.5</u>	<u>\$ 141.7</u>

Identifiable assets at Corporate consist principally of cash, net deferred income tax assets, prepaid pension and property. Property shared by the segments and used in operating activities is also reported in Corporate identifiable assets and Corporate capital expenditures. Corporate identifiable assets include shared net property balances of \$244.7 million, \$234.4 million and \$259.3 million at September 30, 2019, 2018 and 2017, respectively, for which depreciation expense has been allocated to segment operating earnings based on the expected benefit to be realized by each segment. Corporate capital expenditures include \$6.2 million, \$57.6 million and \$69.6 million in 2019, 2018 and 2017, respectively, that will be shared by our operating segments.

We conduct a significant portion of our business activities outside the United States. The following tables present sales and property by geographic region (in millions):

	Sales			Property		
	2019	2018	2017	2019	2018	2017
North America	\$ 4,014.3	\$ 3,964.1	\$ 3,801.8	\$ 443.8	\$ 450.2	\$ 452.2
Europe, Middle East and Africa	1,249.8	1,286.8	1,193.7	60.5	53.3	52.5
Asia Pacific	908.6	933.3	866.4	41.9	42.9	40.0
Latin America	522.1	481.8	449.4	25.7	30.4	39.2
Total	<u>\$ 6,694.8</u>	<u>\$ 6,666.0</u>	<u>\$ 6,311.3</u>	<u>\$ 571.9</u>	<u>\$ 576.8</u>	<u>\$ 583.9</u>

We attribute sales to the geographic regions based on the country of destination. Sales in North America include \$3,640.2 million related to the U.S.

In most countries, we sell primarily through independent distributors in conjunction with our direct sales force. In other countries, we sell through a combination of our direct sales force and to a lesser extent, through independent distributors. We sell large systems and service offerings principally through our direct sales force, though opportunities are sometimes identified through distributors. Sales to our largest distributor in 2019, 2018 and 2017, which are attributable to both segments, were approximately 10 percent of our total sales.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)
18. Quarterly Financial Information (Unaudited)

(in millions, except per share amounts)	2019 Quarters				2019
	First	Second	Third	Fourth	
Sales	\$ 1,642.3	\$ 1,657.2	\$ 1,665.1	\$ 1,730.2	\$ 6,694.8
Gross profit	738.7	708.2	730.3	722.9	2,900.1
Income before income taxes	120.8	402.4	321.4	56.4	901.0
Net income	80.3	346.0	261.4	8.1	695.8
Earnings per share:					
Basic	0.67	2.91	2.22	0.07	5.88
Diluted	0.66	2.88	2.20	0.07	5.83

(in millions, except per share amounts)	2018 Quarters				2018
	First	Second	Third	Fourth	
Sales	\$ 1,586.6	\$ 1,651.2	\$ 1,698.7	\$ 1,729.5	\$ 6,666.0
Gross profit	700.2	703.9	744.7	736.1	2,884.9
Income before income taxes	297.8	299.6	251.7	481.7	1,330.8
Net (loss) income	(236.4)	227.4	198.6	345.9	535.5
(Loss) Earnings per share:					
Basic	(1.84)	1.79	1.60	2.84	4.27
Diluted	(1.84)	1.77	1.58	2.80	4.21

Note: The sum of the quarterly per share amounts will not necessarily equal the annual per share amounts presented.

19. Subsequent Event

On October 1, 2019, we completed the formation of a joint venture, Sensia, the first fully integrated digital oilfield automation solutions provider. Sensia operates as an independent entity, with Rockwell Automation owning 53% and Schlumberger owning 47% of the joint venture. As part of the transaction, we made a \$250 million payment to Schlumberger, which was funded by cash on hand. See the contractual cash obligations table under Financial Condition in MD&A. We control Sensia and, as of October 1, 2019, have consolidated Sensia in our financial results.

As of October 1, 2019, Rockwell Automation will record a preliminary purchase price allocation for the assets acquired and liabilities assumed in connection with the formation of Sensia based on their estimated fair values as of the acquisition date, October 1, 2019. We have not completed our analysis of estimating the fair value of intangible assets acquired, specifically customer relationships. The preliminary purchase price allocation is as follows (in millions):

	Purchase Price Allocation
Net current and tangible assets	\$ 86.9
Goodwill and intangible assets	563.4
Total assets acquired	650.3
Less: current liabilities assumed	(25.3)
Less: noncontrolling interest portion	(294.0)
Net assets acquired	\$ 331.0
	Purchase consideration
Cash	\$ 250.0
Noncontrolling interest portion of Rockwell Automation's contributed business	32.0
Additional paid in capital adjustment	42.0
Other	7.0
Net purchase consideration	\$ 331.0

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

We will assign the full amount of goodwill to our Control Products & Solutions segment. Some of the goodwill recorded is expected to be deductible for tax purposes.

The allocation of the purchase price to identifiable assets is based on the preliminary valuations performed to determine the fair value of the net assets as of the acquisition date. The measurement period for the valuation of net assets acquired ends as soon as information on the facts and circumstances that existed as of the acquisition date becomes available, but not to exceed 12 months following the acquisition date. Adjustments in purchase price allocations may require a change in the amounts allocated to net assets during the periods in which the adjustments are determined. The fair value of the noncontrolling interest of the contributed business upon acquisition was \$294 million. The consolidated value of Sensia will be recorded at fair value for Schlumberger's contribution and at carrying value for Rockwell Automation's contribution.

We expensed an immaterial amount of acquisition-related costs in the year ended September 30, 2019.

Pro forma financial information

Pro forma consolidated sales for the year ended September 30, 2019 are approximately \$6.9 billion and the impact on earnings is not material. The preceding pro forma consolidated financial results of operations are as if the 2019 formation of Sensia occurred on October 1, 2018. The pro forma information is presented for informational purposes only and is not indicative of the results of operations that would have been achieved had the transaction occurred as of that time.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Shareowners of

Rockwell Automation, Inc.

Milwaukee, Wisconsin

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated balance sheets of Rockwell Automation, Inc. and subsidiaries (the “Company”) as of September 30, 2019 and 2018, and the related consolidated statements of operations, comprehensive income, cash flows, and shareowners’ equity for each of the three years in the period ended September 30, 2019, and the related notes and schedule listed in the Index at Item 15 (a)(2) (collectively referred to as the “financial statements”). We also have audited the Company’s internal control over financial reporting as of September 30, 2019, 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 September 30, 2019 and 2018, and the results of its operations and its cash flows for each of the three years in the period ended September 30, 2019, 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 September 30, 2019, based on criteria established in *Internal Control — Integrated Framework (2013)* issued by COSO.

Basis for Opinions

The Company’s management is responsible for these financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management’s Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on these financial statements and financial statement schedule and an opinion 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 audit to obtain reasonable assurance about whether the 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 financial statements included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures to respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. 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 (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company’s assets that could have a material effect on the financial statements.

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

Critical Audit Matter

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

Retirement Benefits - U.S. Pension Benefit Obligation - Refer to Note 13 to the financial statements

Critical Audit Matter Description

The Company's pension benefit obligation is actuarially determined on an annual basis. The determination of the pension benefit obligation requires management to make significant judgments related to the selection of discount rates. Changes in discount rates could have a significant impact on the pension benefit obligation. Management selected discount rates based upon an analysis of a hypothetical portfolio of bonds that match the expected cash flow of their pension plans.

The Company had a pension benefit obligation of \$4,907 million as of September 30, 2019, of which approximately 76% is related to the U.S. pension plans. If the discount rate for the U.S. pension plans were to change by 25 basis points, the effect would be a \$141 million change in the U.S. projected benefit obligation.

Given the significance of the U.S. pension obligation and its sensitivity to a change in the discount rate, performing audit procedures to evaluate whether management's judgments regarding the selection of the discount rate for the U.S. pension plans was appropriate required a high degree of auditor judgment and an increased extent of effort, including the need to involve our actuarial specialists.

How the Critical Audit Matter Was Addressed in the Audit

Our audit procedures related to the selection of the discount rate for the U.S. pension plans included the following, among others:

- We tested the effectiveness of controls over management's accounting for their pension obligation, including those over the selection of the discount rate.
- With the assistance of our actuarial specialists, we evaluated the Company's selection of the discount rate by:
 - Assessing the appropriateness of the bonds included in the analysis used by management by evaluating the criteria used to select bonds, and by testing the characteristics and investment grade of the bonds selected.
 - Testing the mathematical accuracy of the analysis used by management through recalculation.
 - Benchmarking the analysis used by management against an independent yield curve analysis.

/s/ DELOITTE & TOUCHE LLP

Milwaukee, Wisconsin

November 12, 2019

We have served as the Company's auditor since 1967.

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

Under the supervision and with the participation of our management, including the Chief Executive Officer and Chief Financial Officer, we have evaluated the effectiveness, as of September 30, 2019, of our disclosure controls and procedures, as defined in Rule 13a-15(e) and Rule 15d-15(e) under the Exchange Act. Based on that evaluation, our Chief Executive Officer and Chief Financial Officer have concluded that our disclosure controls and procedures were effective as of September 30, 2019.

Management's Report on Internal Control Over Financial Reporting

We are responsible for establishing and maintaining adequate internal control over financial reporting, as defined in Rule 13a-15(f) under the Exchange Act. Our internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of our financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. Under the supervision and with the participation of our management, including the Chief Executive Officer and Chief Financial Officer, we evaluated the effectiveness of our internal control over financial reporting based on the framework in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Based on that evaluation, management has concluded that our internal control over financial reporting was effective as of September 30, 2019.

The effectiveness of our internal control over financial reporting, as of September 30, 2019, has been audited by Deloitte & Touche LLP, as stated in their report that is included on the previous two pages.

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.

Changes in Internal Control Over Financial Reporting

There has not been any change in our internal control over financial reporting (as such term is defined in Rule 13a-15(f) under the Exchange Act) during the fiscal quarter to which this report relates that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting. We are currently evaluating the impact that the formation of Sensia on October 1, 2019 may have on our control environment.

Item 9B. *Other Information*

None.

PART III

Item 10. Directors, Executive Officers and Corporate Governance

Other than the information below, the information required by this Item 10 is incorporated by reference to the sections entitled *Corporate Governance, Election of Directors*, and *Stock Ownership Information* in the Proxy Statement.

No nominee for director was selected pursuant to any arrangement or understanding between the nominee and any person other than the Company pursuant to which such person is or was to be selected as a director or nominee. See also the information about executive officers of the Company under Item 4A of Part I.

We have adopted a code of ethics that applies to our executive officers, including the principal executive officer, principal financial officer and principal accounting officer. A copy of our Code of Conduct is posted on our Internet site at <https://www.rockwellautomation.com> under the “Investors” link. In the event that we amend or grant any waiver from a provision of the code of ethics that applies to the principal executive officer, principal financial officer or principal accounting officer and that requires disclosure under applicable SEC rules, we intend to disclose such amendment or waiver and the reasons therefor on our Internet site.

Item 11. Executive Compensation

The information required by this Item 11 is incorporated by reference to the sections entitled *Executive Compensation, Election of Directors, Corporate Governance*, and *Compensation Committee Report* in the Proxy Statement.

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

Other than the information below, the information required by this Item 12 is incorporated by reference to the section entitled *Stock Ownership Information* in the Proxy Statement.

The following table provides information, as of September 30, 2019, about our common stock that may be issued upon the exercise of options, warrants and rights granted to employees, consultants or directors under all of our existing equity compensation plans, including our 2012 Long-Term Incentives Plan, 2008 Long-Term Incentives Plan, and 2003 Directors Stock Plan.

Plan Category	Number of Securities 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 Securities Remaining Available for Future Issuance under Equity Compensation Plans (excluding Securities reflected in Column (a)) (c)
Equity compensation plans approved by shareowners	4,580,630 ⁽¹⁾	\$ 139.53 ⁽²⁾	3,588,730 ⁽³⁾
Equity compensation plans not approved by shareowners	—	n/a	—
Total	4,580,630	\$ 139.53	3,588,730

⁽¹⁾ Represents outstanding options and shares issuable in payment of outstanding performance shares (at maximum payout) and restricted stock units under our 2012 Long-Term Incentives Plan, 2008 Long-Term Incentives Plan, and 2003 Directors Stock Plan.

⁽²⁾ Represents the weighted average exercise price of outstanding options and does not take into account the performance shares and restricted stock units.

⁽³⁾ Represents 3,375,304 and 213,426 shares available for future issuance under our 2012 Long-Term Incentives Plan and our 2003 Directors Stock Plan, respectively.

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

The information required by this Item 13 is incorporated by reference to the sections entitled *Corporate Governance* and *Election of Directors* in the Proxy Statement.

Item 14. *Principal Accountant Fees and Services*

The information required by this Item 14 is incorporated by reference to the section entitled *Audit Matters* in the Proxy Statement.

PART IV**Item 15. Exhibits and Financial Statement Schedule**

(a) Financial Statements, Financial Statement Schedule and Exhibits

(1) Financial Statements (all financial statements listed below are those of the Company and its consolidated subsidiaries)

	<u>Page</u>
Consolidated Balance Sheet, September 30, 2019 and 2018	38
Consolidated Statement of Operations, years ended September 30, 2019, 2018 and 2017	39
Consolidated Statement of Comprehensive Income, years ended September 30, 2019, 2018 and 2017	40
Consolidated Statement of Cash Flows, years ended September 30, 2019, 2018 and 2017	41
Consolidated Statement of Shareowners' Equity, years ended September 30, 2019, 2018 and 2017	42
Notes to Consolidated Financial Statements	43
Report of Independent Registered Public Accounting Firm	86

(2) Financial Statement Schedule for the years ended September 30, 2019, 2018 and 2017

	<u>Page</u>
Schedule II—Valuation and Qualifying Accounts	S-1

Schedules not filed herewith are omitted because of the absence of conditions under which they are required or because the information called for is shown in the consolidated financial statements or notes thereto.

(3) Exhibits

3-a	Restated Certificate of Incorporation of the Company, filed as Exhibit 3 to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2002, is hereby incorporated by reference.
3-b	By-Laws of the Company, as amended and restated effective June 8, 2016, filed as Exhibit 3.2 to the Company's Current Report on Form 8-K dated June 10, 2016, are hereby incorporated by reference.
4-a-1	Indenture dated as of December 1, 1996 between the Company and The Bank of New York Trust Company, N.A. (formerly JPMorgan Chase, successor to The Chase Manhattan Bank, successor to Mellon Bank, N.A.), as Trustee, filed as Exhibit 4-a to Registration Statement No. 333-43071, is hereby incorporated by reference.
4-a-2	Form of certificate for the Company's 6.70% Debentures due January 15, 2028, filed as Exhibit 4-b to the Company's Current Report on Form 8-K dated January 26, 1998, is hereby incorporated by reference.
4-a-3	Form of certificate for the Company's 5.20% Debentures due January 15, 2098, filed as Exhibit 4-c to the Company's Current Report on Form 8-K dated January 26, 1998, is hereby incorporated by reference.
4-a-4	Form of certificate for the Company's 6.25% Debentures due December 31, 2037, filed as Exhibit 4.2 to the Company's Current Report on Form 8-K dated December 3, 2007, is hereby incorporated by reference.
4-a-5	Form of certificate for the Company's 2.050% Notes due March 1, 2020, filed as Exhibit 4.1 to the Company's Current Report on Form 8-K dated February 17, 2015, is hereby incorporated by reference.
4-a-6	Form of certificate for the Company's 2.875% Notes due March 1, 2025, filed as Exhibit 4.2 to the Company's Current Report on Form 8-K dated February 17, 2015, is hereby incorporated by reference.
4-a-7	Form of certificate for the Company's 3.500% Notes due March 1, 2029, filed as Exhibit 4.1 to the Company's Current Report on Form 8-K dated March 1, 2019, is hereby incorporated by reference.
4-a-8	Form of certificate for the Company's 4.200% Notes due March 1, 2049, filed as Exhibit 4.2 to the Company's Current Report on Form 8-K dated March 1, 2019, is hereby incorporated by reference.
4-a-9	Description of the Company's Securities.

- [*10-a-1](#) [Copy of the Company's 2003 Directors Stock Plan, filed as Exhibit 4-d to the Company's Registration Statement on Form S-8 \(No. 333-101780\), is hereby incorporated by reference.](#)
- [*10-a-2](#) [Memorandum of Amendments to the Company's 2003 Directors Stock Plan approved and adopted by the Board of Directors of the Company on April 25, 2003, filed as Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2003, is hereby incorporated by reference.](#)
- [*10-a-3](#) [Memorandum of Amendments to the Company's 2003 Directors Stock Plan approved and adopted by the Board of Directors of the Company on November 7, 2007, filed as Exhibit 10.3 to the Company's Quarterly Report on Form 10-Q for the quarter ended December 31, 2007, is hereby incorporated by reference.](#)
- [*10-a-4](#) [Memorandum of Amendments to the Company's 2003 Directors Stock Plan approved and adopted by the Board of Directors of the Company on September 3, 2008, filed as Exhibit 10-b-16 to the Company's Annual Report on Form 10-K for the year ended September 30, 2008, is hereby incorporated by reference.](#)
- [*10-a-5](#) [Form of Restricted Stock Unit Agreement under Section 6 of the Company's 2003 Director's Stock Plan, as amended, filed as Exhibit 10.3 to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2008, is hereby incorporated by reference.](#)
- [*10-a-6](#) [Copy of the Company's Directors Deferred Compensation Plan approved and adopted by the Board of Directors of the Company on November 5, 2008, filed as Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q for the quarter ended December 31, 2008, is hereby incorporated by reference.](#)
- [*10-a-7](#) [Summary of Non-Employee Director Compensation and Benefits as of October 1, 2019, filed as Exhibit 10 to the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2019, is hereby incorporated by reference.](#)
- [*10-b-1](#) [Copy of the Company's 2008 Long-Term Incentives Plan, as amended and restated through June 4, 2010, filed as Exhibit 99 to the Company's Current Report on Form 8-K dated June 10, 2010, is hereby incorporated by reference.](#)
- [*10-b-2](#) [Form of Stock Option Agreement under the Company's 2008 Long-Term Incentives Plan, filed as Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2008, is hereby incorporated by reference.](#)
- [*10-b-3](#) [Forms of Stock Option Agreement under the Company's 2008 Long-Term Incentives Plan for options granted to executive officers of the Company after December 1, 2008, filed as Exhibit 10.3 to the Company's Quarterly Report on Form 10-Q for the quarter ended December 31, 2008, is hereby incorporated by reference.](#)
- [*10-b-4](#) [Form of Stock Option Agreement under the Company's 2008 Long-Term Incentives Plan, as amended, for options granted to executive officers of the Company after December 6, 2010, filed as Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q for the quarter ended December 31, 2010, is hereby incorporated by reference.](#)
- [*10-b-5](#) [Form of Stock Option Agreement under the Company's 2008 Long-Term Incentives Plan, as amended, for options granted to executive officers of the Company after November 30, 2011, filed as Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q for the quarter ended December 31, 2011, is hereby incorporated by reference.](#)
- [*10-b-6](#) [Copy of the Company's 2012 Long-Term Incentives Plan, as amended and restated through February 2, 2016, filed as Exhibit 4-c to the Company's Registration Statement on Form S-8 \(No. 333-209706\), is hereby incorporated by reference.](#)
- [*10-b-7](#) [Form of Stock Option Agreement under the Company's 2012 Long-Term Incentives Plan for options granted to executive officers of the Company after December 5, 2012, filed as Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q for the quarter ended December 31, 2012, is hereby incorporated by reference.](#)
- [*10-b-8](#) [Form of Restricted Stock Agreement under the Company's 2012 Long-Term Incentives Plan for shares of restricted stock awarded to executive officers of the Company after December 5, 2012, filed as Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q for the quarter ended December 31, 2012 is hereby incorporated by reference.](#)
- [*10-b-9](#) [Form of Performance Share Agreement under the Company's 2012 Long-Term Incentives Plan for performance shares awarded to executive officers of the Company after December 5, 2012, filed as Exhibit 10.3 to the Company's Quarterly Report on Form 10-Q for the quarter ended December 31, 2012 is hereby incorporated by reference.](#)
- [*10-b-10](#) [Form of Restricted Stock Agreement under the Company's 2012 Long-Term Incentives Plan for certain awards of shares of restricted stock to executive officers of the Company after October 29, 2019.](#)

- [*10-c-1](#) [Copy of the Company's Deferred Compensation Plan, as amended and restated September 6, 2006, filed as Exhibit 10-f to the Company's Annual Report on Form 10-K for the year ended September 30, 2006, is hereby incorporated by reference.](#)
- [*10-c-2](#) [Memorandum of Proposed Amendment and Restatement of the Company's Deferred Compensation Plan approved and adopted by the Board of Directors of the Company on November 7, 2007, filed as Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q for the quarter ended December 31, 2007, is hereby incorporated by reference.](#)
- [*10-d-1](#) [Copy of the Company's Annual Incentive Compensation Plan for Senior Executive Officers, as amended December 3, 2003, filed as Exhibit 10-i-1 to the Company's Annual Report for the year ended September 30, 2004, is hereby incorporated by reference.](#)
- [*10-d-2](#) [Copy of the Company's Incentive Compensation Plan, filed as Exhibit 10 to the Company's Current Report on Form 8-K dated September 7, 2005, is hereby incorporated by reference.](#)
- [*10-e-1](#) [Change of Control Agreement dated as of September 30, 2019 between the Company and Blake D. Moret, filed as Exhibit 99.1 to the Company's Current Report on Form 8-K dated October 1, 2019, is hereby incorporated by reference.](#)
- [*10-e-2](#) [Form of Change of Control Agreement between the Company and each of Patrick P. Goris, Frank C. Kulaszewicz, and Sujcet Chand and certain other officers filed as Exhibit 99.2 to the Company's Current Report on Form 8-K dated October 1, 2019, is hereby incorporated by reference.](#)
- [*10-e-3](#) [Letter Agreement dated September 3, 2009 between Registrant and Theodore D. Crandall, filed as Exhibit 99.2 to the Company's Current Report on Form 8-K dated September 8, 2009, is hereby incorporated by reference.](#)
- [*10-e-4](#) [Letter Agreement dated July 1, 2016 between Registrant and Blake D. Moret, filed as Exhibit 10.3 to the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2016, is hereby incorporated by reference.](#)
- [*10-e-5](#) [Letter Agreement dated February 7, 2017 between Registrant and Patrick P. Goris, filed as Exhibit 10 to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2017, is hereby incorporated by reference.](#)
- [*10-f](#) [Rockwell Automation Consultant Agreement, dated as of February 20, 2019, between the Company and Theodore Crandall, filed as Exhibit 99 to the Company's Current Report on Form 8-K dated February 22, 2019, is hereby incorporated by reference.](#)
- [10-g-1](#) [Agreement and Plan of Distribution dated as of December 6, 1996, among Rockwell International Corporation \(renamed Boeing North American, Inc.\), the Company \(formerly named New Rockwell International Corporation\), Allen-Bradley Company, Inc., Rockwell Collins, Inc., Rockwell Semiconductor Systems, Inc., Rockwell Light Vehicle Systems, Inc. and Rockwell Heavy Vehicle Systems, Inc., filed as Exhibit 10-b to the Company's Quarterly Report on Form 10-Q for the quarter ended December 31, 1996, is hereby incorporated by reference.](#)
- [10-g-2](#) [Post-Closing Covenants Agreement dated as of December 6, 1996, among Rockwell International Corporation \(renamed Boeing North American, Inc.\), The Boeing Company, Boeing NA, Inc. and the Company \(formerly named New Rockwell International Corporation\), filed as Exhibit 10-c to the Company's Quarterly Report on Form 10-Q for the quarter ended December 31, 1996, is hereby incorporated by reference.](#)
- [10-g-3](#) [Tax Allocation Agreement dated as of December 6, 1996, among Rockwell International Corporation \(renamed Boeing North American, Inc.\), the Company \(formerly named New Rockwell International Corporation\) and The Boeing Company, filed as Exhibit 10-d to the Company's Quarterly Report on Form 10-Q for the quarter ended December 31, 1996, is hereby incorporated by reference.](#)
- [10-h-1](#) [Distribution Agreement dated as of September 30, 1997 by and between the Company and Meritor Automotive, Inc., filed as Exhibit 2.1 to the Company's Current Report on Form 8-K dated October 10, 1997, is hereby incorporated by reference.](#)
- [10-h-2](#) [Employee Matters Agreement dated as of September 30, 1997 by and between the Company and Meritor Automotive, Inc., filed as Exhibit 2.2 to the Company's Current Report on Form 8-K dated October 10, 1997, is hereby incorporated by reference.](#)
- [10-h-3](#) [Tax Allocation Agreement dated as of September 30, 1997 by and between the Company and Meritor Automotive, Inc., filed as Exhibit 2.3 to the Company's Current Report on Form 8-K dated October 10, 1997, is hereby incorporated by reference.](#)
- [10-i-1](#) [Distribution Agreement dated as of June 29, 2001 by and among the Company, Rockwell Collins, Inc. and Rockwell Scientific Company LLC, filed as Exhibit 2.1 to the Company's Current Report on Form 8-K dated July 11, 2001, is hereby incorporated by reference.](#)

[Table of Contents](#)

10-i-2	Employee Matters Agreement dated as of June 29, 2001 by and among the Company, Rockwell Collins, Inc. and Rockwell Scientific Company LLC, filed as Exhibit 2.2 to the Company's Current Report on Form 8-K dated July 11, 2001, is hereby incorporated by reference.
10-i-3	Tax Allocation Agreement dated as of June 29, 2001 by and between the Company and Rockwell Collins, Inc., filed as Exhibit 2.3 to the Company's Current Report on Form 8-K dated July 11, 2001, is hereby incorporated by reference.
10-j-1	\$1,250,000,000 Five-Year Credit Agreement dated as of November 13, 2018 among the Company, the Banks listed on the signature pages thereof, Bank of America, N.A., as Administrative Agent, filed as Exhibit 99 to the Company's Current Report on Form 8-K dated November 15, 2018, is hereby incorporated by reference.
10-k	Purchase and Sale Agreement dated as of August 24, 2005 by and between the Company and First Industrial Acquisitions, Inc., including the form of Lease Agreement attached as Exhibit I thereto, together with the First Amendment to Purchase and Sale Agreement dated as of September 30, 2005 and the Second Amendment to Purchase and Sale Agreement dated as of October 31, 2005, filed as Exhibit 10-p to the Company's Annual Report on Form 10-K for the year ended September 30, 2005, is hereby incorporated by reference.
10-l-1	Purchase Agreement, dated as of November 6, 2006, by and among Rockwell Automation, Inc., Rockwell Automation of Ohio, Inc., Rockwell Automation Canada Control Systems, Grupo Industrias Reliance S.A. de C.V., Rockwell Automation GmbH (formerly known as Rockwell International GmbH) and Baldor Electric Company, contained in the Company's Current Report on Form 8-K dated November 9, 2006, is hereby incorporated by reference.
10-l-2	First Amendment to Purchase Agreement dated as of January 24, 2007 by and among Rockwell Automation, Inc., Rockwell Automation of Ohio, Inc., Rockwell Automation Canada Control Systems, Grupo Industrias Reliance S.A. de C.V., Rockwell Automation GmbH and Baldor Electric Company, filed as Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2007, is hereby incorporated by reference.
10-m-1	Securities Purchase Agreement, dated June 11, 2018, between the Company and PTC Inc., filed as Exhibit 10.1 to the Company's Current Report on Form 8-K dated June 11, 2018, is hereby incorporated by reference.
10-m-2	Registration Rights Agreement dated July 19, 2018, between the Company and PTC Inc., filed as Exhibit 10.1 to the Company's Current Report on Form 8-K dated as July 20, 2018, is hereby incorporated by reference.
21	List of Subsidiaries of the Company.
23	Consent of Independent Registered Public Accounting Firm.
24	Powers of Attorney authorizing certain persons to sign this Annual Report on Form 10-K on behalf of certain directors and officers of the Company.
31.1	Certification of Periodic Report by the Chief Executive Officer pursuant to Rule 13a-14(a) of the Securities Exchange Act of 1934.
31.2	Certification of Periodic Report by the Chief Financial Officer pursuant to Rule 13a-14(a) of the Securities Exchange Act of 1934.
32.1	Certification of Periodic Report by the Chief Executive Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.2	Certification of Periodic Report by the Chief Financial Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101	Interactive Data Files.

* Management contract or compensatory plan or arrangement.

Item 16. Form 10-K Summary

None.

SIGNATURES

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

ROCKWELL AUTOMATION, INC.

By /s/ PATRICK P. GORIS

Patrick P. Goris
Senior Vice President and
Chief Financial Officer

Dated: November 12, 2019

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below on the 12th day of November 2019 by the following persons on behalf of the registrant and in the capacities indicated.

By /s/ PATRICK P. GORIS

Patrick P. Goris
Senior Vice President and
Chief Financial Officer
(Principal Financial Officer)

By /s/ DAVID M. DORGAN

David M. Dorgan
Vice President and Controller
(Principal Accounting Officer)

Blake D. Moret*
Chairman of the Board, President and
Chief Executive Officer
(Principal Executive Officer)
and Director

J. Phillip Holloman*
Director

Steven R. Kalmanson*
Director

James P. Keane*
Director

Lawrence D. Kingsley*
Director

Pam Murphy*
Director

Donald R. Parfet *
Director

Lisa A. Payne*
Director

Thomas W. Rosamilia*
Director

Patricia A. Watson*
Director

*By /s/ REBECCA W. HOUSE

ROCKWELL AUTOMATION, INC.

VALUATION AND QUALIFYING ACCOUNTS

For the Years Ended September 30, 2019, 2018 and 2017

(in millions) Description	Balance at Beginning of Year	Additions		Deductions ^(b)	Balance at End of Year
		Charged to Costs and Expenses	Charged to Other Accounts		
Year ended September 30, 2019					
Allowance for doubtful accounts ^(a)	\$ 17.1	\$ 6.1	\$ —	\$ 5.8	\$ 17.4
Valuation allowance for deferred tax assets	27.0	69.3	—	2.5	93.8
Year ended September 30, 2018					
Allowance for doubtful accounts ^(a)	\$ 24.9	\$ 0.1	\$ —	\$ 7.9	\$ 17.1
Valuation allowance for deferred tax assets	18.6	8.9	—	0.5	27.0
Year ended September 30, 2017					
Allowance for doubtful accounts ^(a)	\$ 24.5	\$ 5.0	\$ —	\$ 4.6	\$ 24.9
Valuation allowance for deferred tax assets	17.3	1.5	0.4	0.6	18.6

(a) Includes allowances for current and other long-term receivables.

(b) Consists of amounts written off for the allowance for doubtful accounts and adjustments resulting from our ability to utilize foreign tax credits, capital losses, or net operating loss carryforwards for which a valuation allowance had previously been recorded.

INDEX TO EXHIBITS*

Exhibit No. Exhibit

[4-a-9 Description of the Company's Securities.](#)

[**10-b-10 Form of Restricted Stock Agreement under the Company's 2012 Long-Term Incentives Plan for certain awards of shares of restricted stock to executive officers of the Company after October 29, 2019.](#)

[21 List of Subsidiaries of the Company.](#)

[23 Consent of Independent Registered Public Accounting Firm.](#)

[24 Powers of Attorney authorizing certain persons to sign this Annual Report on Form 10-K on behalf of certain directors and officers of the Company.](#)

[31.1 Certification of Periodic Report by the Chief Executive Officer pursuant to Rule 13a-14\(a\) of the Securities Exchange Act of 1934.](#)

[31.2 Certification of Periodic Report by the Chief Financial Officer pursuant to Rule 13a-14\(a\) of the Securities Exchange Act of 1934.](#)

[32.1 Certification of Periodic Report by the Chief Executive Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.](#)

[32.2 Certification of Periodic Report by the Chief Financial Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.](#)

101 Interactive Data Files.

* See Part IV, Item 15(a)(3) for exhibits incorporated by reference.

** Management contract or compensatory plan or arrangement.

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

As of September 30, 2019, Rockwell Automation, Inc. (“we”, “us”, “our”, “Rockwell Automation” or the “Company”) had one class of securities registered under Section 12 of the Securities Exchange Act of 1934, as amended: our common stock.

DESCRIPTION OF CAPITAL STOCK

The following summary of the terms of our capital stock is based upon our [restated certificate of incorporation](#) and our [amended and restated by-laws](#). The summary is not complete, and is qualified by reference to our restated certificate of incorporation and our amended and restated by-laws, which are filed as exhibits to our Annual Report on Form 10-K and are incorporated by reference herein.

Authorized Shares of Capital Stock

We are authorized to issue:

- 1,000,000,000 shares of common stock with a par value of \$1 per share, which are of a class designated Common Stock (“Common Stock”);
- 100,000,000 shares of common stock with a par value of \$1 per share, which are of a class designated Class A Common Stock (“Class A Common Stock” and, together with the Common Stock, the “Rockwell Common Stock”); and
- 25,000,000 shares of preferred stock, without par value, which are of a class designated Preferred Stock, of which 2,500,000 shares are designated as Series A Junior Participating Preferred Stock (“Series A Preferred Stock”).

The authorized shares of Rockwell Common Stock and preferred stock are available for issuance without further action by our shareowners, unless the action is required by applicable law or the rules of any stock exchange or automated quotation system on which our securities may be listed or traded.

There are no shares of Class A Common Stock or preferred stock outstanding.

The outstanding shares of our Common Stock are fully paid and nonassessable.

Listing

Our Common Stock is listed on the New York Stock Exchange and trades under the symbol “ROK”.

Transfer Agent

EQ Shareowner Services is the transfer agent for our Common Stock.

Rockwell Common Stock

Voting Rights

Each holder of Common Stock is entitled to one vote for each share of Common Stock outstanding in the holder's name and each holder of Class A Common Stock is entitled to ten votes for each share of Class A Common Stock outstanding in the holder's name. Except as otherwise provided in our restated certificate of incorporation or required by law, holders of Common Stock and Class A Common Stock vote on all matters (including the election of directors) together as one class and together with any other series or class of our stock accorded that class voting right. No holder of Rockwell Common Stock is entitled to cumulate votes in voting for directors.

The affirmative vote of the holders of a majority of the Common Stock and Class A Common Stock, each voting separately as a class, is required to (i) authorize additional shares of Class A Common Stock, (ii) modify or eliminate the provision of our restated certificate of incorporation that prohibits any further issuance of Class A Common Stock after the distribution of shares of Class A Common Stock to the holders of Class A Common Stock of the former Rockwell International Corporation, subject to certain exceptions, or (iii) adopt any amendment to our restated certificate of incorporation that alters or changes the designations or powers or the preferences, qualifications, limitations, restrictions or the relative or special rights of either the Common Stock or the Class A Common Stock so as to affect the holders of shares of such class adversely.

Subject to the rights of the holders of any series of our preferred stock or any other series or class of stock, as provided in our restated certificate of incorporation (or any applicable certificate of designation), any director may be removed from office at any time, but only for cause and only by the affirmative vote of the holders of at least 80 percent of the voting power of all of the then outstanding shares of our capital stock entitled to vote generally in the election of directors (the "Voting Stock"), voting together as a single class.

The affirmative vote by the holders of at least 80 percent of the voting power of the Voting Stock, voting together as a single class, is also required to approve, among other things, (i) certain sales, mergers, consolidations, reclassifications or other business combinations (as further described below) and (ii) amendments or repeals of certain provisions of our restated certificate of incorporation, including those related to (A) the number of directors serving on our board of directors, (B) our classified board of directors, (C) removal of directors by our shareowners for cause, (D) the manner in which our restated certificate of incorporation and amended and restated by-laws may be amended, altered or repealed or (E) the procedures for calling a special meeting of shareowners and the prohibition on our shareowners acting by written consent.

Dividends

Holders of Rockwell Common Stock are entitled to such dividends as may be declared by our board of directors out of funds legally available for such purpose. Dividends may not be paid on Rockwell Common Stock unless all accrued dividends on our preferred stock, if any, have been paid or declared and a sum sufficient for the payment thereof set aside. Dividends or distributions are paid or made equally to holders of Common Stock and Class A Common Stock, as if a single class, except that if any dividend is declared in shares of Common Stock or Class A Common Stock, that dividend payable on shares of Common Stock will be payable in shares of Common Stock and that dividend payable on shares of Class A Common Stock will be payable in shares of Class A Common Stock.

Rights Upon Liquidation

In the event of our liquidation, dissolution or winding up, after the payment or setting apart for payment to the holders of any outstanding preferred stock of the full preferential amounts to which those holders are entitled, all of our remaining assets will be distributable in equal amounts per share to the holders of Rockwell Common Stock.

Other Rights and Preferences

No holder of shares of Class A Common Stock may transfer such shares or any interest therein except to such holder's spouse, certain other relatives of such holder, certain trusts established for the benefit of, partnership comprised solely of, or corporations wholly owned by, the holder or such relatives, charitable organizations controlled by the holder or such holder's family members and to employees of Rockwell Automation upon distribution from an employee benefit or employee stock ownership plan.

Class A Common Stock is convertible, at all times and without cost to the holder, into Common Stock on a share-for-share basis. All shares of Class A Common Stock previously outstanding had converted into shares of Common Stock as of 1996.

Our restated certificate of incorporation provides that, unless otherwise determined by our board of directors, no holder of Rockwell Common Stock has any preemptive right to purchase or subscribe for any stock of any class which we may issue or sell. Except as described above, the Rockwell Common Stock has no sinking fund, redemption or conversion provisions or exchange rights.

Preferred Stock

General

Our restated certificate of incorporation authorizes our board of directors to determine, with respect to any series of our preferred stock, the terms and rights of that series, including:

- the designation of the series;

- the number of shares of the series, which number our board of directors may thereafter (except where otherwise provided in the applicable certificate of designation) increase or decrease (but not below the number of shares of the series then outstanding);
- whether dividends, if any, will be cumulative or noncumulative and, in the case of shares of any series having cumulative dividend rights, the date or dates or method of determining the date or dates from which dividends on the shares of that series will be cumulative;
- the rate of dividends (or method of determining dividends) payable to the holders of the shares of the series, any conditions upon which those dividends will be paid and the date or dates or the method for determining the date or dates upon which those dividends will be payable;
- the redemption rights and price or prices, if any, for shares of the series;
- the terms and amount of any sinking fund provided for the purchase or redemption of the shares of the series;
- amounts payable on and the preferences, if any, of shares of the series in the event of any voluntary or involuntary liquidation or dissolution of Rockwell Automation or winding up of our affairs;
- whether the shares of the series will be convertible or exchangeable into shares of any other class or series, or any other security, of Rockwell Automation or any other corporation, and, if so, the specification of that other class or series or that other security, the conversion or exchange price or prices or rate or rates, any adjustments thereof, the date or dates as of which those shares will be convertible or exchangeable and all other terms and conditions upon which that conversion or exchange may be made;
- restrictions on the issuance of shares of the same series or of any other class or series; and
- the voting rights, if any, of the holders of shares of the series.

Except as provided in our restated certificate of incorporation or in any applicable certificate of designation, the Rockwell Common Stock will have the exclusive right to vote for the election of directors and for all other purposes and holders of our preferred stock will not be entitled to receive notice of any meeting of shareowners at which they are not entitled to vote. The number of authorized shares of our preferred stock may be increased or decreased (but not below the number of shares then outstanding) by the affirmative vote of the holders of a majority of the Rockwell Common Stock, without a vote of the holders of our preferred stock, or any series thereof, unless a vote of any of those holders is required pursuant to any applicable certificate of designation.

Series A Preferred Stock

Voting Rights

Each share of Series A Preferred Stock will be entitled to 100 votes per share. The Series A Preferred Stock votes together with the Rockwell Common Stock as one class on all matters submitted to a vote of our shareowners, except as otherwise provided in any applicable certificate of designation for any other class of our preferred stock or by law.

The affirmative vote of the holders of at least two-thirds of the outstanding shares of Series A Preferred Stock is required to amend our restated certificate of incorporation in any manner which would materially alter or change the powers, preferences or special rights of the Series A Preferred Stock so as to affect the holders thereof adversely.

Except as otherwise provided by law, the Series A Preferred Stock has no special voting rights, and except to the extent the Series A Preferred Stock is entitled to vote with the Rockwell Common Stock, the consent of the Series A Preferred Stock is not be required for taking any corporate action.

Dividends

Holders of Series A Preferred Stock will be entitled to receive, when, as and if declared by our board of directors out of funds legally available therefor, quarterly dividends equal to the greater of (i) \$1 or (ii) 100 times the amount of cash dividends and 100 times the amount (payable in kind) of non-cash dividends or other distributions (other than stock dividends of Rockwell Common Stock) declared per share of Rockwell Common Stock. If at any time Rockwell Automation declares or pays a stock dividend payable in shares of Rockwell Common Stock, or effects a subdivision or combination or consolidation of shares of Rockwell Common Stock, then the amount to which holders of Series A Preferred Stock will be entitled under clause (ii) in the immediately preceding sentence will be adjusted in accordance with the antidilution provisions contained in our restated certificate of incorporation.

Dividends and distributions on the Series A Preferred Stock will be declared immediately after the declaration of the dividend or distribution on the shares of Rockwell Common Stock and will be payable quarterly on the second Monday of March, June, September and December in each year (a "Dividend Payment Date). In the event that no dividend or distribution is declared on the shares of Rockwell Common Stock, then a dividend of \$1 per share of Series A Preferred Stock will be payable on the next Dividend Payment Date. Dividends on the Series A Preferred Stock will accrue and be cumulative and accrued and unpaid dividends will not bear interest.

If quarterly dividends or other dividends or distributions payable on the Series A Preferred Stock are in arrears, until all accrued and unpaid dividends on the Series A Preferred Stock are paid in full, Rockwell Automation may not (i) declare or pay any dividend or distribution with respect to any stock ranking junior to the Series A Preferred Stock, (ii) declare or pay any dividend or distribution with respect to the any stock ranking on parity with the Series A Preferred Stock, other than *pro rata* distributions made on the Series A Preferred Stock and all of that parity stock, (iii)

redeem or purchase or otherwise acquire shares of any stock ranking junior to the Series A Preferred Stock (provided that Rockwell Automation may redeem or purchase or otherwise acquire shares of any of that junior stock in exchange for shares of any stock ranking junior to the Series A Preferred Stock) or (iv) redeem or purchase or otherwise acquire shares of any stock ranking on parity with the Series A Preferred Stock, except in accordance with a purchase offer made in writing or publication to all holders of those shares upon such terms as our board of directors, after consideration of the respective annual dividend rates and other relative rights and preferences of the respective series and classes, will determine in good faith will result in fair and equitable treatment among the respective series or classes.

Rights Upon Liquidation

In the event of our liquidation, dissolution or winding up, no distributions will be made with respect to (i) any shares of stock ranking junior to the Series A Preferred Stock, unless the holders of Series A Preferred Stock have received an amount per share equal to \$100 plus any dividends accrued but unpaid thereon, without interest, provided that those holders will be entitled to receive an amount per share equal to 100 times the amount to be distributed per share to holders of Rockwell Common Stock or (ii) any shares of stock ranking on parity with the Series A Preferred Stock, except for *pro rata* distributions made on the Series A Preferred Stock and all of that parity stock. If at any time Rockwell Automation declares or pays a stock dividend payable in shares of Rockwell Common Stock, or effects a subdivision or combination or consolidation of shares of Rockwell Common Stock, then the amount to which holders of Series A Preferred Stock will be entitled will be adjusted in accordance with the antidilution provisions contained in our restated certificate of incorporation.

Rights Upon Consolidation, Merger or Combination

If Rockwell Automation enters into any consolidation, merger, combination or other transaction in which shares of the Rockwell Common Stock are exchanged for or changed into other stock or securities, cash and/or other property, then each share of Series A Preferred Stock will at the same time be similarly exchanged or changed into an amount per share equal to 100 times the aggregate amount of stock, securities, cash and/or other property (payable in kind) into which or for which each share of Rockwell Common Stock is changed or exchanged. If at any time Rockwell Automation declares or pays a stock dividend payable in shares of Rockwell Common Stock, or effects a subdivision or combination or consolidation of shares of Rockwell Common Stock, then the amount to which holders of Series A Preferred Stock will be entitled with respect to the exchange or change will be adjusted in accordance with the antidilution provisions contained in our restated certificate of incorporation.

Other Rights and Preferences

Our restated certificate of incorporation provides that, unless otherwise determined by our board of directors, no holder of Series A Preferred Stock has any preemptive right to purchase or subscribe for any stock of any class which we may issue or sell.

Series A Preferred Stock is not redeemable and has no sinking fund, redemption or conversion provisions or exchange rights.

Business Combinations

Certain provisions described below that are contained in our restated certificate of incorporation and our amended and restated by-laws could render more difficult certain unsolicited or hostile attempts to take over Rockwell Automation. These provisions establish a classified board of directors whereby our directors are elected for staggered terms in office, permit newly created directorships resulting from any increase in the number of directors and any vacancies on our board of directors resulting from death, resignation, disqualification, removal or other cause to be filled by affirmative vote of a majority of the remaining directors then in office, even though less than a quorum of our board of directors, and not by our shareowners, require shareowners to provide advance notice of any shareowner nominations of directors or any proposal of new business to be considered at any meeting of shareowners, require a supermajority vote to remove a director or to amend or repeal our amended and restated by-laws or certain provisions of our restated certificate of incorporation, preclude shareowners from acting by written consent, preclude shareowners from calling a special meeting of shareowners (which may only be called by a majority of our board of directors) or bringing any business at a special meeting of shareowners, and include fair price provisions and other restrictions on certain business combinations.

“Fair Price” Provision

Our restated certificate of incorporation contains a “fair price” provision that applies to certain business combinations involving any person who beneficially owns (or is an Affiliate or Associate (each as defined in our restated certificate of incorporation) of Rockwell Automation and at any time within the two-year period immediately prior to the date in question owned) Voting Stock having 10 percent or more of the votes entitled to be cast by the holders of all then outstanding Voting Stock (an “Interested Shareowner”). The provision requires the affirmative vote of the holders of at least 80 percent of the combined voting power of the then outstanding shares of Voting Stock, voting together as a single class, to approve certain business combinations between the Interested Shareowner (or any Affiliate or Associate of any Interested Shareowner) and Rockwell Automation, including:

- any merger or consolidation;
- any sale, lease, exchange, mortgage, pledge, transfer or other disposition (in one or a series of transactions) involving our assets or securities or the assets or securities of any Interested Shareowner or any Affiliate or Associate of any Interested Shareowner having an aggregate fair market value of \$25,000,000 or more;
- the adoption of any plan or proposal for the liquidation or dissolution of Rockwell Automation proposed by or on behalf of an Interested Shareowner or any Affiliate or Associate of any Interested Shareowner;

- any reclassification of securities (including any reverse stock split), or recapitalization of Rockwell Automation, or any merger or consolidation of Rockwell Automation with any of its subsidiaries or any other transaction (whether or not with or into or otherwise involving an Interested Shareowner) that has the effect of increasing the proportionate share of any class or series of securities beneficially owned by any Interested Shareowner or any Affiliate or Associate of any Interested Shareowner; or
- any agreement, contract, arrangement or other understanding providing for any of the foregoing actions.

The 80 percent voting requirement will not apply if:

- the applicable business combination is approved by at least two-thirds of our Continuing Directors (as defined in our restated certificate of incorporation); or
- the aggregate amount of consideration to be received per share by holders of Common Stock in the applicable business combination is at least equal to the higher of:
 - the highest per share price paid by or on behalf of the Interested Shareowner for any shares of Common Stock acquired beneficially by it within the two-year period immediately prior to the first public announcement of the proposal of the applicable business combination (the “Announcement Date”) or in the transaction in which it became an Interested Shareowner, whichever is higher, plus interest compounded annually from the date on which the Interested Shareowner became an Interested Shareowner (the “Determination Date”) through the date of the consummation of the applicable business combination (the “Consummation Date”), less the aggregate amount of any dividends paid per share of Common Stock from the Determination Date through the Consummation Date; or
 - the fair market value per share of Common Stock on the Announcement Date or on the Determination Date, whichever is higher; and
- the aggregate amount of consideration to be received per share by holders of shares of any class or series of our capital stock, other than the Common Stock, in the applicable business combination is at least equal to the highest of:
 - the highest per share price paid by or on behalf of the Interested Shareowner for any shares of such class or series acquired beneficially by it within the two-year period immediately prior to the Announcement Date or in the transaction in which it became an Interested Shareowner, whichever is higher, plus interest compounded annually from the Determination Date through the Consummation Date, less the aggregate amount of any dividends paid per share of such class or series from the Determination Date through the Consummation Date;

- o the fair market value per share of such class or series on the Announcement Date or on the Determination Date, whichever is higher; or
- o the highest preferential amount per share to which the holders of shares of such class or series would be entitled in the event of any voluntary or involuntary liquidation, dissolution or winding up of our affairs, regardless of whether the applicable business combination to be consummated constitutes such an event.

**ROCKWELL AUTOMATION, INC.
2012 LONG-TERM INCENTIVES PLAN
RESTRICTED STOCK AGREEMENT**

To: <first name> <last name>

In accordance with Section 4(c) of the Rockwell Automation, Inc. 2012 Long-Term Incentives Plan (the Plan), <shares awarded> shares (Restricted Shares) of Stock (as defined in the Plan) of Rockwell Automation, Inc. (Rockwell Automation) have been granted to you, effective <award date> (award date), as Restricted Stock (as defined in the Plan) upon the terms and conditions of this Restricted Stock Agreement, subject in all respects to the provisions of the Plan, as it may be amended. Capitalized terms used in this Agreement and not otherwise defined herein shall have the respective meanings ascribed to them in the Plan.

1. Earning of Restricted Shares

(a) You will be deemed to have fully earned one-third of the Restricted Shares (rounded to the nearest whole number) on the first anniversary of the award date, one-third of the Restricted Shares (rounded to the nearest whole number) on the second anniversary of the award date and the balance of the Restricted Shares on the third anniversary of the award date, in each case if you continue as an Employee from the date hereof until the anniversary of the award date in the respective year.

(b) If you die or suffer a disability that shall continue for a continuous period of at least six months during the period of your continuous service as an Employee and prior to the third anniversary of the award date, then you shall be deemed to have fully earned all the Restricted Shares subject to this Agreement on the date of your death or the six month anniversary of your disability, as the case may be.

(c) If during the period of your continuous service as an Employee and prior to the third anniversary of the award date, (A) a Change of Control occurs, (B) all Restricted Shares that are outstanding are assumed or substituted with comparable awards by the successor corporation in such Change of Control or its parent corporation and (C) within two years of such Change of Control your employment is terminated (1) by reason of death or disability, (2) by you for a Change of Control Good Reason or (3) by the Corporation other than for Cause, you shall be deemed to have fully earned all the Restricted Shares subject to this Agreement (and any substituted awards of restricted stock) on the date of your separation from service. If during the period of your continuous service as an Employee and prior to the third anniversary of the award date, (A) a Change of Control occurs and (B) all Restricted Shares that are outstanding are not assumed or substituted with comparable awards by the successor corporation in such Change of Control or its parent corporation, then you shall be deemed to have fully earned all the Restricted Shares subject to this Agreement on the date of such Change of Control.

(d) If your employment by Rockwell Automation terminates on or after the first anniversary of the award date and prior to the third anniversary of the award date by reason of your retirement, then you shall be deemed to have fully earned a prorated portion of the Restricted Shares subject to this Agreement (rounded to the nearest whole number) equal to the amount by which (i) the number of Restricted Shares subject to this Agreement, multiplied by the percentage of days in the three-year period ended on the third anniversary of the award date during which you were an Employee, exceeds (ii) the number of Restricted Shares earned before your retirement pursuant to Section 1(a). For purposes of this Section 1, retirement means termination of employment with Rockwell Automation after attaining age 65 and five (5) years of service or age 55 and ten (10) years of service, except as otherwise determined by the Committee or the Chief Executive Officer of Rockwell Automation or as otherwise may be required by local law.

(e) If your employment by Rockwell Automation terminates for “cause” (as reasonably determined by the Corporation), then you shall be deemed not to have earned any of the Restricted Shares and shall have no further rights with respect to the Restricted Shares or any Stock Dividends.

For purposes of this Section 1, if you receive severance payments in connection with your separation from Rockwell Automation, you will be treated as not having terminated your employment with Rockwell Automation until the last date on which you are entitled to receive severance payments from Rockwell Automation, at which time your employment by Rockwell Automation will be deemed terminated.

2. Retention of Certificates for Restricted Shares

Certificates for the Restricted Shares and any dividends or distributions thereon or in respect thereof that may be paid in additional shares of Stock or other securities of Rockwell Automation or securities of another entity (Stock Dividends) shall be delivered to and held by Rockwell Automation, or shall be registered in book entry form subject to Rockwell Automation’s instructions, until you shall have earned the Restricted Shares in accordance with the provisions of Section 1. To facilitate implementation of the provisions of this Agreement, you undertake to sign and deposit with Rockwell Automation’s Office of the Secretary such documents appropriate to effectuate the purpose and intent of this Restricted Stock Agreement as Rockwell Automation may reasonably request from time to time.

3. Dividends and Voting Rights

Notwithstanding the retention by Rockwell Automation of certificates (or the right to give instructions with respect to shares held in book entry form) for the Restricted Shares and any Stock Dividends, unless and until such shares have been forfeited in accordance with Section 5, you shall be entitled to receive any dividends that may be paid in cash on, and to vote, the Restricted Shares and you shall be entitled to receive any Stock Dividends held by Rockwell Automation (or subject to its instructions) in accordance with Section 2.

4. Delivery of Earned Restricted Shares

As promptly as practicable after (i) you shall have been deemed to have earned the Restricted Shares in accordance with Section 1 and (ii) Rockwell Automation has been reimbursed for all required withholding taxes in respect of your earning all the Restricted Shares and Stock Dividends that you have been deemed to have earned, Rockwell Automation shall deliver to you (or in the event of your death, to your estate or any person who acquires your interest in the Restricted Shares by bequest or inheritance) all or the part of the Restricted Shares and Stock Dividends that you have been deemed to have earned.

5. Forfeiture of Unearned Restricted Shares

(a) Notwithstanding any other provision of this Agreement, other than as provided in Section 5(b), if at any time it shall become impossible for you to earn any of the Restricted Shares in accordance with this Agreement, all the Restricted Shares, together with any Stock Dividends, then being held by Rockwell Automation (or subject to its instructions) in accordance with Section 2 shall be forfeited, and you shall have no further rights of any kind or nature with respect thereto. Upon any such forfeiture, the Restricted Shares, together with any Stock Dividends, shall be transferred to Rockwell Automation.

(b) Notwithstanding any other provision of this Agreement, if Section 1(d) is applicable, all of the unearned Restricted Shares, together with any Stock Dividends thereon, then being held by Rockwell Automation (or subject to its instructions) in accordance with Section 2 shall be forfeited, and you shall have no further rights of any kind or nature with respect thereto. Upon any such forfeiture, such unearned Restricted Shares, together with any Stock Dividends thereon, shall be transferred to Rockwell Automation.

6. Adjustments

If there shall be any change in or affecting shares of Stock on account of any stock dividend or split, merger or consolidation, reorganization (whether or not Rockwell Automation is a surviving corporation), recapitalization, reorganization, combination or exchange of shares or other similar corporate changes or an extraordinary dividend in cash, securities or other property, there shall be made or taken such amendments to this Agreement or the Restricted Shares as the Board of Directors may deem appropriate under the circumstances.

7. Transferability

This grant is not transferable by you otherwise than by will or by the laws of descent and distribution, and the Restricted Shares, and any Stock Dividends, shall be deliverable during your lifetime only to you.

8. Beneficiary Designation

You explicitly agree that the beneficiary designated in your designated beneficiary plan, if any, in your Schwab One Brokerage account linked to your Equity Award Center account will apply to your Equity Award Center account. This includes, without limitation, the Restricted Shares and any equity awards outstanding as of the date hereof, unless you submit to Charles Schwab a written revocation of the designated beneficiary with respect to your Equity Award Center account.

9. Withholding

Rockwell Automation shall have the right, in connection with the delivery of the Restricted Shares and any Stock Dividends subject to this Agreement, (i) to deduct from any payment otherwise due by Rockwell Automation to you or any other person receiving delivery of the Restricted Shares and any Stock Dividends an amount equal to any taxes required to be withheld by law with respect to such delivery, (ii) to require you or any other person receiving such delivery to pay to it an amount sufficient to provide for any such taxes so required to be withheld, or (iii) to sell such number of the Restricted Shares and any Stock Dividends as may be necessary so that the net proceeds of such sale shall be an amount sufficient to provide for any such taxes so required to be withheld.

10. No Acquired Rights

You acknowledge, agree and consent that: (a) the Plan is discretionary and Rockwell Automation may amend, cancel or terminate the Plan at any time; (b) the grant of the Restricted Shares subject to this Agreement is a one-time benefit offered to you and does not create any contractual or other right for you to receive any grant of Stock as Restricted Stock or benefits under the Plan in the future; (c) future grants, if any, shall be at the sole discretion of Rockwell Automation, including, but not limited to, the timing of any grant, the number of shares and forfeiture provisions; and (d) your participation in the Plan is voluntary.

11. Applicable Law

This Agreement and Rockwell Automation's obligation to deliver Restricted Shares and any Stock Dividends hereunder shall be governed by and construed and enforced in accordance with the laws of Delaware and the Federal law of the United States.

12. Entire Agreement.

This Agreement and the Plan embody the entire agreement and understanding between Rockwell Automation and you with respect to the Restricted Shares subject to this Agreement, and there are no representations, promises, covenants, agreements or understandings with respect to such Restricted Shares other than those expressly set forth in this Agreement and the Plan. In the event of any conflict between this Agreement and the Plan, the terms of the Plan shall govern.

Dated: _____

ROCKWELL AUTOMATION, INC.

By:

Rebecca W. House
Senior Vice President,
General Counsel and Secretary

Agreed to this ____ day of _____

Name:

ROCKWELL AUTOMATION, INC.
LIST OF SUBSIDIARIES OF THE COMPANY
AS OF SEPTEMBER 30, 2019

Name	Jurisdiction	Percentage of Voting Securities Owned By	
		Registrant	Subsidiary
Maverick Technologies, LLC	Missouri		100%
Nuad Corporation	Delaware	100%	
Rockwell Automation (China) Company Limited	China		100%
Rockwell Automation Switzerland G.m.b.H	Switzerland		100%
Rockwell Automation Asia Pacific Business Center PTE. Ltd.	Singapore		100%
Rockwell Automation Australia Ltd.	Australia		100%
Rockwell Automation B.V.	Netherlands		100%
Rockwell Automation Canada Holdings Inc.	Canada		100%
Rockwell Automation Canada Ltd.	Canada		100%
Rockwell Automation Control Solutions (Harbin) Co., Ltd.	China		100%
Rockwell Automation de Mexico S.A. de C.V.	Mexico		100%
Rockwell Automation do Brasil Ltda.	Brazil	100%	
Rockwell Automation Europe B.V.	Netherlands		100%
Rockwell Automation G.m.b.H.	Germany		100%
Rockwell Automation India Private Limited	India		100%
Rockwell Automation International Holdings LLC	Delaware	100%	
Rockwell Automation Korea Ltd	Korea		100%
Rockwell Automation Limited	United Kingdom		100%
Rockwell Automation L.L.C.	United Arab Emirates - Abu Dhabi		49%
Rockwell Automation Monterrey Manufacturing S de RL de CV	Mexico		100%
Rockwell Automation of Ohio, Inc.	Ohio	100%	
Rockwell Automation Solutions G.m.b.H.	Germany		100%
Rockwell Automation Spolka Z Organizacjona Odpowiedzialnoscia	Poland		100%
Rockwell Automation Technologies, Inc.	Ohio	100%	
Rockwell European Holdings Ltd.	England		100%

Listed above are certain subsidiaries included in our consolidated financial statements. Unlisted subsidiaries, considered in the aggregate as a single subsidiary, do not constitute a significant subsidiary.

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in Registration Statement Nos. 333-101780, 333-149581, 333-150019, 333-157203, 333-165727, 333-180557, 333-184400, 333-205022, and 333-209706 on Form S-8 and 333-228817 on Form S-3 of our report dated November 12, 2019 relating to the consolidated financial statements and financial statement schedule of Rockwell Automation, Inc. and the effectiveness of Rockwell Automation Inc.'s internal control over financial reporting, appearing in this Annual Report on Form 10-K of Rockwell Automation, Inc. for the year ended September 30, 2019.

/s/ DELOITTE & TOUCHE LLP

Milwaukee, Wisconsin
November 12, 2019

POWER OF ATTORNEY

I, the undersigned Director or Officer of Rockwell Automation, Inc., a Delaware corporation (the Company), hereby appoint REBECCA W. HOUSE and PATRICK P. GORIS, and each of them singly, my true and lawful attorneys with full power to them and each of them to sign for me, and in my name and in the capacity or capacities indicated below,

1. the Company's Annual Report on Form 10-K for the fiscal year ended September 30, 2019 and any amendments thereto;
2. any and all amendments (including supplements and post-effective amendments) to
 - a) the Registration Statement on Form S-8 registering securities to be sold under the Company's 2012 Long-Term Incentives Plan (Registration Nos. 333-180557 and 333-209706);
 - b) the Registration Statements on Form S-8 registering securities to be sold under the Company's 2008 Long-Term Incentives Plan (Registration Nos. 333-150019 and 333-165727);
 - c) the Registration Statement on Form S-8 registering securities to be sold under the Company's 1165(e) Plan (Registration Nos. 333-157203 and 333-205022);
 - d) the Registration Statements on Form S-8 registering securities to be sold under the Company's Retirement Savings Plan (Registration Nos. 333-184400 and 333-149581); and
 - e) the Registration Statement on Form S-8 registering securities to be sold pursuant to the Company's 2003 Directors Stock Plan (Registration No. 333-101780); and
3. any and all amendments (including supplements and post-effective amendments) to the Registration Statement on Form S-3 (Registration No. 333-228817) registering an indeterminate amount of debt securities of the Company in one or more series.

Signature	Title	Date
/s/ Blake D. Moret Blake D. Moret	Chairman of the Board, President and Chief Executive Officer (principal executive officer)	October 30, 2019
/s/ J. Phillip Holloman J. Phillip Holloman	Director	October 30, 2019
/s/ Steven R. Kalmanson Steven R. Kalmanson	Director	October 30, 2019
/s/ James P. Keane James P. Keane	Director	October 30, 2019
/s/ Lawrence D. Kingsley Lawrence D. Kingsley	Director	October 30, 2019
/s/ Pam Murphy Pam Murphy	Director	October 30, 2019
/s/ Donald R. Parfet Donald R. Parfet	Director	October 30, 2019
/s/ Lisa A. Payne	Director	October 30, 2019

Lisa A. Payne

/s/ Thomas W. Rosamilia
Thomas W. Rosamilia

Director

October 30, 2019

/s/ Patricia A. Watson
Patricia A. Watson

Director

October 30, 2019

/s/ Patrick P. Goris
Patrick P. Goris

Senior Vice President and Chief Financial Officer (principal
financial officer)

October 30, 2019

/s/ Rebecca W. House
Rebecca W. House

Senior Vice President, General Counsel and
Secretary

October 30, 2019

/s/ David M. Dorgan
David M. Dorgan

Vice President and Controller (principal
accounting officer)

October 30, 2019

CERTIFICATION

I, Blake D. Moret, certify that:

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

Date: November 12, 2019

/s/ BLAKE D. MORET

Blake D. Moret
President and Chief
Executive Officer

CERTIFICATION

I, Patrick P. Goris, certify that:

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

Date: November 12, 2019

/S/ PATRICK P. GORIS

Patrick P. Goris
Senior Vice President and
Chief Financial Officer

CERTIFICATION OF PERIODIC REPORT

I, Blake D. Moret, President and Chief Executive Officer of Rockwell Automation, Inc. (the “Company”) certify, pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, 18 U.S.C. Section 1350, that:

- (1) the Annual Report on Form 10-K of the Company for the year ended September 30, 2019 (the “Report”) fully complies with the requirements of Section 13(a) of the Securities Exchange Act of 1934; and
- (2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: November 12, 2019

/s/ BLAKE D. MORET

Blake D. Moret
President and Chief
Executive Officer

CERTIFICATION OF PERIODIC REPORT

I, Patrick P. Goris, Senior Vice President and Chief Financial Officer of Rockwell Automation, Inc. (the "Company") certify, pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, 18 U.S.C. Section 1350, that:

- (1) the Annual Report on Form 10-K of the Company for the year ended September 30, 2019 (the "Report") fully complies with the requirements of Section 13(a) of the Securities Exchange Act of 1934; and
- (2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: November 12, 2019

/S/ PATRICK P. GORIS

Patrick P. Goris
Senior Vice President and
Chief Financial Officer