ITT Inc.
Form 10-K
February 22, 2019

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

Form 10-K
ANNUAL REPORT

(Mark One)

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

For the fiscal year ended December 31, 2018

OR

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

For the Transition period from to

Commission File No. 001-05672

ITT INC.

Incorporated in the State of Indiana **81-1197930**
(I.R.S. Employer Identification No.)

1133 Westchester Avenue
White Plains, New York 10604
(Principal Executive Office)
Telephone Number: (914) 641-2000

Securities registered pursuant to Section 12(b) of the Act, all of which are registered on The New York Stock Exchange, Inc.:
COMMON STOCK, $1 PAR VALUE

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 þ 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 þ
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 þ 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 þ No ¨
Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. þ
Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer þ Accelerated filer ¨ Non-accelerated filer ¨

Smaller reporting company ¨ Emerging growth company ¨

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ¨
Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes ¨ No þ

The aggregate market value of the common stock of the registrant held by non-affiliates of the registrant on June 30, 2018 was approximately $4.6 billion. As of February 20, 2019, there were outstanding 87.4 million shares of common stock, $1 par value, of the registrant.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's Definitive Proxy Statement to be filed with the Securities and Exchange Commission pursuant to Regulation 14A for its 2019 Annual Meeting of Shareholders are incorporated by reference in Part II and Part III of this Form 10-K.

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FORWARD-LOOKING AND CAUTIONARY STATEMENTS

Some of the information included herein includes forward-looking statements intended to qualify for the safe harbor from liability established by the Private Securities Litigation Reform Act of 1995. These forward-looking statements are not historical facts, but rather are based on current expectations, estimates, assumptions and projections about our business, future financial results and the industry in which we operate, and other legal, regulatory and economic developments. These forward-looking statements include, but are not limited to, future strategic plans and other statements that describe the company's business strategy, outlook, objectives, plans, intentions or goals, and any discussion of future operating or financial performance.

We use words such as "anticipate," "estimate," "expect," "project," "intend," "plan," "believe," "target," "future," "may," "will," "could," "should," "potential," "continue," "guidance" and other similar expressions to identify such forward-looking statements. Forward-looking statements are uncertain and to some extent unpredictable, and involve known and unknown risks, uncertainties and other important factors that could cause actual results to differ materially from those expressed or implied in, or reasonably inferred from, such forward-looking statements.

Where in any forward-looking statement we express an expectation or belief as to future results or events, such expectation or belief is based on current plans and expectations of our management, expressed in good faith and believed to have a reasonable basis. However, there can be no assurance that the expectation or belief will occur or that anticipated results will be achieved or accomplished. More information on factors that could cause actual results or events to differ materially from those anticipated is included in this Annual Report on Form 10-K under the caption "Risk Factors," and in other documents we file from time to time with the U.S. Securities and Exchange Commission (SEC).

The forward-looking statements included in this report speak only as of the date of this report. We undertake no obligation to update any forward-looking statements, whether as a result of new information, future events or otherwise.

WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and current reports, proxy statements and other information with the SEC. The SEC maintains a website at www.sec.gov on which you may access our SEC filings. In addition, we make available free of charge at www.itt.com/investors copies of materials we file with, or furnish to, the SEC as well as other important information that we disclose from time to time. Information contained on our website, or that can be accessed through our website, does not constitute a part of this Annual Report on Form 10-K. We have included our website address only as an inactive textual reference and do not intend it to be an active link to our website.

Our corporate headquarters are located at 1133 Westchester Avenue, White Plains, New York 10604 and the telephone number of this location is (914) 641-2000.

PART I

DESCRIPTION OF BUSINESS

(In millions, except per share amounts, unless otherwise stated. References herein to "ITT," "the Company," and such words as "we," "us," and "our" include ITT Inc. and its subsidiaries, unless the context otherwise indicates.)

COMPANY OVERVIEW

ITT is a diversified manufacturer of highly engineered critical components and customized technology solutions for the transportation, industrial, and oil and gas markets. We manufacture components that are integral to the operation of systems and manufacturing processes in these key markets. Our products provide enabling functionality for applications where reliability and performance are critically important to our customers and the users of their products.

BUSINESS OVERVIEW

• Sales in Over 100 Countries	• Strategic Proximity to Customers
• 2018 Revenue of $2.75 Billion	• 68% of Revenue Outside the U.S.
• Approx. 10,000 Employees in 35 Countries	• Balanced & Diversified Portfolio

3 Segments: Motion Technologies (MT), Industrial Process (IP), and Connect & Control Technologies (CCT)

MT produces friction and shock and vibration equipment; IP delivers industrial flow equipment and services; and CCT produces electronic connectors, fluid handling, motion control, and noise and energy absorption products.

Our businesses share a common, repeatable operating model centered on our engineering capabilities. Each business applies its technology and engineering expertise to solve our customers' most pressing challenges. Our applied engineering provides a special business fit with our customers given the critical nature of their applications. This in turn provides us with unique insight into our customers' requirements and enables us to develop solutions to better assist our customers to achieve their business goals. Our technology and customer intimacy together produce opportunities to capture recurring revenue streams, aftermarket opportunities and long-lived platforms from original equipment manufacturers (OEMs).

OUR KEY BRANDS

MT	• ITT Friction Technologies	• KONI	• Wolverine Advanced Materials
	• Axtone		
IP	• Goulds Pumps	• Bornemann	• Engineered Valves
	• PRO Services	• C'treat	• i-ALERT
CCT	• Cannon	• VEAM	• BIW Connector Systems
	• Aerospace Controls	• Enidine	• Compact Automation
	• Neo-Dyn Process Controls	• Conoflow	

These brands are associated with quality, reliability, durability, and engineering excellence. Our brands have a strong international presence and participate in emerging markets, including China, Mexico, Brazil, Saudi Arabia, and Russia.
We are committed to creating long-term sustainable value for all of our stakeholders, supported by our balanced operating strategy designed to achieve long-term profitable growth. The elements of this strategy are disciplined organic growth through global market expansion and new product development, combined with operational improvements that focus on the principles of Lean Six Sigma (herein referred to as Lean) to reduce costs and cycle times while improving overall productivity, quality, and safety on a continuing basis. We have also moved beyond the factory floor to improve the efficiency of other critical processes in the value chain to become a truly lean enterprise. This initiative encompasses not only core Lean problem solving and continuous improvement principles, but also leadership, talent and cultural aspects.
Given these dynamics and our technology investments, global reach and vibrant brands, we believe we have the opportunity to continue to expand geographically, broaden our product lines, improve our market position, and increase earnings through organic revenue growth and operational efficiencies and through targeted acquisitions. We continue to prioritize deploying capital for organic growth before acquisitive growth. Our acquisition strategy generally targets firms in similar businesses and end-markets that have unique and differentiated products, services, and technologies. Effective capital deployment, including resource optimization and a disciplined focus on liquidity and cash management, is a major part of how we plan to achieve our financial performance goals.

Segment Information

See Note 3, Segment Information, to the Consolidated Financial Statements for financial information about each of our segments.

Motion Technologies (MT)

The Motion Technologies segment, MT, is a manufacturer of brake pads, shims, shock absorbers, energy absorption components, and sealing technologies primarily for the transportation industry, including passenger cars, light- and heavy-duty commercial and military vehicles, buses, and rail. MT consists of three business units: Friction Technologies, Wolverine, and KONI & Axtone.

Friction Technologies

Our Friction Technologies business manufactures a range of brake pads installed as original equipment (OE) pads on passenger cars and light- and heavy-duty commercial vehicles. Demand for MT's products stem from a variety of end customers and automotive platforms around the world. OE pads are sold either directly to OEMs or to Tier-1 brake manufacturers. Our OE pads are designed to meet customer specifications and environmental regulations, and to satisfy an array of performance standards and geographic applications. Most automobile OEM platforms (car models) require specific brake pad formulations and have demanding delivery and volume schedules.
Friction Technologies also manufactures aftermarket brake pads designed for the automotive service and repairs market. This market consists of both OE dealers, also referred to as original equipment service (OES) networks, and independent aftermarket (AM) networks. Brake pads sold within the OES network generally match the specifications of an original auto platform OE brake pad, while our catalog of AM pads feature technology designed to provide a range of braking performance levels. Within the service and repairs market, pads are sold either directly to OE manufacturers or Tier-1 brake manufacturers (such as Continental ATE (Continental)) or indirectly through independent distributor channels.
Sales to Continental, MT's largest customer, was 23% of 2018 MT revenue, however, a significant portion of this revenue, typically about 50% of the total, is derived from the OEMs' specification to use an ITT brake pad in Continental's braking system, generally through supply agreements signed directly with OEMs.

Wolverine

Wolverine is a manufacturer of customized damping technologies for automotive braking systems and specialized gasket sealing solutions for harsh operating environments. Brake shims are thin metal and rubber adhesive dampeners that fit onto the brake pad and against the brake caliper to prevent excessive

noise and vibration. Gaskets are an anti-vibration solution and a sealing solution that prevent fluid spillage in applications such as engines, transmissions, exhaust systems, fuel systems, and a variety of pneumatic systems.

KONI & Axtone

The KONI and Axtone businesses service three main product groups: railway rolling stock; car & racing; and bus, truck & trailer.

Railway Rolling Stock provides a wide range of equipment for passenger rail, locomotives, freight cars, high speed trains and light rail. Offerings include customized energy absorption solutions, hydraulic shock absorbers (primary, lateral, and inter-car), yaw dampers, springs, visco-elastic and hydraulic buffers, coupler components, and crash mitigation. Revenue opportunities for our rail damping systems are balanced between OE and AM customers. Sales are either directly to train manufacturers, train operators carrying out scheduled train maintenance programs, or indirectly through distributors.

Car & Racing features performance shock absorbers often using our Frequency Selective Damping (FSD) technology. FSD products generally have been used by car and racing enthusiasts who desire to modify their cars for increased handling performance and comfort, and are now also being incorporated into OEM platform designs. KONI aftermarket car shock absorbers are sold all over the world, through a distribution network that markets KONI products into specific geographies or customer groups.

Bus, Truck & Trailer manufactures shock absorbers and dampers, for sale to both OEM and AM customers.

Other Information

Due to many years of mutual collaboration with major OEMs, MT is known for customer satisfaction, quality and on-time delivery. MT has a global manufacturing footprint, with production facilities in Europe, China, and North America.

MT competes in markets primarily served by large, well-established national and global companies. Key competitive drivers within the brake pad and brake shim business include technical expertise, formulation development capabilities, scale production, product performance, high-quality standards, customer intimacy, reputation, and the ability to meet demanding delivery and volume schedules in a reduced amount of time. OE and OES brake pad customers usually require long-lasting and well-established relationships based on mutual trust, local proximity and a wide range of cooperative activities, starting from the design, to the sampling, prototyping and testing phases of brake pads. Within the independent AM pads market, MT is a leading European provider in a highly fragmented global market.

Competitive drivers in the rail damping systems business include price, technical expertise and product performance. Rail damping systems are considered critical components because of safety requirements and thus they have to be specifically designed according to many different train applications, and must satisfy strict compliance requirements. MT is a leader in the rail dampers component of the complete rail damper system in Europe and continues to gain market share in China.

Industrial Process (IP)

The Industrial Process segment, IP, is an original equipment manufacturer and aftermarket parts and service provider offering an extensive portfolio of industrial pumps, valves, and plant optimization systems and services. IP's products serve an extensive base of customers from large multi-national companies and engineering, procurement and construction (EPC) firms to regional distributors and end-user customers. IP has a global manufacturing footprint with significant operations located in the United States, South Korea, and Germany. IP's customers operate in global infrastructure and natural resource markets such as oil and gas, chemical and petrochemical, pharmaceutical, general industrial, mining, pulp and paper, food and beverage, and power generation. Brands include Goulds Pumps, Bornemann, Engineered Valves, PRO Services, C'treat, and i-ALERT.

Industrial Pumps

Industrial pumps serve a wide array of customers and applications primarily in the chemical, oil and gas, mining, general industrial, pharmaceutical, and power generation markets. IP designs and manufactures configured-to-order industry standards-based industrial pumps that are highly engineered and customized to our customer’s needs. These products include a broad portfolio of API (American Petroleum Institute), ANSI (American National Standards Institute), ATEX (Atmosphere EXplosible, European Directive 2014/34/EC) and IECEx (IEC standards) centrifugal process pumps, and twin screw pumps, positive displacement pumps, and water systems. Our project pumps are generally part of larger and more complex

capital projects, have longer lead times than baseline pumps, and are generally managed by EPC firms.

Valves

Valves are manufactured to handle a wide variety of materials and solve unique challenges in the biopharmaceutical, mining, power generation, pulp and paper and general industrial markets and include industrial knife-gate valves, ball valves, and sanitary diaphragm valves. Valves generally have shorter lead times.

Aftermarket

Our aftermarket solutions provide customers with replacement parts, services, and plant optimization solutions that reduce total cost of ownership for pumps and rotating equipment. In addition to providing standard repairs and upgrades, the business also develops engineered solutions for specific customer process issues. Examples include innovative technologies like PumpSmart Smart Control & Protection Technology and i-ALERT Equipment Health Monitoring Devices to control and monitor pumps and other rotating equipment in an industrial environment.

Other Information

IP goes to market via a global and diversified sales channel structure. End-users are serviced by an extensive network of independent industrial distributors, which account for approximately one-third of revenue, and representatives which complement our customer-focused direct sales and service organization. We also have focused channels dedicated to supporting EPC firms as their needs are often distinct from those of other distributors and end-user customers.

The pump and valve markets served are highly competitive, especially in the last few years, due to uncertainty and volatility in the oil and gas market. For most of our products there are hundreds of regional competitors and a limited number of larger global peers. Primary customer purchase decision drivers include price, delivery terms, and on-time performance, brand recognition and reputation, perceived quality, breadth of product and service offerings, commercial terms, technical support and localization. Pricing can be very competitive for large projects because of overcapacity, fewer investment projects, and aftermarket opportunities for the original equipment provider.

Connect & Control Technologies (CCT)

The Connect & Control Technologies segment, CCT, designs and manufactures a range of highly engineered connectors and specialized control products for critical applications supporting various markets including aerospace and defense, industrial, transportation, medical, and oil and gas. CCT’s products are often part of long-lived platforms that provide for recurring aftermarket and replacement opportunities. CCT has organized its business around product offerings and end-user markets, with dedicated teams that specialize in solutions for their specific markets, providing focused customer support and expertise.

CCT has a global production footprint, including facilities in the United States, Mexico, Germany, China, Italy and Japan, which provides close geographic proximity to key customers. CCT competes with a large number of competitors in highly fragmented industries. CCT’s competitors can range from large public multi-national corporations to small privately held local firms, depending on the product line and region. CCT's ability to compete successfully depends upon numerous factors, including quality, price, availability, performance, brand recognition, customer service, innovation, application expertise and previous installation history. In addition, collaboration with customers to deliver a wide range of product offerings has allowed CCT to compete effectively, to cultivate and maintain customer relationships, and to expand into new markets. CCT products are sold directly and through numerous channels including distributors. CCT has long-lasting relationships with distributors, as many have been selling certain CCT products for decades. Sales to distributors represented approximately 30% of 2018 CCT revenue.

Connector Products

The connector product portfolio includes high performance electrical connectors of the following types: Circular, Rectangular, Radio Frequency, Fiber Optic, D-sub Miniature, Micro-Miniature and cable assemblies. Brands include Cannon, VEAM and BIW Connector Systems, which deliver solutions to enable the transfer of data, signal, and power into various end-user markets including aerospace, defense, industrial, transportation, medical, and oil and gas. These brands are known for high-performance, high-reliability solutions which withstand high vibrations and are resistant to dirt and fluids. In certain harsh

environment niche markets, our connector products are considered market leaders because of their technological capabilities, cost performance, and global footprint.

Products for the aerospace and defense markets include industry standards-based connectors and customized solutions for most segments of the commercial aviation and defense industries. These products are designed to withstand the extreme shock, exposure, and vibration environments that are typical in aviation and military applications and where reliability and safety are critical factors.

Products for the industrial markets include connectors for industrial production equipment, industrial electronics and instruments, and other industrial and medical applications. Products for the transportation markets include connectors for passenger rail, heavy-duty vehicles, and electric vehicle applications. Products for the oil and gas markets include connectors that provide power for electric submersible pumps in oil wells, reservoir monitoring instruments, and electrical downhole heaters. Oil and gas product applications include electrical power penetrations for wellheads, packers, and pods that are able to accommodate various sizes and provide for multiple sealing strategies and ratings.

Control Products

The control product portfolio provides actuation, fuel management, noise and energy absorption, and environmental control system applications, with a specialized set of design and application engineering skills and capabilities that enables CCT to engineer differentiated custom solutions for unique applications for the aerospace and defense, and industrial markets.

Control products for the aerospace and defense markets consist of fuel and water pumps, valves, electro-mechanical rotary and linear actuators, and pressure, temperature, limit, and flow switches for various aircraft systems. These products also include stowage bin rate controls, rotary hinge dampers and actuators, seat recline locks and control cables, electromechanical seat actuation, a variety of engineered elastomer isolators to protect equipment and keep the interior of the aircraft quiet, certain energy absorption products and other aerospace components. Other control products for this market include environmental control systems such as climate control and ice protection heaters, composite conveyance ducting and acoustically engineered inlets and exhausts for auxiliary power units.

Control products for the industrial markets include large and small bore shock absorbers, linear and rotary actuators, and process control instrumentation, such as high and low pressure regulators and flow, temperature, and pressure switches. The shock absorbers and actuators serve a wide range of applications in a diverse set of end-markets including production, packaging, factory automation, and infrastructure. The process control products primarily serve the chemical, petrochemical, and energy segments of the industrial market.

Other Company Information

Materials

All of our businesses require various products, manufactured components, and raw materials; the availability and prices of which may fluctuate.

MANUFACTURED COMPONENTS ASSEMBLED INTO OUR PRODUCTS

• Motors	• Castings
• Mechanical Seals	• Machined Castings
• Metal Fabrications	• Miscellaneous Metal, Plastic, and Electronic Components

PRIMARY RAW MATERIALS

• Steel	• Gold	• Copper	• Nickel
• Iron	• Aluminum	• Tin	• Rubber
• Specialty Alloys, including Titanium			

Raw materials are purchased in various forms, such as sheet, bar, rod and wire stock, pellets, and metal powders. Raw materials, supplies and product subassemblies are purchased from third-party suppliers, contract manufacturers, and commodity dealers. For most of our products, we have existing alternate sources of supply, or such materials are readily available. In some instances we depend on a single source of supply, manufacturing or assembly, or participate in commodity markets that may be subject to a limited number of suppliers.

We continually monitor the business conditions of our supply chain to maintain our market position and to avoid potential supply disruptions. There have been no raw material shortages that have had a material adverse impact on our business as a whole, and we have been able to develop a robust supply chain such

that we do not anticipate shortages of such materials in the future.

Although some cost increases may be recovered through increased prices to customers, our operating results are generally exposed to fluctuations in the prices of raw materials and commodities due to inflation, and most recently, tariffs imposed by the U.S, or other countries. When practical, we attempt to control such costs through fixed-priced contracts with suppliers. We typically acquire materials and components through a combination of blanket and scheduled purchase orders to support our materials requirements for an average of four to eight weeks, with the exception of some specialty materials. From time to time, we experience price volatility or supply constraints for raw materials based on market supply and demand dynamics. In limited circumstances, we may have to obtain scarce components for higher prices on the spot market, which may have a negative impact on gross margin and can periodically create a disruption to production and delivery. We also acquire certain inventory in anticipation of supply constraints or enter into longer-term pricing commitments with vendors to improve the priority, price, and availability of supply. We evaluate hedging opportunities to mitigate or minimize the risk of operating margin erosion resulting from the volatility of commodity prices.

Manufacturing Methods

We utilize two primary methods of fulfilling demand for products, build-to-order and engineer-to-order.

- Build-to-order consists of assembling a group of products with the same pre-defined specifications, generally for our OEM customers. We employ build-to-order capabilities to maximize manufacturing and logistics efficiencies by producing high volumes of basic product configurations.
- Engineer-to-order consists of assembling a customized system according to a customer’s individual order specifications. Engineering products-to-order permits the configuration of units to meet the customized requirements of our customers.

In both cases, we offer design, integration, test and other production value-added services. Our inventory management and distribution practices in both build-to-order and engineer-to-order seek to improve customer delivery performance and minimize inventory holding periods.

Backlog

Our backlog represents firm orders that have been received, acknowledged and entered into our production systems. Our backlog may vary due to market volatility or other changes in macroeconomic conditions. In addition, delivery schedules vary from customer to customer based on their requirements. For example, large complex projects in specialized markets such as oil and gas, chemical, and mining at IP require longer lead times and production cycles. Delivery delays could arise from supply chain limitations, internal production challenges, changes in the customer’s requirements, or technical difficulties. We expect to satisfy nearly all backlog commitments within 12 months. The following table illustrates our total backlog by segment as of December 31, 2018, 2017, and 2016, respectively:

	2018	2017	2016
Motion Technologies	**$303.1**	$299.7	$201.2
Industrial Process[a]	**444.2**	385.5	347.2
Connect & Control Technologies	**273.7**	233.5	236.7
ITT Inc.	**$1,021.0**	$918.7	$785.1

(a) The Industrial Process backlog amount as of December 31, 2017 presented in the table above has been updated from the amount previously reported in the 2017 Form 10-K to include an additional $49 of backlog related to impacts associated with the adoption of the new revenue recognition accounting standard, Accounting Standard Update (ASU) 2014-09.

Intellectual Property

We generally seek patent protection for certain inventions and improvements that are likely to be incorporated into our products or where proprietary rights are expected to improve our competitive position. The highly customized application engineering embedded within our products, our proprietary rights, our knowledge capabilities, and our brand recognition all contribute to enhancing our competitive position. While we own and control a significant number of patents, trade secrets, confidential information, trademarks, trade names, copyrights, and other intellectual property rights which, in the aggregate, are of material importance to our business, management believes that our Company, as a whole, as well as each

of our core segments, is not materially dependent on any one intellectual property right or related group of such rights. Patents, patent applications, and license agreements will expire or terminate over time by operation of law, in accordance with their terms or otherwise. As the portfolio of our patents, patent applications, and license agreements has evolved over a long period of time, we do not expect the expiration of any specific patent or other intellectual property right to have a material adverse effect on our financial statements.

Research and Development

Research and Development (R&D) is key to our strategy and is generally focused on the design of highly engineered solutions that enable our customers to achieve their results. Our approach to R&D often begins by working closely with our customers to address their needs by engineering a solution to fit the particular application. R&D focuses on developing tangible solutions that bring a competitive offering that address clear needs in the market segments we serve. As a result, we believe R&D is a source of competitive advantage. With this in mind, we focused our effort to support business growth by increasing R&D activities in 2018 and plan to continue this focus into 2019 as part of our long-term growth strategy. Toward this effort, in recent years, we have invested in new innovation centers of excellence in Italy and China and plan to continue this effort in the U.S. in the future.

Cyclicality and Seasonality

Many of the businesses in which we operate are subject to specific industry and general economic cycles. We consider our connector products in our CCT segment to be an early cycle business, meaning it generally is impacted more in the early portion of an economic cycle, while the automotive and aerospace components businesses tend to be impacted in the middle portion of the cycle and the industrial pump business typically is impacted late in the economic cycle.

Our businesses experience limited seasonal variations. Revenue impacts from the limited seasonal variations are typically mitigated by our backlog of orders that allow us to adjust levels of production across different periods.

Environmental Matters

We are subject to stringent federal, state, local, and foreign environmental laws and regulations concerning air emissions, water discharges and waste disposal. In the U.S., these include, but are not limited to, the Federal Clean Air Act, the Clean Water Act, the Resource, Conservation and Recovery Act, and the Comprehensive Environmental Response, Compensation and Liability Act. Environmental requirements are significant factors affecting our operations. We have established an internal program to assess compliance with applicable environmental requirements at our facilities. The program, which includes periodic audits of many of our locations, including our major operating facilities, is designed to identify problems in a timely manner, correct deficiencies and prevent future noncompliance.

We closely monitor our environmental responsibilities, together with trends in environmental laws. In addition, we have purchased insurance protection against certain environmental risks arising from our business activities. Environmental laws and regulations are subject to change, however, and the nature and timing of such changes, if any, is difficult to predict. As actual costs incurred at identified sites in future periods may vary from our current estimates given the inherent uncertainties in evaluating environmental exposures, management believes it is possible that the outcome of these uncertainties may have a material adverse effect on our financial statements. See "Critical Accounting Estimates" within Item 7, Management's Discussion and Analysis, as well as Note 20, Commitments and Contingencies, to the Consolidated Financial Statements for additional information regarding environmental matters.

Employees

As of December 31, 2018, we had approximately 10,000 employees, of which approximately 3,100 were located in the U.S. Approximately 20% of our U.S. employees are represented by unions. No one unionized facility accounts for more than 12% of ITT's total revenues. In addition, many of our global employees are covered by collective agreements or represented by works councils or other groups. Although our relations with our employees are strong and we have not experienced any material strikes or work stoppages recently, we can provide no assurance that we will not experience these or other types of conflict with groups representing our employees or our employees generally, or that any future negotiations with our labor unions will not result in significant increases in our cost of labor.

Change in Leadership

On December 31, 2018, Denise L. Ramos retired from the role of Chief Executive Officer and Director of the Company. On January 1, 2019, Luca Savi, formerly President and Chief Operating Officer of the Company, became the Company’s President and Chief Executive Officer. In addition, the Board elected Mr.

Savi to serve as a director of the Company, effective January 1, 2019.

General Developments of the Business

On October 31, 2011, ITT completed the tax-free spin-off (referred to herein as the 2011 spin-off) of its Defense and Information Solutions business, Exelis Inc. (Exelis), and its water-related businesses, Xylem Inc. (Xylem) by way of a distribution of all of the issued and outstanding shares of Exelis common stock and Xylem common stock, on a pro rata basis, to ITT shareholders of record on October 17, 2011. The 2011 spin-off was made pursuant to a Distribution Agreement, dated October 25, 2011, among ITT, Exelis and Xylem (the Distribution Agreement). Following the 2011 spin-off, ITT did not own any shares of common stock of Exelis or Xylem. On May 29, 2015, Exelis was acquired by Harris Corporation (Harris). On October 14, 2018, Harris and L3 Technologies agreed to a merger which the parties expect to close in 2019.

On May 16, 2016, we consummated a corporate reorganization into a holding company structure. As a result of the reorganization ITT Inc., an Indiana corporation formed in 2016 that was previously a wholly owned subsidiary of ITT Corporation, became the publicly traded holding company of ITT Corporation and its subsidiaries and the successor issuer to ITT Corporation under Rule 12g-3(a) under the Securities Exchange Act of 1934 (Exchange Act). As the successor issuer, ITT Inc. common stock was deemed to be registered under Section 12(b) of the Exchange Act and ITT Inc. succeeded to ITT Corporation's obligation to file reports, proxy statements and other information required by the Exchange Act with the SEC. For additional information regarding the holding company reorganization, please refer to the Current Report on Form 8-K that we filed with the SEC on May 16, 2016.

Acquisitions

- On March 31, 2015, we completed the acquisition of Environmental Control Systems (f/k/a Hartzell Aerospace), a designer and manufacturer of products to support aerospace applications. Environmental Control Systems is included as part of our Connect & Control Technologies segment.
- On October 5, 2015, we completed the acquisition of Wolverine Automotive Holdings Inc., the parent company of Wolverine Advanced Materials LLC (Wolverine). Wolverine is a manufacturer of customized technologies for automotive braking systems and specialized sealing solutions. Wolverine is included as part of our Motion Technologies segment.
- On January 26, 2017, we completed the acquisition of Axtone Railway Components (Axtone), a leading manufacturer of highly engineered and customized components for railway and other harsh-environment industrial markets. Axtone is included as part of our Motion Technologies segment.
- On February 21, 2019, we entered into an agreement to acquire Rheinhütte Pumpen Group (Rheinhütte). Rheinhütte is a globally recognized designer and manufacturer of highly engineered pumps suited for harsh and corrosive environments for the industrial market. The acquisition is expected to close in the first half of 2019, subject to customary closing conditions and appropriate regulatory approvals. Rheinhütte will be reported within the Industrial Process segment.

See Note 22, Acquisitions, to the Consolidated Financial Statements for additional information.

RISK FACTORS

We are subject to a wide range of factors that could materially affect future developments and performance. Because of these factors, past performance may not be a reliable indicator of future results. Set forth below and elsewhere in this document are descriptions of the risks and uncertainties that could cause our actual results to differ materially from the results contemplated by the forward-looking statements contained in this document. The most significant factors affecting our business and operations include the following:

Our exposure to pending and future asbestos claims and related liabilities, assets, and cash flows is subject to significant uncertainties.

Subsidiaries of ITT, ITT LLC (f/k/a ITT Corporation) and Goulds Pumps LLC (f/k/a Goulds Pumps, Inc.), have been sued, along with many other companies, in numerous lawsuits in which the plaintiffs claim damages for personal injury arising from exposure to asbestos from component parts of certain products sold or distributed by various defendants, including certain ITT subsidiaries. We expect they will be sued in similar actions in the future. As such, we record an estimated liability related to pending claims and similar claims that we estimate will be filed over the next 10 years based on a number of key assumptions, including the likelihood of suits being filed, claim acceptance rates, disease type, settlement values and defense costs. These assumptions are derived from ITT’s recent experience and reflect our expectations about future claim activities. Although it is probable that the Company will incur additional costs for asbestos claims filed beyond the next 10 years, we do not believe that there is a reasonable basis for estimating those costs at this time.

In addition, we record an asset that represents our best estimate of probable recoveries from our insurers for the estimated asbestos liabilities. There are significant assumptions made in developing estimates of asbestos-related recoveries, such as policy triggers, policy or contract interpretation, the methodology for allocating claims to policies, and the continued solvency of the Company’s insurers. All of our primary insurance policies are exhausted, which may result in higher net cash outflows until excess carriers begin accepting claims for reimbursement. Performance by our insurers could differ from the assumptions underlying the recognized asset and could result in lower collections of receivables than are currently expected to reduce the Company’s asbestos costs.

Due to these uncertainties, as well as our inability to reasonably estimate any additional asbestos liability for claims that may be filed beyond the next 10 years, it is difficult to predict the ultimate cost, including potential recoveries, of resolving pending and unasserted asbestos claims. Changes in estimates related to these uncertainties may result in increases or decreases to the net asbestos liability, particularly if the quality, number of claims, or settlement or defense costs change significantly, if there are significant developments in the trend of case law or court procedures, or if legislation or another alternative solution is implemented. The resolution of asbestos claims may take many years. We believe it is possible that the future events affecting the key factors and other variables within the next 10 years, as well as the cost of asbestos claims filed beyond the next 10 years, net of expected recoveries, could have a material adverse effect on our financial condition, results of operations, or cash flows in any given period.

As part of the 2011 spin-off, ITT Corporation (n/k/a ITT LLC) indemnified Exelis and Xylem with respect to asserted and unasserted asbestos claims that relate to the presence or alleged presence of asbestos in products manufactured, repaired or sold prior to the 2011 spin-off, subject to limited exceptions. This indemnification obligation could also have a material adverse effect on our financial condition, results of operations or cash flows for any given period.

Our operating results and our ability to maintain liquidity or procure capital may be adversely affected by unfavorable or uncertain global economic and capital market conditions.

We have experienced and expect to continue to experience volatility in revenues, operating results and profitability due to uncertain global economic and capital market conditions. We have undertaken measures to reduce the impact of this volatility through diversification of markets and expansion of the geographic regions in which we operate. The end markets we serve include automotive, aerospace, oil and gas,

industrial, mining, chemical, and defense, each of which is impacted by specific industry and general economic cycles. Important factors impacting our businesses include, but are not limited to, the overall strength of the global economy and our customers' confidence in local and global macroeconomic conditions, industrial spending, tax rates, interest rates, the availability of commercial financing, and regulations and tariffs in the jurisdictions in which we operate. Instability in the global credit markets and geopolitical environment in many parts of the world may put pressure on global economic conditions. If global economic and market conditions, or economic conditions in key markets or regions deteriorate, we may experience material impacts on our financial statements.

We closely monitor the credit-worthiness of our insurers and customers and evaluate their ability to service their obligations to us. However, adverse changes to financial conditions could jeopardize these counterparty obligations. A tightening of credit markets may reduce funds available to our customers to pay for our products and services for a prolonged and perhaps unknown period of time. Restrictive credit markets may also result in customers extending terms for payment and may result in our having higher customer receivables with increased risk of default.

Should market conditions deteriorate, this may also adversely affect our ability to manage inventory levels and maintain current levels of profitability. If, for any reason, we lose access to commercial paper markets or our currently available lines of credit, or if we are required to raise additional capital, we may be unable to do so, or we may be able to do so only on unfavorable terms. Deteriorating market conditions could also indicate an impairment in the value of our goodwill and intangible assets in one or more of our reporting units which would require us to recognize a non-cash charge to our Statement of Operations. We test both goodwill and intangible assets for impairment on an annual basis and whenever events or changes in circumstances indicate the carrying value of an asset may not be recoverable.

We are subject to inherent business risks due to our operations and sales outside the U.S. and in emerging markets.

Our international operations, including U.S. exports, comprise a growing portion of our operations and are a strategic focus for continued future growth. Our strategy calls for increasing sales in overseas markets, including emerging markets such as Mexico, South America, China, Russia, and the Middle East. In 2018, 68% of our total sales were to customers operating outside of the United States. Our sales from international operations and export sales are subject to varying degrees of risks inherent in doing business outside of the United States. These risks include the following, some of which could be impacted by changes in international trade agreements or trade sanctions between the United States and other countries:

- possibility of unfavorable circumstances arising from host country laws or regulations;
- restrictions, regulations, or tax liabilities on currency repatriation;
- potential negative consequences from changes to taxation policies;
- the disruption of operations from labor and political disturbances;
- our ability to hire and maintain qualified staff in these regions; and
- changes in tariff and trade barriers and import and export licensing requirements.

Our operations in emerging markets could involve additional uncertainties, including risks that governments may impose limitations on our ability to repatriate funds, impose or increase withholding or other taxes on remittances and other payments to us, seek to nationalize our assets, or impose or increase investment barriers or other restrictions that may adversely affect our business. In addition, emerging markets pose other uncertainties, including challenges to our ability to protect our intellectual property, pressure on the pricing of our products, and risks of political instability.

The cost of compliance with increasingly complex and often conflicting regulations worldwide can also impair our flexibility in modifying product, marketing, pricing, or other strategies for growing our businesses, as well as our ability to improve productivity and maintain acceptable profit margins.

Significant movements in foreign currency exchange rates may adversely affect our financial statements.

A significant portion of our sales are to customers operating outside the U.S.; therefore, we are exposed to fluctuations in foreign currency exchange rates which could adversely affect our results of operations. The primary currencies to which we have exposure are the Euro, Mexican peso, Polish zloty, South Korean won, Chinese renminbi, and Czech koruna. From time to time, we may enter into derivative contracts to hedge some of these foreign currency exposures. However, our hedging strategy may fail to reduce our exposure or could result in unfavorable impact to our operating results.

As we continue to grow our business internationally, our operating results could be affected by the relative strength or weakness of global economies and the impact of foreign currency exchange rate fluctuations. Any significant change in the value of currencies of the countries in which we do business relative to the

value of the U.S. dollar could affect our ability to sell products competitively and control our cost structure, which could have a material adverse effect on our financial statements. Accordingly, fluctuations in foreign currency exchange rates may also impact our results when the currency of a transaction differs from the functional currency of our operating unit, or when financial statements in the functional currency of non-U.S. operating units are translated into U.S. dollars.

Recently announced tariffs remain uncertain and may continue to have a negative impact to our business.

The U.S. government recently announced tariffs on certain imported goods, and there have been various efforts to renegotiate trade arrangements between the U.S., China, and other countries. As a result, these tariffs negatively impacted the price of certain parts and materials we purchase to be included in the finished products we sell in the U.S. Since announced, we have been managing the known impacts from these tariffs and will continue attempting to mitigate the impact of these tariffs, including higher input costs through pricing and supply chain actions, efficient utilization of our global manufacturing footprint, and supplier negotiations and diversification strategies. Continued trade disputes between the U.S., China, or other countries, or other governmental action related to tariffs or international trade agreements or policies may adversely impact demand for our products, our costs, customers, and suppliers.

Our business is impacted by our customers' levels of capital investment and maintenance expenditures, particularly in the oil and gas, chemical, and mining markets.

Demand for certain industrial products and services depends on the level of capital investment and planned maintenance expenditures of our customers. Our customers' levels of capital expenditures depend, in turn, on general economic conditions, availability of credit, economic conditions within their respective industries and expectations of future market behavior. Additionally, volatility in commodity prices can negatively affect the level of these activities and can result in postponement of capital spending decisions or the delay or cancellation of existing orders. The ability of our customers to finance capital investment and maintenance may also be affected by factors independent of the conditions in their industries, such as the condition of global credit and capital markets.

The businesses of many of our customers, particularly those in the oil and gas, chemical, and mining industries, which represent approximately 10%, 7%, and 3%, respectively, of our 2018 revenue, are to varying degrees cyclical and have experienced, or may experience, periodic downturns of varying severity. Our customers in these industries, particularly those whose demand for our products and services is primarily profit-driven, historically have tended to delay large capital projects, including expensive maintenance and upgrades, during economic downturns. Additionally, fluctuating energy demand forecasts and lingering uncertainty concerning commodity pricing and other macroeconomic factors may cause our customers to be more conservative in their capital planning, which could reduce demand for our products and services. Reduced demand for our products and services could result in the delay or cancellation of existing orders or lead to excess manufacturing capacity, which unfavorably impacts our absorption of fixed manufacturing costs. This reduced demand may also erode average selling prices in our industry. Any of these results could adversely affect our business and financial results.

Additionally, some of our industrial products customers may choose to postpone capital investment and maintenance, even during favorable conditions in their industries or markets, which could lead to the delay or cancellation of orders. Despite these favorable conditions, the general health of global credit and capital markets and our customers' ability to access such markets may significantly impact investments in large capital projects, as well as necessary maintenance and upgrades. In addition, the liquidity and financial position of our customers, which are typically directly linked to the economies in which they operate, could impact capital investment decisions and their ability to pay in full and/or on a timely basis. Any of these factors, whether individually or in the aggregate, could have a material adverse effect on our customers and, in turn, our business and financial results.

Failure to compete successfully in our markets could adversely affect our business.

We provide products and services to competitive markets. We believe the principal points of competition in our markets are product performance, reliability and innovation, application expertise, brand reputation, energy efficiency, product life cycle cost, timeliness of delivery, proximity of service centers, effectiveness of distribution channels and price.

Maintaining and improving our competitive position will require continued investment by us in manufacturing, research and development, engineering, marketing, customer service and support, and our distribution networks. We may not be successful in maintaining our competitive position. Our competitors

may develop products that are superior to our products, or may develop more efficient or effective methods of providing products and services or may adapt more quickly than we do to new technologies or evolving customer requirements. Pricing pressures also could cause us to adjust the prices of certain products to stay competitive. We may not be able to compete successfully with existing or new competitors.
Our operating costs are subject to fluctuations, particularly due to changes in commodity prices, raw materials, energy and related utilities, freight, tariffs, and cost of labor. In order to remain competitive, we may not be able to recoup all or a portion of these higher costs from our customers through product price increases. Further, our ability

to realize financial benefits from efficiency initiatives may not be able to mitigate these manufacturing and operating cost increases and, as a result, could negatively impact our profitability.

Quality problems with our manufacturing processes or finished goods could harm our reputation for producing high-quality products and erode our competitive advantage, sales, and market share.

We manufacture key components that are integral to the operation of systems and manufacturing processes in the automotive, aerospace, oil and gas, industrial, mining, chemical, and defense markets. The reliability and performance of our products are critically important to our customers and the users of their products. Accordingly, quality is extremely important to us and our customers due to the potentially costly consequences of product failure. Our quality certifications, including products manufactured to military specifications, are critical to the marketing success of our goods and services. If we fail to meet these standards, our reputation could be damaged, we could lose customers or the ability to sell certain products, and our revenue and results of operations could be materially adversely affected. Our success in part depends on our ability to manufacture to exact tolerances precision-engineered components, subassemblies, and finished devices from multiple materials. If our components fail to meet these standards or fail to adapt to evolving standards, our reputation as a manufacturer of high-quality components will be harmed, our competitive advantage could be damaged, and we could lose customers, market share or our ability to sell certain products.

We are subject to risks related to government contracting, including changes in levels of government spending and regulatory and contractual requirements applicable to sales to the U.S. government.

Our Connect & Control Technologies and Motion Technologies segments derive a portion of their revenue from sales to U.S. government customers and higher tier contractors who sell to the U.S. government. Government expenditures are subject to political and budgetary fluctuations and constraints, which may result in significant unexpected changes in levels of demand for our products. In addition, the award, administration and performance of government contracts is subject to regulatory and contractual requirements that differ significantly from the terms and conditions that apply to contracts with our non-governmental customers. We may be subject to audits and investigations to evaluate our compliance with these requirements. If we are found to have failed to comply with requirements applicable to government contractors, we may be subject to various actions, including but not limited to fines or penalties, reductions in the value of our government contracts, or suspension or debarment from government contracting. Failure to comply with applicable requirements also could harm our reputation and our ability to compete for future government contracts or sell equivalent commercial products. Any of these outcomes could have a material adverse effect on our business, results of operations and financial condition.

Our business could be adversely affected by raw material price volatility and the inability of suppliers to meet quality and delivery requirements.

Our business relies on third-party suppliers for raw materials, components, and contract manufacturing services to produce our products. The supply of raw materials to the Company and to its component parts suppliers could be interrupted for a variety of reasons, including availability and pricing. Commodity prices, and the prices for other raw materials necessary for production have fluctuated significantly in the past, impacting our operating results, and significant future increases in commodity prices could adversely affect our results of operations and profit margins. Due to pricing pressure or other factors, we may not be able to pass along increased raw material and component prices to our customers in the form of price increases or our ability to do so could be delayed. Consequently, our results of operations and financial condition may be adversely affected.

For most of our products, we have existing alternate sources of supply, or the required materials are readily available. In limited instances we depend on a single source of supply, manufacturing or assembly or participate in commodity markets that may be subject to a limited number of suppliers. While we believe we could obtain and qualify alternative sources for most sole and limited source supplier materials, if necessary, the transition time could be long, particularly if the change requires us to redesign our systems,

and this process could materially increase our costs. Delays in obtaining supplies may result from a number of factors affecting our suppliers, including production interruptions at suppliers, capacity constraints, labor disputes, the impaired financial condition of a particular supplier, the ability of suppliers to meet regulatory requirements, and suppliers' allocations to other purchasers. Any delay in our suppliers' abilities to provide us with sufficient quality and flow of materials, price increases, or decreased availability of raw materials or commodities could impair our ability to deliver products to our customers and, accordingly, could have an adverse effect on our business, results of operations and financial position.

If we fail to manage the distribution of our products and services effectively, our revenue, gross margin and profitability could suffer. A significant portion of our revenue is derived from a single customer.

We use a variety of sales channels to sell our products and services. Successfully managing these sales channels is a complex process as we sell a broad mix of products through a network of approximately 700 distributors, agents, and value-added resellers. Moreover, since each distribution method has distinct risks and profit margins, our failure to implement the most advantageous balance in the delivery model for our products and services could adversely affect our revenue and profit margins. In addition, changes to the sales channels could introduce additional complexity to our sales and inventory management processes and could cause disruptions to customer service or create channel conflicts.

Further, we must manage inventory effectively, particularly with respect to sales to distributors, which involves forecasting demand and potential pricing issues. Distributors may increase orders during periods of product shortages, cancel orders if their inventory is too high or delay orders in anticipation of new products. Our reliance on indirect distribution methods may reduce visibility to end-customer demand, generating a time lag to the market trend with potential negative impacts on inventory levels and strategic decisions, including pricing, capital deployment, and operational decisions.

Our financial results could be adversely affected by the loss of or delays caused by a distributor, the loss or deterioration of some distribution or reseller arrangements, channel conflicts, including the consolidation of third-party distributors, or if the financial conditions of our channel partners were to weaken. Some of our distributors may have insufficient financial resources and may not be able to withstand changes in business conditions, including economic weakness, leading to a slowness or difficulty in the cash collection process.

Sales to Continental, ITT's largest customer, was approximately 11% of our total revenue in 2018, however, a significant portion of this revenue, typically about 50% of the total, is derived from the OEMs specification to use an ITT brake pad in Continental's braking system, generally through supply agreements signed directly with OEMs. The loss of this customer could have a material adverse effect on our business, results of operations, or financial condition.

Changes in our effective tax rates as a result of changes in the realizability of our deferred tax assets, the geographic mix of earnings, tax examinations or disputes, tax authority rulings, or changes in the tax laws, may adversely affect our financial results.

The Company is subject to income taxes in the U.S. and in various foreign jurisdictions. We exercise significant judgment in calculating our provision for income taxes and other tax liabilities. In the ordinary course of our business, there are many transactions and calculations where the ultimate tax determination is uncertain. Furthermore, changes in domestic or foreign income tax laws and regulations, or their interpretation, could result in higher or lower income tax rates assessed or changes in the taxability of certain income or the deductibility of certain expenses, thereby affecting our income tax expense and profitability.

Any significant increase in our future effective tax rates could reduce net income in future periods. Given the global nature of our business, a number of factors may increase our future effective tax rates, including:

- changes in the geographic mix of our profits among jurisdictions with differing statutory income tax rates;
- sustainability of historical income tax rates in the jurisdictions in which we conduct business;
- changes in tax laws applicable to us;
- expiration, renewal, or application of tax holidays;
- the resolution of issues arising from tax audits with various tax authorities; or
- changes in the valuation of our deferred tax assets, deferred tax liabilities, and deferred tax asset valuation allowances.

The amount of income taxes and other taxes we have paid are subject to ongoing audits by U.S. federal, state and local tax authorities and by non-U.S. authorities. If these audits result in assessments different from amounts paid or reserved, future financial results may include unfavorable tax adjustments. We are currently under routine examination by the U.S. Internal Revenue Service and other tax authorities, and we may be subject to additional examinations in the future. The tax authorities may disagree with our tax

treatment of certain material items and thereby increase our tax liability. Failure to sustain our position in these matters could result in a material adverse effect on our financial statements.

Failure to retain our existing senior management, engineering and other key personnel or the inability to attract and retain new qualified personnel could negatively impact our ability to operate or grow our business.

Our success will continue to depend to a significant extent on our ability to retain or attract a significant number of employees in senior management and engineering and other key personnel. The ability to attract or retain employees will depend on our ability to offer competitive compensation, training and cultural benefits. We will need to continue to develop a roster of qualified talent to support business growth and replace departing employees. A failure to retain or attract highly skilled personnel could adversely affect our operating results or our ability to operate or grow our business.

Our inability to protect our own intellectual property rights, or unintentionally violating the intellectual property rights of others could negatively impact our business and financial results.

Obtaining, maintaining and enforcing our proprietary rights is critical to the success of our business. For certain products and manufacturing processes, we rely on patents, trademarks, trade secrets, non-disclosure agreements and other contracts to protect these rights. These contracts may be breached, or may not prevent competitors from independently developing or selling similar products, and therefore could have a negative impact on our business. In addition, during the normal course of business, we could unintentionally infringe or violate the proprietary rights of others. Intellectual property litigation could be time consuming for management, and could result in significant legal expense to either pursue claims against others, or to defend ourselves. If we are unable to protect our patents, trademarks, or other proprietary rights, or if we infringe or violate the rights of others, our business, results of operations, or financial condition could be materially adversely affected.

A material business interruption, particularly at one of our manufacturing facilities, could negatively impact our ability to generate sales and meet customer demand.

If operations at one of our manufacturing facilities were to be disrupted as a result of a significant equipment failure, natural disaster, power outage, fire, explosion, act of terrorism, IT system failure, cyber-attack, adverse weather conditions, labor disputes, relocation of production location, or any other reason, our financial performance could be adversely affected as a result of our inability to meet customer demand for our products. We have business continuity plans in place to mitigate the effects of such interruptions, but these plans may not be able to resolve the issues in a timely manner. A significant interruption in production capability could also require us to make substantial payments due to non-performance, which could negatively affect our results of operations. We have insurance for certain covered losses which we believe to be adequate to provide for reconstruction of facilities and equipment, as well as certain financial losses resulting from any production interruption or shutdown. However, any recovery under our insurance policies may not offset the lost revenues or increased expenses that may be experienced during the disruption of operations.

Additionally, we intend to upgrade or replace various existing Enterprise Resource Planning (ERP) systems over the next several years. Implementing new ERP systems may result in unintended changes to the way in which production is performed and transactions are processed. Our inability to successfully execute these ERP systems implementations could negatively impact our customers or financial results during this implementation period.

Cyber-security breaches could adversely affect our business and results of operations.

The efficient operation of our business is dependent on information technology systems, some of which are managed by third parties. In the ordinary course of business, we collect and store confidential information, including proprietary business information belonging to us, our customers, suppliers, business partners and, other third parties and personally identifiable information of our employees. We have taken many steps to protect our information systems, including the installation of protective systems that monitor, test, and backup our systems, as well as annual employee training. For third parties that manage our confidential data on cloud-based servers, we have a robust process to ensure the third party has appropriate systems and controls in place to manage potential cyber threats.

Our information technology systems and those of third party service providers may be susceptible to damage, disruptions or shutdowns due to power outages, hardware failures, telecommunication failures, cyber-attacks, and user errors. If we experience a disruption in our information technology systems, it could result in the loss of sales and customers and significant incremental costs, which could materially adversely affect our business. Moreover, even the most well-protected information systems are vulnerable to internal and external security breaches including, but not limited to, those by computer hackers and cyber terrorists utilizing techniques such as phishing, ransomware or denial of service attacks. In addition, as a provider of products and services to government and commercial customers, and particularly as a government contractor, we are subject to a heightened risk of security breaches caused by computer viruses, illegal break-ins or hacking, sabotage, or acts of vandalism, including by foreign governments and cyber terrorists. Furthermore, information technology security threats are increasing in sophistication, intensity, and frequency.

While we actively manage the risks to our information systems that are within our control, we can provide no assurance that our actions or those of our third party service providers will be successful in eliminating or mitigating risks to our systems, networks or data. Accordingly, a security breach may occur, including breaches that we may be unable to detect. The unavailability of our information systems, the failure of these systems to perform as anticipated for any reason or any significant breach of security could cause significant disruption to our business or could result in decreased performance and increased overhead costs, causing an adverse effect on our reputation, business, financial condition and results of operations. If we are unable to protect sensitive information, our customers or governmental authorities could question the adequacy of our security processes and procedures and our compliance with evolving government cyber security requirements for government contractors. A breach could also result in the loss of our intellectual property, potentially impacting our long-term capability to compete for sales of affected products. In addition, a breach of security of our information systems could result in litigation, regulatory action and potential liability, as well as increased costs to implement further information security measures. If we are unable to prevent, detect or adequately respond to cyber-security breaches, our operations could be disrupted and our business could be materially and adversely affected.

Changes in laws relating to the use and transfer of personal and other information could adversely affect our business and results of operations.

The processing and storage of certain information is increasingly subject to privacy and data security regulations, and many such regulations are country-specific. The interpretation and application of data protection laws in the U.S., Europe, and elsewhere are uncertain, evolving and may be inconsistent among jurisdictions. Compliance with these various laws may be onerous and require us to incur substantial costs or to change our business practices in a manner that adversely affects our business, while failure to comply with such laws may subject us to substantial penalties. For example, the European Union's General Data Protection Regulation (GDPR), which became effective in May 2018, imposed significant new requirements on how we collect, process and transfer personal data, as well as significant fines for non-compliance. The costs of compliance with the GDPR and the potential for fines and other related costs in the event of a breach of the GDPR or other information security or privacy requirements may have an adverse effect on our financial results.

Portfolio management strategies for growth, including cost-saving initiatives, may not meet expectations.

We regularly review our portfolio of businesses and pursue growth through the acquisition of other companies, assets and product lines that either complement or expand our existing business. Although we conduct what we believe to be a prudent level of investigation regarding the operating and financial condition of the businesses we purchase, a level of risk remains regarding the actual operating condition of these businesses. Until we actually assume operating control of these business assets and their operations, we may not be able to ascertain the actual value or understand the potential liabilities of the acquired entities and their operations. Acquisitions involve a number of risks and present financial, managerial and operational challenges that could have a material adverse effect on our reputation and business, including that an acquired business could under-perform relative to our expectations, the failure to realize expected synergies, integration of technology, operations, personnel and financial and other systems, the possibility that we have acquired substantial undisclosed liabilities, potentially insufficient internal controls over financial activities or financial reporting at an acquired company that could impact us on a consolidated basis, diversion of management attention from other businesses, loss of key employees of the acquired businesses, and customer dissatisfaction or performance.

Our portfolio reviews also include the potential for cost-saving initiatives through restructuring and other initiatives. We strive for and expect to achieve cost savings in connection with certain initiatives, including: (i) manufacturing process and supply chain rationalization; (ii) streamlining redundant administrative overhead and support activities; and (iii) restructuring and repositioning actions. Cost savings expectations are inherently estimates that are difficult to predict and we cannot provide assurance that we will achieve expected, or any, actual cost savings. Our restructuring activities may place substantial demands on our

management, which could lead to the diversion of management’s attention from other business priorities and result in a reduced customer focus. In addition, restructuring activities may result in a loss of knowledge or expertise of existing products or business processes or could negatively impact employee performance and retention.

The level of returns on postretirement benefit plan assets, changes in interest rates and other factors could affect our earnings and cash flows in future periods.
A portion of our current and retired employee population is covered by pension and other employee-related defined benefit plans (collectively, postretirement benefit plans). We may experience significant fluctuations in costs related to postretirement benefit plans as a result of macroeconomic factors, such as interest rates, that are beyond our control. The cost of our postretirement plans is incurred over long periods of time and involves various factors and uncertainties during those periods, which can be volatile and unpredictable, including the rates of return on postretirement benefit plan assets and discount rates used to calculate liabilities and expenses. Management develops each assumption using our relevant experience in conjunction with market-related data. Our liquidity, cash flows and financial statements could be materially affected by significant changes in key economic indicators, volatility in the financial markets, future legislation and other governmental regulatory actions.
We make contributions to fund our postretirement benefit plans when considered necessary or advantageous to do so. The macro-economic factors discussed above, including the return on postretirement benefit plan assets and the minimum funding requirements established by local government funding or taxing authorities, or established by other agreements, may influence future funding requirements. A significant decline in the fair value of our plan assets, or other adverse changes to our overall pension and other employee-related benefit plans could require increased funding contributions and could adversely affect our financial statements. Future minimum funding requirements will depend primarily on the return on plan assets and discount rate. Depending on these factors, the level of future minimum contributions could be material.
Our business could be adversely affected by the inability of suppliers to provide us with certifications relating to conflict minerals.
Since our supply chain is complex, ultimately we may not be able to sufficiently discover the origin of the conflict minerals (generally defined as the minerals tin, tantalum, titanium and gold which have been extracted from the Democratic Republic of the Congo or adjoining countries) used in our products through the due diligence procedures that we implement, which may adversely affect our reputation with our customers, shareholders, and other stakeholders. We may also face difficulties in satisfying customers who require that all of our products are certified as conflict mineral free. If we are not able to meet such requirements, customers may choose not to purchase our products, which could adversely affect our sales and the value of portions of our inventory. Further, there may be only a limited number of suppliers offering conflict free minerals and, as a result, we cannot be sure that we will be able to obtain metals, if necessary, from such suppliers in sufficient quantities or at competitive prices. Any one or a combination of these various factors could harm our business, reduce market demand for our products, and adversely affect our financial results.
Changes in environmental laws or regulations, the discovery of previously unknown or more extensive contamination, or the failure of a potentially responsible party to perform may adversely affect our financial results.
We are subject to a variety of federal, state, local and foreign laws, rules and regulations related to the use, storage, handling, discharge or disposal of certain toxic, volatile or otherwise hazardous chemicals, gases and other substances used in manufacturing our products. Some of these laws in the United States include the Federal Clean Water Act, Clean Air Act, Resource Conservation and Recovery Act, Comprehensive Environmental Response, Compensation, and Liability Act, Toxic Substances Control Act, and similar state and foreign statutes and regulations. In the European Union (EU), we are subject to the EU regulation on Registration, Evaluation, Authorization and Restriction of Chemicals. Compliance with these laws and regulations could require us to incur substantial expenses. Environmental laws and regulations allow for the assessment of substantial fines and criminal sanctions as well as facility shutdowns to address violations, and may require the installation of costly pollution control equipment or operational changes to limit emissions or discharges. We also could be affected by changes in environmental laws or regulations, including, for example, those imposed in response to vapor intrusion or climate change concerns.

Developments such as the adoption of new environmental laws and regulations, violations by us of such laws and regulations, discovery of previously unknown or more extensive contamination, litigation involving environmental impacts, the adequacy of insurance policies, our inability to recover costs associated with any such developments, or financial insolvency of other potentially responsible parties could have a material adverse effect on our business, financial condition and results of operations.

Failure to comply with the U.S. Foreign Corrupt Practices Act or other applicable anti-corruption legislation, as well as export controls and trade sanctions, could result in fines or criminal penalties.

We operate in a number of countries throughout the world, including countries known to have a reputation for corruption. We are committed to doing business in accordance with applicable anti-corruption laws. However, we cannot provide assurance that our internal controls will always protect us from reckless or criminal acts committed by our employees, agents or business partners that would violate U.S. and/or applicable non-U.S. laws, including anti-bribery, competition, trade sanctions and regulation, and other laws including but not limited to, the U.S. Foreign Corrupt Practices Act of 1977 and the U.K. Bribery Act of 2010, as well as trade sanctions administered by the Office of Foreign Assets Control (OFAC), the U.S. Department of State and the U.S. Department of Commerce. Any such violation could result in substantial fines, sanctions, civil and/or criminal penalties, suspension or debarment from government contracts, or curtailment of operations in certain jurisdictions, and might adversely affect our business, financial condition or results of operations or financial position. Furthermore, detecting, investigating, and resolving actual or alleged violations is expensive and can consume significant time and attention of our senior management. Even the allegation or appearance of our employees, agents or business partners acting improperly or illegally could damage our reputation and result in significant expenditures in investigating and responding to such actions.

We are subject to laws, regulations and potential liability relating to claims, complaints and proceedings, including those related to product and other matters.

Our business exposes us to potential product liability risks that are inherent in the design, manufacture, and marketing of products for the markets we serve. In addition, many of the devices we manufacture and sell are designed to be used in harsh environments for long periods of time where the cost of failure is high. Component failures, manufacturing defects, design flaws, or inadequate disclosure of product-related risks or product-related information could result in an unsafe condition or injury to, or death of, an end-user of our products. The occurrence of such a problem could result in product liability claims or a recall of, or safety alert relating to, one or more of our products which could ultimately result, in certain cases, in the removal of such products from the marketplace and claims regarding costs associated therewith. Product liability claims or product recalls in the future, regardless of their ultimate outcome, could have a material adverse effect on our business and reputation and on our ability to attract and retain customers for our products.

We are subject to various laws, ordinances, regulations and other requirements of government authorities in the U.S. and in foreign countries. Any violations or failure to comply with securities laws, trade or tax rules or similar regulations could create a substantial liability for us, and also could cause harm to our reputation. Changes in laws, ordinances, regulations or other government policies, the nature, timing, and effect of which are uncertain, may significantly increase our expenses and liabilities.

From time to time we are involved in legal proceedings that are incidental to the operation of our businesses. Some of these proceedings allege damages relating to personal injury claims, employment and employee benefit matters and commercial or contractual disputes, sometimes related to acquisitions or divestitures. Additionally, we may become subject to significant claims of which we are currently unaware or the claims of which we are aware may result in our incurring a significantly greater liability than we anticipate or can estimate.

Past divestitures and spin-offs may expose us to potential liabilities.

Over our more than 100-year history, we have divested a number of businesses, including as part of spin-offs in 1995 and 2011. With respect to some of these former businesses, we have contractually agreed to indemnify the counterparties against, or otherwise retain, certain liabilities, including, for example certain lawsuits, tax liabilities, product liability claims, asbestos claims or environmental matters. Even without ongoing contractual indemnification obligations, we could be exposed to liabilities arising out of such divestitures. In addition, the counterparties to those divestitures may have agreed to indemnify us or assume certain liabilities relating to those divestitures. Similarly, there can be no assurance that the indemnity or assumption of liability by the counterparties will be sufficient to protect us against the full

amount of these liabilities, or that a counterparty will be able to fully satisfy its obligations. Third parties also could seek to hold us responsible for any of the liabilities that a counterparty agreed to assume. Even if we ultimately succeed in recovering any amounts for which we were initially held liable, we may be temporarily required to bear these losses ourselves. For example, as part of the Distribution Agreement that we signed in 2011, ITT LLC, Exelis, and Xylem indemnified each other with respect to such parties' assumed or retained liabilities pursuant to the Distribution Agreement and breaches of the Distribution Agreement or related spin agreements. As a result of these types of arrangements, conditions outside our control could have a material adverse effect on our future financial results.

Anti-takeover provisions in our organizational documents and Indiana law could delay or prevent a change in control.

Certain provisions of our articles of incorporation and by-laws may delay or prevent a merger or acquisition that a shareholder may consider favorable. For example, the articles of incorporation authorize our Board of Directors to issue one or more series of preferred stock. In addition, the articles of incorporation and by-laws, among other things, do not permit action by written consent of the shareholders. These provisions may also discourage acquisition proposals or delay or prevent a change in control, which could harm our stock price. Indiana law also imposes some restrictions on mergers and other business combinations between any holder of 10% or more of our outstanding common stock and us as well as certain restrictions on the voting rights of "control shares" of an "issuing public corporation."

UNRESOLVED STAFF COMMENTS

None.

PROPERTIES

We consider the offices, plants, warehouses, and other properties that we own or lease to be in good condition and generally suitable for their intended purpose. We believe these properties are adequate for the Company's needs and will generally allow for expansion of capacity if needed. The following table summarizes the number and area (in thousands of square feet) of our properties by region and business segment that support our operations as of December 31, 2018.

	Number of Facilities - Owned							
	Motion Technologies		Industrial Process		Connect & Control Technologies		Total	
Location	#	Area	#	Area	#	Area	#	Area
Manufacturing:								
North America	4	813.6	3	1,109.0	3	515.4	10	2,438.0
Europe	9	1,581.1	1	356.8	1	231.3	11	2,169.2
Asia	—	—	1	670.9	1	33.5	2	704.4
South America	—	—	1	42.7	—	—	1	42.7
	13	2,394.7	6	2,179.4	5	780.2	24	5,354.3
Non-Manufacturing:								
North America	—	—	3	112.5	—	—	3	112.5
Europe	2	88.7	—		—	—	2	88.7
	2	88.7	3	112.5	—	—	5	201.2

	Number of Facilities - Leased									
	Motion Technologies		Industrial Process		Connect & Control Technologies		Other		Total	
Location	#	Area	#	Area	#	Area	#	Area	#	Area
Manufacturing:										
North America	3	56.6	3	156.0	6	322.0	—		12	534.6
Europe	5	378.8	1	11.7	3	69.0	—		9	459.5
Asia	2	348.6	2	161.5	2	297.6	—		6	807.7
South America	—	—	2	49.6	—	—	—		2	49.6
	10	784.0	8	378.8	11	688.6	—		29	1,851.4
Non-Manufacturing:										
North America	2	58.0	11	303.5	—	—	2	64.6	15	426.1
Europe	6	130.5	10	91.0	—	—	1	3.2	17	224.7
Middle East	—	—	2	13.5	—	—	—		2	13.5
Asia	3	12.4	8	102.2	4	9.5	3	12.9	18	137.0
South America	—	—	7	95.5	—	—	—		7	95.5
	11	200.9	38	605.7	4	9.5	6	80.7	59	896.8

LEGAL PROCEEDINGS

From time to time, we are involved in litigation, claims, government inquiries, investigations and proceedings, including but not limited to those relating to environmental exposures, intellectual property matters, personal injury claims, regulatory matters, commercial and government contract issues, employment and employee benefit matters, commercial or contractual disputes, and securities matters.

Asbestos Proceedings

Subsidiaries of ITT, ITT LLC and Goulds Pumps LLC, have been joined as defendants with numerous other companies in product liability lawsuits alleging personal injury due to asbestos exposure. These claims allege that certain of their products sold prior to 1985 contained a part manufactured by a third party (*e.g.*, a gasket) which contained asbestos. To the extent these third-party parts may have contained asbestos, it was encapsulated in the gasket (or other) material and was non-friable. Frequently, the plaintiffs are unable to identify any ITT LLC or Goulds Pumps LLC products as a source of asbestos exposure. In addition, a large majority of claims pending against the Company's subsidiaries have been placed on inactive dockets because the plaintiff cannot demonstrate a significant compensable loss. Our experience to date is that a substantial portion of resolved claims have been dismissed without payment by the Company's subsidiaries.

We have recorded a liability for pending asbestos claims and asbestos claims estimated to be filed over the next 10 years. While it is probable that we will incur additional costs for future claims to be filed against the Company, a liability for potential future claims beyond the next 10 years is not reasonably estimable due to the uncertainties and variables inherent in the long-term projection of the Company's asbestos exposures and potential recoveries. As of December 31, 2018, we have recorded an undiscounted asbestos-related liability for pending claims and unasserted claims estimated to be filed over the next 10 years of $849.3, which includes expected legal fees and we have recorded an associated asset of $376.7, which represents estimated recoveries from insurers, resulting in a net exposure of $472.6. See information provided in Note 20, Commitments and Contingencies, to the Consolidated Financial Statements for further information.

Environmental

In the ordinary course of business, we are subject to federal, state, local, and foreign environmental laws and regulations. We are responsible, or are alleged to be responsible, for ongoing environmental investigation and site remediation. These sites are in various stages of investigation and/or remediation and in many of these proceedings our liability is considered de minimis. We have received notification from the U.S. Environmental Protection Agency, and from similar state and foreign environmental agencies, that a number of sites formerly or currently owned and/or operated by ITT, and other properties or water supplies that may be or have been impacted from those operations, contain disposed or recycled materials or wastes and require environmental investigation and/or remediation. These sites include instances where we have been identified as a potentially responsible party under federal and state environmental laws and regulations. See information provided in Note 20, Commitments and Contingencies, to the Consolidated Financial Statements for further information.

Other Matters

The Company received a civil subpoena from the Department of Defense, Office of the Inspector General, in the second quarter of 2015 as part of an investigation being led by the Civil Division of the U.S. Department of Justice (DOJ). The subpoena and related investigation involve certain connector products manufactured by the Company’s Connect & Control Technologies segment that are purchased or used by the U.S. government. The Company is cooperating with the government and has produced documents responsive to the subpoena. Based on its current analysis following discussions with DOJ to resolve the civil matter, the Company has increased the accrual to $10 as its current best estimate of the amount of probable loss. It is reasonably possible that any actual loss related to this matter may be higher than this amount. In addition, the Criminal Division of DOJ also investigated this matter. In the fourth quarter of 2018, the Fraud Section of DOJ’s Criminal Division advised the Company that it had decided, based on its assessment of the available information, to decline to prosecute the Company at this time.

MINE SAFETY DISCLOSURES

Not applicable.

EXECUTIVE OFFICERS OF THE REGISTRANT

The current executive officers of the Company, as of February 1, 2019, are listed below.

Name	Age	Current Title
Luca Savi	53	Chief Executive Officer and President
Farrokh Batliwala	43	Senior Vice President and President, Connect & Control Technologies
John Capela	39	Vice President and Chief Accounting Officer
Ryan F. Flynn	47	Senior Vice President and President, Asia Pacific
Carlo Ghirardo	48	Senior Vice President and President, Motion Technologies
Mary Elizabeth Gustafsson	59	Senior Vice President, General Counsel and Chief Compliance Officer
Maurine C. Lembesis	52	Senior Vice President, Chief Human Resources Officer
David J. Malinas	44	Senior Vice President and President, Industrial Process
Thomas M. Scalera	47	Executive Vice President and Chief Financial Officer

Luca Savi was appointed Chief Executive Officer, President and a director of the Company in January 2019. He previously served as President and Chief Operating Officer of the Company from August 2018 to December 2018 and as Executive Vice President and Chief Operating Officer from January 2017 to August 2018. Prior to that, he served as Executive Vice President, Motion Technologies from February 2016 to January 2017 and as Senior Vice President and President, Motion Technologies from November 2011 to February 2016. Prior to joining the Company, Mr. Savi served as Chief Operating Officer, Comau Body Welding at Comau, a subsidiary of the Fiat Group responsible for producing and serving advanced manufacturing systems, from 2009 to 2011 and as Chief Executive Officer, Comau North America from 2007 to 2009. Mr. Savi previously held leadership roles at Honeywell International, Royal Dutch Shell and technical roles at Ferruzzi-Montedison Group.

Farrokh Batliwala has served as our Senior Vice President and President, Connect and Control Technologies since May 2017. Prior to the combination of Control Technologies and Interconnect Solutions, Mr. Batliwala served as the Senior Vice President of Control Technologies and Interconnect Solutions from November 2016 to May 2017 and previously as Senior Vice President and President, Control Technologies from October 2015 to November 2016. Prior to joining us, Mr. Batliwala served as Vice President and General Manager, Hydraulics, Power and Motion Control Division for Eaton Corporation (Eaton), a diversified global power management technology company, from 2013 to 2015. Mr. Batliwala held various other positions of increasing levels of responsibility at Eaton since 2004.

John Capela has served as our Vice President and Chief Accounting Officer since November 2018. He previously served as Executive Vice President, Chief Accounting Officer and Corporate Controller of Toys "R" Us, Inc. from May 2018 to November 2018 and as Vice President and Corporate Controller from March 2018 to May 2018. Prior to that, Mr. Capela served as Vice President and Assistant Controller from May 2015 to March 2018 and held various other positions of increasing levels of responsibility at Toys "R" Us, Inc. Prior to joining Toys "R" Us, Inc. in March 2007, Mr. Capela spent several years with PricewaterhouseCoopers LLP in its audit practice. Mr. Capela is also a Certified Public Accountant and a Chartered Global Management Accountant.

Ryan F. Flynn has served as Senior Vice President and President, Asia Pacific Region since January 2019. He previously served as General Manager of Motion Technologies China since 2016. Prior to joining ITT he served as Executive Vice President and Head of Business Area Equipment for Konecranes from 2013 to 2016 and held various other positions with Konecranes including the Asia-Pacific President and Director for its Port Cranes & Lifttrucks businesses in Asia from 2005 to 2013.

Carlo Ghirardo has served as our Senior Vice President and President, Motion Technologies since April 2018. He previously served as President of Eaton's Vehicle Group EMEA region since 2017. He also served as Vice President and General Manager of Eaton's Engine Air Management Product Group from 2015, as Vice President and General Manager of Eaton's Valvetrain Division from 2010, as well as holding various other executive roles in global operations from 2003. Prior to that, Mr. Ghirardo held leadership positions at United Technologies Corporation and Michelin. He also acquired lean manufacturing consulting

and project management experience with Galgano & Associati working in transformation projects across Europe.

Mary Elizabeth Gustafsson has served as our Senior Vice President and General Counsel since February 2014 and as our Chief Compliance Officer since August 2014. Prior to joining us, Ms. Gustafsson served as Executive Vice President, General Counsel and Corporate Secretary of First Solar Inc. from 2009 to 2013 and from 2008 to 2009 as Vice President, General Counsel. Prior to that Ms. Gustafsson was Senior Vice President, General Counsel and Secretary of American Standard Companies, Inc. from 2005 to 2008.
Maurine C. Lembesis has served as our Senior Vice President and Chief Human Resources Officer since January 2019. She previously served as Vice President and Corporate Human Resources Business Partner from January 2017 to December 2018 and prior to that as Executive Director, Corporate Human Resources since June 2013. Prior to joining ITT, she held roles of increasing responsibility in Human Resources at Avon Products Inc. from 2007 to 2013, including the role of Executive Director of Human Resources. In addition, Ms. Lembesis held various other human resources roles at Capital Group Companies, Pfizer Inc. and GE Capital.
David J. Malinas has served as our Senior Vice President and President, Industrial Process since June 2017. He previously served as Vice President and General Manager of Thermo Fisher Scientific, a leading provider of scientific tools and services, from April 2008 through June 2017. In addition, while at Thermo Fisher Scientific, he held a variety of leadership roles across the United States and Japan. Mr. Malinas also previously held a variety of management roles at Danaher Corporation in the Environmental and Motion platforms in the USA, England, Germany, and Mexico.
Thomas M. Scalera has served as our Executive Vice President and Chief Financial Officer since February 2015 and previously as Senior Vice President, Chief Financial Officer and Strategy and IT Leader since August 2014 and prior to that as Senior Vice President and Chief Financial Officer since October 2011. He previously served as Vice President, Corporate Finance from 2010 to 2011 and Director, Investor Relations from 2008 to 2010. Prior to joining ITT in 2006, Mr. Scalera held senior financial roles with R.R. Donnelley, Dover Corp., and PricewaterhouseCoopers, LLP.

PART II

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

COMMON STOCK AND DIVIDENDS

Our common stock is reported in the consolidated transaction reporting system of the New York Stock Exchange (NYSE), the principal market in which this security is traded (under the trading symbol "ITT"). There were approximately 7,676 holders of record of our common stock on February 20, 2019.

The amount and timing of dividends payable on our common stock are within the sole discretion of our Board of Directors and will be based on, and affected by, a number of factors, including our financial position and results of operations, available cash, expected capital spending plans, prevailing business conditions, and other factors the Board deems relevant. Therefore, there can be no assurance as to what level of dividends, if any, will be paid in the future.

EQUITY COMPENSATION PLAN INFORMATION

The equity compensation plan information called for by Item 5(a) is set forth under the caption "Equity Compensation Plan Information" in our Proxy Statement for the 2019 Annual Meeting of Shareholders. During the fiscal year ended December 31, 2018, no equity securities of the Company were sold by the Company that were not registered under the Securities Act.

ISSUER PURCHASES OF EQUITY SECURITIES

We did not make any open-market share repurchases of our common stock during the quarter ended December 31, 2018. We routinely receive shares of our common stock as payment for stock option exercises and the withholding of taxes due on stock option exercises and the vesting of restricted stock awards from stock-based compensation program participants.

PERFORMANCE GRAPH
CUMULATIVE TOTAL RETURN

Based upon an initial investment on December 31, 2013 of $100 with dividends reinvested

	12/31/2013	12/31/2014	12/31/2015	12/31/2016	12/31/2017	12/31/2018
ITT Inc.	$ 100.00	$ 94.13	$ 85.53	$ 92.04	$ 128.91	$ 117.74
S&P 400 Mid-Cap	$ 100.00	$ 109.74	$ 107.34	$ 129.60	$ 150.63	$ 133.91
S&P 400 Capital Goods	$ 100.00	$ 100.25	$ 94.73	$ 124.97	$ 155.83	$ 134.00

This graph is not, and is not intended to be, indicative of future performance of our common stock. This graph shall not be deemed "filed" with the SEC or subject to the liabilities of Section 18 of the Exchange Act, and should not be deemed to be incorporated by reference into any of our prior or subsequent filings under the Securities Act.

SELECTED FINANCIAL DATA

The following table presents selected historical financial data derived from the Consolidated Financial Statements for each of the five years presented. The selected financial data should be read in conjunction with, and is qualified in its entirety by reference to Management's Discussion and Analysis of Financial Condition and Results of Operations and the Consolidated Financial Statements and the Notes thereto. Gross profit, gross margin, other operating costs, operating income and operating margin for the years ended December 31, 2017 through 2014 have been restated to reflect the adoption of ASU 2017-07, *Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost*. Refer to Note 2, Recent Accounting Pronouncements for further information.

(In Millions, except per share amounts)	**2018**	2017[a]	2016[b]	2015	2014
Results of Operations					
Revenue	**$2,745.1**	$2,585.3	$2,405.4	$2,485.6	$2,654.6
Gross profit	**887.2**	819.9	760.9	802.7	868.5
Gross margin	***32.3 %***	*31.7 %*	*31.6 %*	*32.3 %*	*32.7 %*
Asbestos-related costs (benefit), net[c]	**4.9**	(19.9)	(25.6)	(91.4)	3.9
Other operating costs[d]	**485.0**	520.5	509.9	517.6	593.1
Operating income	**397.3**	319.3	276.6	376.5	271.5
Operating margin	***14.5 %***	*12.4 %*	*11.5 %*	*15.1 %*	*10.2 %*
Income tax expense[e]	**57.7**	194.6	76.0	70.1	71.3
Income from continuing operations attributable to ITT Inc.	**332.4**	115.0	181.9	312.4	188.4
Income (loss) from discontinued operations, net of tax[f]	**1.3**	(1.5)	4.2	39.4	(3.9)
Net income attributable to ITT Inc.	**333.7**	113.5	186.1	351.8	184.5
Income from continuing operations per basic share	**3.79**	1.30	2.04	3.48	2.06
Net income per basic share	**3.81**	1.29	2.09	3.92	2.02
Income from continuing operations per diluted share	**3.75**	1.29	2.02	3.44	2.03
Net income per diluted share	**3.76**	1.28	2.07	3.88	1.99
Dividends declared per share	**0.536**	0.512	0.496	0.4732	0.44
Financial Position					
Cash and cash equivalents	**$561.2**	$389.8	$460.7	$415.7	$584.0
Total assets	**3,846.8**	3,700.2	3,601.7	3,723.6	3,631.5
Total debt and finance leases	**125.0**	171.9	216.3	248.5	8.5
Working capital[g]	**542.1**	590.1	517.4	562.9	492.8

(a) On January 26, 2017, we acquired Axtone Railway Components (Axtone). Our 2017 Consolidated Financial Statements include an additional 11 months of operations compared to 2016 and prior related to this acquisition. See Note 22, Acquisitions, in our Notes to Consolidated Financial Statements for further information.

(b) On October 5, 2015, we acquired Wolverine Automotive Holdings Inc. (Wolverine). Our 2016 Consolidated Financial Statements include an additional nine months of operations compared to 2015 and prior related to this acquisition.

(c) The asbestos-related benefit in 2015 primarily reflects a $100.7 benefit recognized related to a new single firm defense strategy and streamlined case management that is expected to significantly reduce asbestos defense costs.

(d) In 2018, we completed the sale of excess property for net proceeds of $40, and recognized a pre-tax gain of $38.5.

(e) 2017 income tax expense includes $129.2 associated with the Tax Cuts and Jobs Act of 2017 that was signed into U.S. law in December 2017. See Note 6, Income Taxes, in our Notes to the Consolidated Financial Statements for further information.

(f) 2015 income from discontinued operations of $39.4 is principally related to the settlement of a U.S.

income tax audit.

(g) Working capital, as presented, is defined as the sum of Receivables, net and Inventories, net, less Accounts payable. In 2018, we updated our working capital definition to include Current contract assets and Current contract liabilities. See the section titled "Key Performance Indicators and Non-GAAP Measures" for a definition and reconciliation of working capital. See Note 4, Revenue, in our Notes to the Consolidated Financial Statements for further information regarding current contract assets and current contract liabilities.

MANAGEMENT'S DISCUSSION & ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion should be read in conjunction with the consolidated financial statements and the notes related thereto. As we noted earlier in the Forward-Looking and Cautionary Statements of this Annual Report on Form 10-K, this Part II, Item 7, "Management’s Discussion and Analysis of Financial Condition and Results of Operations," and Part II, Item 7A, "Quantitative and Qualitative Disclosures about Market Risk" (along with other sections of this Annual Report), may contain forward-looking statements. The risks discussed in Part I, Item 1A, "Risk Factors," and other risks identified in this Annual Report on Form 10-K could cause our actual results to differ materially from those expressed by such forward-looking statements.

OVERVIEW

ITT Inc., through its worldwide subsidiaries, is a diversified manufacturer of highly engineered critical components and customized technology solutions for the energy, transportation and industrial markets. We refer you to Part I, Item 1, "Description of Business" for a further overview of our company, segments, products and services offerings, and other information about our business.

EXECUTIVE SUMMARY

During 2018, we continued to enhance our operational capabilities to deliver strong execution, which helps us better serve our customers, gain market share, and produce strong financial results. The benefits realized from leveraging our global volume along with improvements in productivity more than offset commodity and pricing pressures and strategic investments to support our long-term growth. In 2018, we had a number of breakthrough product lines that helped drive market share gains. In IP, our Pure-Flo product offering together with our new EnviZion product incorporates a new valve technology that can significantly improve manufacturing up-time and reduce total cost of ownership. In MT, industry leading energy absorption technology drove strong share gains in rail. In CCT, our new sensor-enabled Energy Absorption solutions for rotorcraft are providing safer and more comfortable riding experiences.
The following table provides a summary of our key performance indicators for 2018 with growth comparisons to 2017.

Summary of Key Performance Indicators for 2018

Revenue	**Orders**	**Segment Operating Income**	**Segment Operating Margin**	**EPS**	**Operating Cash Flow**
$2,745	$2,892	$411	15.0%	$3.75	$372
6% Increase	10% Increase	27% Increase	250bp Increase	$2.46 Increase	50% Increase
Organic Revenue	**Organic Orders**	**Adjusted Segment Operating Income**	**Adjusted Segment Operating Margin**	**Adjusted EPS**	**Adjusted Free Cash Flow**
$2,694	$2,826	$414	15.1%	$3.23	$309
4% Increase	8% Increase	18% Increase	150bp Increase	25% Increase	108% Conversion

See the section titled "Key Performance Indicators and Non-GAAP Measures" for a definition and reconciliation of organic revenue, organic orders, adjusted segment operating income, adjusted EPS, adjusted free cash flow, and adjusted free cash flow conversion.
Our 2018 results include:

- Record revenue of $2.75 billion in 2018, a $159.8 or 6.2% increase that included favorable foreign exchange of $45.7, and an incremental $5.5 from the Axtone acquisition completed in the first quarter of 2017. Organic revenue increased 4.2%, driven by continued growth across all segments, most notably in the industrial and transportation markets. Our industrial market results were fueled by higher pump demand within the chemicals market. Our transportation market results benefited from continued market share gains in automotive, and strength in rail and commercial aerospace. Organic revenue growth was partially offset by oil and gas project timing.

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- Record orders of $2.89 billion, a $272.5 or 10.4% increase that included favorable foreign exchange of $48.7 and an incremental $17.7 from the Axtone acquisition. Organic orders grew 7.9%, powered by growth in IP from pump projects within North American petrochemical, chemical, and oil and gas, growth in CCT connectors from strength in all major markets, and strong North America and China friction OEM demand within our MT segment. Continued orders strength provided a $102.3 increase in our year-end backlog, an increase of 11.1%.
- Segment operating income of $411.3 increased $86.9 or 26.8% reflecting strong operational performance across all segments. We achieved record adjusted segment operating income of $414.2, an increase of 18% driven by global volume leverage along with manufacturing and purchasing productivity and favorable foreign exchange, partially offset by commodity and pricing pressures. Our segment operating income results were also negatively impacted by incremental strategic investments. In addition, GAAP segment operating income was favorably impacted by lower restructuring, realignment, and acquisition-related expenses.
- Operating income of $397.3 increased $78.0 or 24.4%. This included segment operating income growth, as well as a net gain of $38.5 from the sale of a former operating location, which were partially offset by higher asbestos-related costs of $24.8, which included insurance settlements of $58.9 offset by the annual re-measurement. Adjusted operating income of $367.3 increased 17.4% as segment operating income growth was partially offset by higher corporate costs primarily related to incentive compensation.
- Income from continuing operations increased to $3.75 per share as compared to $1.29 for the prior year due to provisional tax charges of $1.45 per share related to the U.S. Tax Cuts and Jobs Act recorded in 2017, significant segment operating income growth, favorable 2018 deferred tax valuation adjustments of $0.27 per share, and an after-tax gain of $0.30 per on sale of a former operating location. These were partially offset by higher after-tax net asbestos costs of $0.18 per share. Adjusted EPS of $3.23 per share increase 24.7% over 2017 reflecting strong segment operating income growth, in addition to a lower tax rate and share count, along with a favorable impact from foreign exchange, partially offset by higher incentive costs and increased strategic investments.
- Operating cash flow of $371.8 increased $124.6 or 50.4% over 2017 primarily driven by higher segment operating income and lower postretirement contributions of $33.8. Adjusted free cash flow of $308.9 reflected a 107.7% conversion of adjusted income from continuing operations.

In 2018, we advanced our strategic objectives to drive long-term growth and share gains. The following highlights a few examples of strategic actions that occurred during the year that will help position us well for continued value creation:

- We expanded production capacity at our new North American friction manufacturing facility, and reached breakeven profitability at that facility for the first time during the fourth quarter. We also opened a new European Technical Innovation Center and a Rotorcraft Center of Excellence in the United States.
- We accelerated our efforts towards smart products and targeted technologies.

During the year, we drove market share gains by expanding in new and existing key end markets and geographies, including:

- Advancing our capabilities and product offerings in rotorcraft, aerospace and defense, electric vehicle, and high speed rail markets. In all categories, we were awarded significant multi-year contracts that may also generate aftermarket opportunities.
- In the transportation market, we significantly outpaced global OEM production rates, due to strength in North America and China. During the year we won awards on a number of significant platforms, including a recent major North American friction award for a front axle, copper-free cross-over platform, as well as two large front axle share gain wins in Europe.

In 2018, we continued to deploy our capital in balanced and effective ways, including:

- Deploying capital to fund major organic investments that extend our global reach and enhance our production capabilities in key end-markets such as automotive friction and rotorcraft.
- Returning $97 to shareholders; $47 in the form of quarterly dividends and $50 through our share repurchase program.

As we enter 2019, we plan to build on our operational and strategic momentum by focusing on execution by driving efficiency, speed, and operational excellence that will enhance our innovation and growth strategies to drive growth. We will also continue to leverage the benefits of our global and end-market diversification. We expect our primary top-line growth drivers in 2019 to include accelerating automotive production ramp-ups from recent share gains in North America, China and European markets. We expect to continue to outperform global market production rates. In addition, the significant increase in backlog entering 2019 in the CCT and IP segments will provide top line momentum into 2019. While slowing global growth, higher commodity costs including tariffs, price pressures, and foreign exchange are expected to provide challenges in the coming year, we will direct our focus to areas that are within our control by continuing to drive productivity across our business segments and initiating proactive restructuring actions as necessary. In addition, we continue to focus our efforts on growth and innovation, which includes increasing our research and development activities into 2019 as part of our long-term growth strategy. We will also continue to deploy capital in a balanced and efficient way that starts with funding our organic growth initiatives. We also raised our first quarter 2019 quarterly dividend by 10%, which represents our seventh consecutive year of dividend increases. The Company is also targeting up to $25 of incremental new share repurchases which, when combined with the $25 of share repurchases previously authorized in November 2018, could result in total repurchases of up to $50 in 2019.

DISCUSSION OF FINANCIAL RESULTS

2018 VERSUS 2017

	2018	2017	Change
Revenue	**$2,745.1**	$2,585.3	6.2 %
Gross profit	**887.2**	819.9	8.2 %
Gross margin	***32.3 %***	*31.7 %*	60 bp
Operating expenses	**489.9**	500.6	(2.1)%
Operating expense to revenue ratio	***17.8 %***	*19.4 %*	(160)bp
Operating income	**397.3**	319.3	24.4 %
Operating margin	***14.5 %***	*12.4 %*	210 bp
Interest and non-operating expenses, net	**6.3**	9.9	(36.4)%
Income tax expense	**57.7**	194.6	(70.3)%
Effective tax rate	***14.8 %***	*62.9 %*	(4,810)bp
Income from continuing operations attributable to ITT Inc.	**332.4**	115.0	189.0 %
Net income attributable to ITT Inc.	**$333.7**	$113.5	194.0 %

All comparisons included within the Discussion of Financial Results for 2018 versus 2017 refer to results for the year ended December 31, 2018 compared to the year ended December 31, 2017, unless stated otherwise. Gross profit, gross margin, other operating costs, operating income and operating margin for the year ended December 31, 2017 have been restated to reflect the adoption of ASU 2017-07, *Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost*. Refer to Note 2, Recent Accounting Pronouncements, for further information.

REVENUE AND ORDERS

The following table illustrates the year-over-year revenue and orders results from each of our segments for the years ended December 31, 2018 and 2017.

Revenue:	**2018**	2017	Change	Organic growth[(a)]
Motion Technologies	**$1,274.1**	$1,176.0	8.3 %	4.2 %
Industrial Process	**827.1**	807.2	2.5 %	2.7 %
Connect & Control Technologies	**646.6**	605.6	6.8 %	5.9 %
Eliminations	**(2.7)**	(3.5)	(22.9)%	— %
Total Revenue	**$2,745.1**	$2,585.3	6.2 %	4.2 %
Orders:				
Motion Technologies	**$1,295.6**	$1,198.8	8.1 %	2.9 %
Industrial Process	**902.1**	799.8	12.8 %	13.0 %
Connect & Control Technologies	**696.3**	624.1	11.6 %	10.7 %
Eliminations	**(2.1)**	(3.3)	(36.4)%	— %
Total Orders	**$2,891.9**	$2,619.4	10.4 %	7.9 %

(a) See the section titled "Key Performance Indicators and Non-GAAP Measures" for a definition and reconciliation of organic revenue and organic orders.

Motion Technologies

MT revenue for the year ended December 31, 2018 was $1,274.1, an increase of $98.1, or 8.3%, which included incremental revenue of $5.5 from the acquisition of Axtone, which was completed in the first quarter of 2017, and favorable foreign currency translation impact of $42.7. Organic revenue increased $49.9, or 4.2%, primarily driven by a 5% increase from Friction Technologies and a 4% increase from our KONI & Axtone business. The increase in Friction Technologies was driven by market share growth most notably in North America and China in the automotive OEM sales channel, as well as continued gains in Europe in the OES aftermarket sales channel. The improved KONI & Axtone performance was due to the high speed rail market and aftermarket shock absorbers. Organic revenue from our Wolverine business declined 1% on lower activity from sealing solutions.

Orders for the year ended December 31, 2018 were $1,295.6, an increase of $96.8, or 8.1%, which included incremental orders of $17.7 from the acquisition of Axtone and favorable foreign currency translation impacts of $44.9. Organic orders grew $34.2, or 2.9%, primarily due to a 5% increase from Friction Technologies due to new platform activity. KONI-Axtone activity declined 3% due to a large multi-year U.S. defense order received in the prior year, partially offset by Eastern European rail market orders received in the first half of 2018.

Industrial Process

IP revenue for the year ended December 31, 2018 was $827.1, an increase of $19.9, or 2.5%, including an unfavorable foreign currency translation impact of $2.0. Organic revenue increased 2.7% resulting primarily from industrial valves, aftermarket, and baseline pumps. The improvement within industrial valves of 13% stemmed from higher demand in the bio-pharmaceutical and chemical markets. In addition, aftermarket revenue increased 3%, driven by higher maintenance activity, and baseline pumps improved 4% due to strength in Latin America. This was partially offset by a 5% decline in project pumps revenue due to lower shipments in the North American oil and gas market.

Orders for the year ended December 31, 2018 were $902.1, an increase of $102.3, or 12.8% including an unfavorable foreign currency translation impact of $1.5. Organic orders increased 13.0%, driven by growth across all product categories. Order intake for project pumps increased 34% due to an improvement in market conditions and key wins in North America and Asia in the petrochemical and oil and gas markets. Additionally, valve orders increased 19% due to strength in the bio-pharmaceutical market, and short-cycle baseline pump orders grew 3% due to increased demand in Asia. Aftermarket activity improved 6% resulting from higher maintenance demand in North America and the Middle East.

The level of order and shipment activity related to project pumps can vary significantly from period to period. IP's backlog as of December 31, 2018 was $444.2, reflecting an increase of $58.7, or 15.2%, compared to December 31, 2017, due to significant project wins in 2018.

Connect & Control Technologies

CCT revenue for the year ended December 31, 2018 was $646.6, an increase of $41.0, or 6.8%, including favorable foreign currency translation impacts of $5.1. Organic revenue grew $35.9, or 5.9% with strength across all major markets. The revenue growth of 6% in the aerospace and defense market was driven by connectors and components in the commercial aerospace market, rotorcraft, and aftermarket applications. Revenue from the general industrial market grew 4% due to continued strength in electric vehicle connectors as well as medical connectors. In addition, revenue from oil and gas connectors increased 23% from stronger demand in North America and the Middle East.

Orders received during the year ended December 31, 2018 were $696.3, an increase of $72.2, or 11.6%, including favorable foreign currency translation impacts of $5.3, resulting from organic growth across all markets. Orders from the aerospace and defense market grew 13% due to key wins in connectors used in defense applications, as well as commercial aerospace connectors, components and aftermarket activity. General industrial orders improved 7% resulting from market share gains in electric vehicle connectors and growth in industrial connectors. Additionally, oil and gas orders grew 22% from strength in Asia, North America, and the Middle East.

On July 11, 2017, the U.S. Defense Logistics Agency, Land and Maritime (DLA) issued a notice that it had removed our connectors business from the Qualified Products List (QPL) with respect to six military-specification connector products. At the time of this notice, these products had been subject to a previously-disclosed stop shipment/stop production order issued by DLA in the first quarter of 2017. Annual sales of these military-specification connectors were estimated to range from $8 to $10 prior to the removal of these products from the QPL. The Company is making progress and expects to restore its status of certain products on the QPL beginning in the first half of 2019. At this time, there is uncertainty whether there will be any further impacts to our revenue and results of operations related to the QPL removal.

GROSS PROFIT

Gross profit for 2018 was $887.2, reflecting a gross margin of 32.3%. Gross profit for 2017 was $819.9, reflecting a gross margin of 31.7%. The improvement in gross margin was primarily due to sourcing and supply chain productivity gains resulting from improved execution across all segments in 2018, as well as, savings from past restructuring actions and favorable sales volume leverage. These items were partially offset by unfavorable automotive pricing pressure and increased direct material costs due to higher commodity prices and unfavorable tariff impacts, primarily at Motion Technologies.

Other

Tariffs

The U.S. government recently announced tariffs on certain imported goods, and began renegotiating existing trade terms with China and other countries. These tariffs have negatively impacted the price of certain parts and materials we utilize to manufacture finished products we sell in the U.S. Since announced, we have been managing the impacts of these tariffs and will attempt to mitigate the impact of higher input costs through pricing and supply chain actions, efficient utilization of our global manufacturing footprint, and supplier negotiations and diversification strategies. Tariffs and related impacts remain highly uncertain due to the current dynamic landscape and ongoing negotiations. Therefore, we are unable to estimate the ultimate outcome tariffs will have on our results of operations, financial position and cash flows.

OPERATING EXPENSES

The following table provides further information by expense type, as well as a breakdown of operating expense by segment.

	2018	2017	Change
General and administrative expenses	**$259.1**	$258.4	0.3 %
Sales and marketing expenses	**168.2**	169.5	(0.8)%
Research and development expenses	**98.4**	93.5	5.2 %
Gain on sale of long-lived assets	**(40.7)**	(0.9)	**
Asbestos-related expense (benefit), net	**4.9**	(19.9)	(124.6)%
Total operating expenses	**$489.9**	$500.6	(2.1)%
By Segment:			
Motion Technologies	**$167.3**	$177.8	(5.9)%
Industrial Process	**170.7**	171.2	(0.3)%
Connect & Control Technologies	**137.9**	146.5	(5.9)%
Corporate & Other	**14.0**	5.1	174.5 %

** Resulting percentage change not considered meaningful.

General and administrative ("G&A") expenses were $259.1 for the year ended December 31, 2018, an increase of $0.7, or 0.3%. The increase was primarily due to an insurance-related settlement of $16 in the prior year, and an increase in incentive compensation in the current year. These items were partially offset by lower restructuring costs of $7.9, favorable foreign currency impacts of approximately $7, and income of $6, net of legal expenses, from a favorable intellectual property settlement.

Sales and marketing expenses for the year ended December 31, 2018 were $168.2, a decrease of 0.8%, from lower personnel costs at Industrial Process and lower commission costs at Connect & Control Technologies, partially offset by higher overall selling costs at Motion Technologies attributable to strong sales growth.

Research and development ("R&D") expenses for the year ended December 31, 2018 were $98.4, reflecting an increase of $4.9, or 5.2%. The increase was primarily driven by increased product development activity at our Motion Technologies segment.

Gain on sale of long-lived assets was $40.7 for the year ended December 31, 2018, and $0.9 for the year ended December 31, 2017. The increase is primarily due to a net gain of $38.5 recognized on the sale of a former operating location.

During 2018, we recognized a net asbestos-related expense of $4.9, compared to a net benefit of $19.9 in the prior year. The change was primarily due to our annual remeasurement which resulted in additional expense of $10.0 in 2018, compared to a benefit of $76.4 in the prior year. The unfavorable change in the annual remeasurement was partially offset by insurance settlements in 2018 which provided a benefit of $58.9. See Note 20, Commitments and Contingencies, in our Notes to the Consolidated Financial Statements for further information on our asbestos-related liabilities and assets.

OPERATING INCOME

The following table illustrates the 2018 and 2017 operating income and operating margin by segments and at the consolidated level.

	2018	2017	Change
Motion Technologies	**$223.4**	$190.2	17.5 %
Industrial Process	**91.4**	65.8	38.9 %
Connect & Control Technologies	**96.5**	68.4	41.1 %
Segment operating income	**411.3**	324.4	26.8 %
Asbestos-related (expense) benefit, net	**(4.9)**	19.9	(124.6)%
Gain on sale of long-lived assets[(a)]	**38.5**	—	100.0 %
Other corporate costs	**(47.6)**	(25.0)	(90.4)%
Total corporate and other cost, net	**(14.0)**	(5.1)	(174.5)%
Total operating income	**$397.3**	$319.3	24.4 %
Operating margin:			
Motion Technologies	**17.5 %**	16.2 %	130 bp
Industrial Process	**11.1 %**	8.2 %	290 bp
Connect & Control Technologies	**14.9 %**	11.3 %	360 bp
Segment operating margin	**15.0 %**	12.5 %	250 bp
Consolidated operating margin	**14.5 %**	12.4 %	210 bp

(a) Excludes gain on sale of long-lived assets presented within segment results of $2.2 and $0.9 for 2018 and 2017, respectively.

MT operating income for the year ended December 31, 2018 increased $33.2, or 17.5%, to $223.4, an improvement to operating margin of 130 basis points to 17.5%. The increase in operating income and margin was primarily driven by higher sales volume, which provided a benefit of $21, as well as strong operating and supply chain improvements. Additionally, foreign currency favorability provided a benefit of $19. These items were partially offset by higher commodity costs, costs related to strategic investments, pricing pressure, and unfavorable sales mix.

IP operating income for the year ended December 31, 2018 increased $25.6, or 38.9%, to $91.4. IP's operating margin of 11.1% represented an improvement of 290 basis points. The increase in operating income and margin was primarily driven by a benefit of $10, mainly from short-cycle volume and project execution. In addition, savings from past restructuring actions, along with productivity and supply chain initiatives provided a benefit of $12. Additionally, restructuring costs decreased $7. These were partially offset by higher incentive compensation costs, unfavorable foreign currency impacts of $2, and higher strategic investment costs.

CCT operating income for the year ended December 31, 2018 increased $28.1, or 41.1%, to $96.5, an improvement to operating margin of 360 basis points to 14.9%. The increase in operating income and margin was driven by higher sales volumes which provided a benefit of $14, an improvement of $13 from productivity initiatives which included savings from past restructuring actions, and unfavorable impacts from certain military-specification connectors of $4 in the prior year.

Total corporate and other costs, net, increased $8.9 due to higher asbestos-related costs of $24.8, a prior year insurance-related settlement gain of $16 and a prior year environmental-related gain of $3.8, as well as higher 2018 incentive compensation, which were partially offset by a net gain of $38.5 recognized on the sale of a former operating location.

INTEREST AND NON-OPERATING EXPENSES (INCOME), NET

	2018	2017	Change
Interest expense (income), net	**$0.4**	$(0.3)	(233.3)%
Miscellaneous expense, net	**5.9**	10.2	(42.2)%
Total interest and non-operating expenses, net	**$6.3**	$9.9	(36.4)%

Interest expense (income), net in 2018 reflects an unfavorable change of $0.7 compared to 2017 driven by a reversal of accrued interest in the prior year related to unrecognized tax benefits, partially offset by lower interest expense in 2018 primarily from lower interest rates on our commercial paper facilities.
Miscellaneous expenses, net decreased $4.3 in 2018, primarily due to lower postretirement benefit expenses which were a result of past discretionary contributions, as well as a plan curtailment in 2017 which froze benefits for certain employees at our Industrial Process segment.

INCOME TAX EXPENSE

Income tax expense and the effective tax rate is displayed below for the years ended December 31, 2018 and 2017.

	2018	2017	Change
Income tax expense	**$57.7**	$194.6	(70.3)%
Effective tax rate	**14.8 %**	62.9 %	(4,810)bp

The lower effective tax rate in 2018 is primarily due to the reduction to the U.S. corporate tax rate from 35% to 21% in 2018, tax benefits of $22.9 from the reversal of valuation allowances mainly related to German deferred tax assets, and $4.0 from a reduction to the one-time tax charge in 2017 associated with U.S. tax reform.
On December 22, 2017, the Tax Cuts and Jobs Act of 2017 (the “Act”) was signed into law making significant changes to the Internal Revenue Code. Changes include, but are not limited to, a corporate tax rate decrease from 35% to 21% effective for tax years beginning after December 31, 2017, the transition of U.S. international taxation from a worldwide tax system to a territorial system, and a one-time transition tax on the mandatory deemed repatriation of cumulative foreign earnings as of December 31, 2017. In accordance with the Act, the Company recorded $129.2 million as additional income tax expense in the fourth quarter of 2017, the period in which the legislation was enacted. The total expense included $57.9 related to the transition tax and $86.0 related to the remeasurement of certain deferred tax assets and liabilities. The Company also recorded a tax benefit of $14.7 reversing a previously recorded tax liability related to undistributed foreign earnings. The Company continues to provide tax for foreign withholding taxes, foreign and U.S. state income taxes on future distributions of its foreign earnings.
Additionally, Staff Accounting Bulletin No. 118 ("SAB 118") was issued to address the application of U.S. GAAP in situations when a registrant does not have the necessary information available, prepared, or analyzed (including computations) in reasonable detail to complete the accounting for certain income tax effects of the Act. December 22, 2018 marked the end of the measurement period for purposes of SAB 118. The Company has completed the analysis based on currently available legislative updates and recorded an additional tax benefit of $2.6 for the year ended December 31, 2018. The total tax provision benefit included $4.0 related to adjustments to the transition tax and a $1.4 expense related to the remeasurement of certain deferred tax assets and liabilities.
The Company intends to distribute all post-1986 earnings to the U.S. in future years, and therefore is no longer asserting permanent reinvestment of these earnings outside the U.S. Further, the Company will provide for any U.S. state and foreign taxes on distributions of future earnings of its foreign subsidiaries as these earnings will not be considered permanently reinvested in the foreign countries.
The Company has performed computations and has not provided deferred taxes on the $59.1 excess of financial reporting over tax basis in its foreign subsidiaries that exceeds undistributed earnings and profits, which it intends to permanently reinvest outside the U.S. The Company anticipates that foreign earnings of $1,042.7 and future earnings of its foreign subsidiaries that are considered not permanently reinvested will be sufficient to meet its U.S. cash needs. In the event additional foreign funds are needed to support U.S. operations, and if U.S. tax has not already been previously provided, we would be required to accrue and

pay additional U.S. taxes.

DISCUSSION OF FINANCIAL RESULTS
2017 VERSUS 2016

	2017	2016	Change
Revenue	**$2,585.3**	$2,405.4	7.5 %
Gross profit	**819.9**	760.9	7.8 %
Gross margin	***31.7 %***	*31.6 %*	10 bp
Operating expenses	**500.6**	484.3	3.4 %
Operating expense to revenue ratio	***19.4 %***	*20.1 %*	(70)bp
Operating income	**319.3**	276.6	15.4 %
Operating margin	***12.4 %***	*11.5 %*	90 bp
Interest and non-operating expenses, net	**9.9**	18.2	(45.6)%
Income tax expense	**194.6**	76.0	156.1 %
Effective tax rate	***62.9 %***	*29.4 %*	3,350 bp
Income from continuing operations attributable to ITT Inc.	**115.0**	181.9	(36.8)%
Net income attributable to ITT Inc.	**$113.5**	$186.1	(39.0)%

All comparisons included with the Discussion of Financial Results 2017 versus 2016 refer to results for the year ended December 31, 2017 compared to the year ended December 31, 2016, unless stated otherwise. Gross profit, gross margin, other operating costs, operating income and operating margin for 2017 and 2016 have been restated to reflect the adoption of ASU 2017-07, *Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost*. Refer to Note 2, Recent Accounting Pronouncements for further information.

REVENUE AND ORDERS

The following table illustrates the year-over-year revenue and orders results from each of our segments for the years ended December 31, 2017 and 2016.

Revenue:	2017	2016	Change	Organic (decline) growth(a)
Motion Technologies	**$ 1,176.0**	$ 983.4	19.6 %	9.8 %
Industrial Process	**807.2**	830.1	(2.8)%	(3.4)%
Connect & Control Technologies	**605.6**	596.3	1.6 %	1.4 %
Eliminations	**(3.5)**	(4.4)	(20.5)%	—
Total Revenue	**$ 2,585.3**	$ 2,405.4	7.5 %	3.2 %
Orders:				
Motion Technologies	**$ 1,198.8**	$ 998.4	20.1 %	10.8 %
Industrial Process	**799.8**	779.1	2.7 %	2.1 %
Connect & Control Technologies	**624.1**	602.4	3.6 %	3.4 %
Eliminations	**(3.3)**	(5.1)	(35.3)%	— %
Total Orders	**$ 2,619.4**	$ 2,374.8	10.3 %	6.2 %

(a) See the section titled "Key Performance Indicators and Non-GAAP Measures" for a definition and reconciliation of organic revenue and organic orders.

Motion Technologies

MT revenue for the year ended December 31, 2017 was $1,176.0, reflecting an increase of $192.6, or 19.6%, including incremental revenue of $74.0 from the acquisition of Axtone, which was completed in the first quarter of 2017, and favorable foreign currency translation impact of $22.7. Organic revenue increased $95.9, or 9.8%, driven by a 12% increase from our Friction Technologies business. The increase was primarily driven by continued strength in the automotive OEM sales channel due to market growth and share gains in China, Europe and North America. The OES and independent aftermarket channels were also strong as revenues grew 8% and 13%, respectively. Wolverine contributed organic revenue growth of

5% due to global share gains in sealing solutions. Organic revenue from our KONI business increased 5% primarily in the rail market due to growth in Europe and higher demand in the high speed rail market in China. Activity on a U.S. defense program also contributed to the growth in KONI revenue.

Orders for the year ended December 31, 2017 were $1,198.8, reflecting an increase of $200.4, or 20.1%, including incremental orders of $70.2 from the acquisition of Axtone and favorable foreign currency translation impacts of $22.0. Organic orders grew $108.2, or 10.8%, primarily due to continued strength in our Friction Technologies business. KONI order activity grew 16% due to a large multi-year order on a U.S. defense program and strength from new products in the China high speed rail market.

Industrial Process

IP revenue for the year ended December 31, 2017 was $807.2, reflecting a decrease of $22.9, or 2.8%, including a favorable foreign currency translation impact of $5.7. Organic revenue decreased 3.4%, due to a 17% decline in project pump revenue primarily stemming from lower North American oil and gas projects in backlog entering 2017 and lower mining project revenue, but also reflected an 11% decline in revenue from valves partially related to a significant contract in 2016. Partially offsetting this decline was organic revenue growth of 4% in short-cycle baseline pumps driven by stronger demand in the industrial and mining markets and growth of 3% from aftermarket parts driven by oil & gas in Europe and Middle East regions and growth of 6% from service due to strength in all North American markets.

Orders for the year ended December 31, 2017 were $799.8, reflecting an increase of $20.7, or 2.7% including favorable foreign currency translation impact of $4.6. Organic orders increased 2.1%, driven by an 8% increase in short-cycle baseline pumps stemming from higher distributor activity across all end markets in North America and in the paper and general industrial markets. Positive organic order growth of 5% from aftermarket parts and service was driven by increases in the North America pulp and paper, Europe and Middle East oil & gas, and Asia mining markets. Organic order growth was partially offset by an 8% decline in project activity reflecting the continued competitive and challenging conditions in chemical and oil and gas markets.

Connect & Control Technologies

CCT revenue for the year ended December 31, 2017 was $605.6, reflecting an increase of $9.3, or 1.6%, including favorable foreign currency translation impacts of $1.0. The increase in revenue was primarily driven by strength in oil and gas connectors which increased 31% due to stronger demand in North America and the Middle East upstream market. In addition, revenue from the general industrial market grew 2% due to heavy vehicle and electric vehicle connector strength. Revenue from the aerospace and defense market decreased 1% due to weaker commercial aerospace demand and impacts from restrictions on the sales of certain military-specification connectors, but was partially offset by rotorcraft share gains and defense component strength.

Orders received during the year ended December 31, 2017 were $624.1, reflecting an increase of $21.7, or 3.6%, including favorable foreign currency translation impacts of $1. The increase was primarily driven by strong order activity in the aerospace and defense market due to defense component strength as well as rotorcraft share gains. Offsetting this increase were impacts from restrictions on the sales of certain military-specification connectors and weaker commercial aerospace demand. Orders for connectors associated with the oil and gas market grew 31%. In the general industrial markets, orders grew 2% due to energy absorption projects, actuation components, and heavy vehicle connectors in China.

GROSS PROFIT

Gross profit for 2017 was $819.9, reflecting a gross margin of 31.7%. Gross profit for 2016 was $760.9, reflecting a gross margin of 31.6%. Higher automotive sales volumes and lower labor costs as a result of restructuring benefits from our structural cost reset at our Industrial Process segment, operational improvements at our Connect & Control Technologies segment, and incremental activity from our 2017 acquisition of Axtone were partially offset by unfavorable automotive and aerospace pricing and sales mix impacts, increased direct material costs due to higher commodity prices impacting our Motion Technologies segment, and unfavorable impacts from certain military-specification connectors.

OPERATING EXPENSES

The following table provides further information by expense type, as well as a breakdown of operating expense by segment.

	2017	2016	Change
General and administrative expenses	**$258.4**	$260.5	(0.8)%
Sales and marketing expenses	**169.5**	169.8	(0.2)%
Research and development expenses	**93.5**	80.5	16.1 %
Gain on sale of long-lived assets	**(0.9)**	(0.9)	— %
Asbestos-related benefit, net	**(19.9)**	(25.6)	(22.3)%
Total operating expenses	**$500.6**	$484.3	3.4 %
By Segment:			
Motion Technologies	**$177.8**	$139.1	27.8 %
Industrial Process	**171.2**	208.5	(17.9)%
Connect & Control Technologies	**146.5**	135.8	7.9 %
Corporate & Other	**5.1**	0.9	466.7 %

General and administrative ("G&A") expenses were $258.4 for the year ended December 31, 2017, reflecting a decrease of $2.1, or 0.8%. The year-over-year decrease was primarily due to an insurance-related settlement of $16 in the fourth quarter of 2017, lower restructuring costs of $13, cost savings from our past restructuring actions and a trade name impairment of $4 from 2016. These items were partially offset by higher incentive compensation of $20, unfavorable foreign currency impacts of $13, and $5 related to a DOJ civil matter. In addition, G&A expenses increased $11 due to the Axtone acquisition in early 2017.

Sales and marketing expenses for the year ended December 31, 2017 were $169.5, reflecting a decrease of 0.2%, as lower personnel and commission costs at Industrial Process were partially offset by higher overall selling costs at Motion Technologies attributable to strong sales growth and incremental costs related to our acquisition of Axtone of $4.

Research and development ("R&D") expenses for the year ended December 31, 2017 were $93.5, reflecting an increase of $13.0, or 16.1%. The increase was primarily driven by increased product development activity at our Motion Technologies and Connect and Control segments. Incremental costs related to our acquisition of Axtone were $1 during 2017.

During 2017, we recognized a net asbestos-related benefit of $19.9, compared to a benefit of $25.6 in 2016. The decrease was primarily due to a lower current year benefit from our annual remeasurement. See Note 20, Commitments and Contingencies, in our Notes to the Consolidated Financial Statements for further information on our asbestos-related liabilities and assets.

OPERATING INCOME

The following table illustrates the 2017 and 2016 operating income and operating margin by segments and at the consolidated level.

	2017	2016	Change
Motion Technologies	**$190.2**	$171.3	11.0 %
Industrial Process	**65.8**	39.6	66.2 %
Connect & Control Technologies	**68.4**	66.3	3.2 %
Segment operating income	**324.4**	277.2	17.0 %
Asbestos-related benefit, net	**19.9**	25.6	(22.3)%
Gain on sale of long-lived assets[a]	**—**	0.6	(100.0)%
Other corporate costs	**(25.0)**	(26.8)	(6.7)%
Total corporate and other cost, net	**(5.1)**	(0.6)	750.0 %
Total operating income	**$319.3**	$276.6	15.4 %
Operating margin:			
Motion Technologies	**16.2 %**	17.4 %	(120)bp
Industrial Process	**8.2 %**	4.8 %	340 bp
Connect & Control Technologies	**11.3 %**	11.1 %	20 bp
Segment operating margin	**12.5 %**	11.5 %	100 bp
Consolidated operating margin	**12.4 %**	11.5 %	90 bp

(a) Excludes gain on sale of long-lived assets presented within segment results of $0.9 and $0.3 for 2017 and 2016, respectively.

MT operating income for the year ended December 31, 2017 increased $18.9, or 11.0%, to $190.2, but operating margin decreased 120 basis points to 16.2%. The increase in operating income was primarily driven by higher sales volume, which provided a benefit of $44, and productivity improvements at our brake component facilities. These items were partially offset by unfavorable pricing and sales mix, higher material costs, and incremental investments to support recent long-term global automotive platform wins including startup costs for the new North American facility. Foreign currency fluctuations provided an unfavorable impact of $4 during 2017. In addition, our acquisition of Axtone produced incremental operating income of $1 during 2017.

IP operating income for the year ended December 31, 2017 increased $26.2, or 66.2%, to $65.8. IP's operating margin of 8.2% reflected an increase of 340 basis points. The increase in operating income and margin was primarily driven by net savings of approximately $15 due to restructuring benefits, productivity, and sourcing initiatives, a decrease in restructuring costs of $13, improved project performance, and a trade name impairment of $4 recorded in 2016. These items were partially offset by an unfavorable impact of $9 from lower sales volume, higher long-term incentive compensation of $6 and unfavorable foreign currency impacts of $4.

CCT operating income for the year ended December 31, 2017 increased $2.1, or 3.2%, to $68.4 and resulted in an operating margin of 11.3%. Operating income was favorably impacted by net savings of approximately $23, due to restructuring benefits, productivity, and sourcing initiatives, primarily at our North American Connector facility, as well as higher sales volumes that provided a benefit of $8. These items were offset by unfavorable sales mix and pricing of $12, unfavorable impacts related to certain military-specification connectors, and $5 related to a DOJ civil matter. In addition, unfavorable foreign currency impacts of $3 impacted operating income.

Total corporate and other costs, net for the year ended December 31, 2017 increased $4.5, to $5.1, primarily reflecting a decrease of $5.7 in the asbestos-related benefit, net. Additionally, higher incentive compensation in 2017, certain insurance-related benefits recorded in 2016, and disposal costs associated with a pending sale of property were partially offset by an insurance-related settlement of $16 and income of $3.8 related to an amendment to the environmental Qualified Settlement Fund (QSF) in 2017.

INTEREST AND NON-OPERATING EXPENSES (INCOME), NET

	2017	2016	Change
Interest income, net	**$(0.3)**	$(0.8)	(62.5)%
Miscellaneous expense, net	**10.2**	19.0	(46.3)%
Total interest and non-operating expenses, net	**$9.9**	$18.2	(45.6)%

Interest income, net decreased $0.5 in 2017 compared to 2016 due to higher interest expense associated with our revolving credit and commercial paper facilities during 2017.

Miscellaneous expense, net decreased $8.8 in 2017 to $10.2. The decrease was primarily due to lower overall postretirement benefit expenses as a result of a $12.7 plan settlement in 2016, which was partially offset by $3.7 of plan curtailment costs in 2017.

INCOME TAX EXPENSE

Income tax expense and the effective tax rate is displayed below for the years ended December 31, 2017 and 2016.

	2017	2016	Change
Income tax expense	**$194.6**	$76.0	156.1 %
Effective tax rate	**62.9 %**	29.4 %	3,350 bp

Income tax expense of $194.6 was recognized during the year ended December 31, 2017, representing an effective tax rate of 62.9%, which included a $129.2 provisional tax expense related to the Tax Act that was signed into U.S. law on December 22, 2017. The $129.2 provisional tax expense, includes $86.0 related to measuring our U.S. net deferred tax assets at the 21% rate (versus the prior 35% rate), and one-time provisional U.S. tax expenses of $57.9 on existing post-1986 foreign earnings and $37.6 for the future distribution of such earnings to the U.S., which were partially reduced by the reversal of a previously recorded $52.3 liability for foreign earnings that were not considered permanently reinvested. Excluding the impact of the U.S. Tax Act, income tax expense for 2017 was $65.4, representing an effective tax rate of 21.1%, compared to 2016 income tax expense of $76.0, and an effective tax rate of 29.4%. The lower effective tax rate in 2017, excluding the impact from the Tax Act, was due to tax benefits from an Italian patent box strategy, excess tax deduction on equity compensation, and a decrease in the deferred tax liability on foreign earnings which are not considered indefinitely reinvested.

For further information on the Tax Act refer to Note 6, Income Taxes, to our Consolidated Financial Statement and the section titled "Critical Accounting Estimates" within Management's Discussion and Analysis.

LIQUIDITY AND CAPITAL RESOURCES

Funding and Liquidity Strategy

We monitor our funding needs and design and execute strategies to meet overall liquidity requirements, including the management of our capital structure, on both a short- and long-term basis. We expect to fund our ongoing working capital, capital expenditures, dividends, and financing requirements through cash flows from operations and cash on hand, or by accessing the U.S. or European commercial paper markets or our Revolving Credit Agreement.

We manage our worldwide cash requirements considering available funds among the many subsidiaries through which we conduct business and the cost effectiveness with which those funds can be accessed. We have identified and continue to look for opportunities to access cash balances in excess of local operating requirements to meet our global liquidity needs in a cost-efficient manner. We plan to transfer cash between certain international subsidiaries and the U.S. and other international subsidiaries when it is cost effective to do so. The passage of the U.S. Tax Act provides greater flexibility around our global cash management strategy related to the amount and timing of transfers, and we will continue to support growth and expansion in markets outside of the U.S. through the development of products, increased capital spending, and potential foreign acquisitions. In connection with the Tax Act, we have recognized a one-time U.S. tax expense of $53.9 on existing post-1986 foreign earnings and potential future distributions of such earnings to the U.S., however we expect that existing foreign tax credits, research and development tax

credits, and net operating losses will offset most of this tax liability. Accordingly, we expect the net cash outflow resulting from this tax liability will be approximately $8. Net cash distributions from foreign countries amounted to $318.1 and $111.8 during 2018 and 2017, respectively. The timing and amount of any additional future distributions remains under evaluation.

The amount and timing of dividends payable on our common stock are within the sole discretion of our Board of Directors and will be based on, and affected by, a number of factors, including our financial position and results of operations, available cash, expected capital spending plans, prevailing business conditions, and other factors the Board of Directors deems relevant. Therefore, there can be no assurance as to what level of dividends, if any, will be paid in the future. Aggregate dividends paid in 2018 were $47.3, compared to $45.4 in 2017 and $44.6 in 2016, reflecting annual per share amounts of $0.536, $0.512, and $0.496, respectively. In the first quarter of 2019, we declared a quarterly dividend of $0.147 per share for shareholders of record on March 11, 2019.

In 2018 and 2017, we repurchased and retired 1.0 and 0.8 shares of common stock, respectively, for $50.0 and $30.0, respectively, under our $1 billion share repurchase program. As of December 31, 2018, under the program, the Company has repurchased 22.2 shares for $909.4.

Significant factors that affect our overall management of liquidity include our credit ratings, the adequacy of commercial paper, access to bank lines of credit, and the ability to attract long-term capital on satisfactory terms. We assess these factors along with current market conditions on a continuous basis, and as a result, may alter the mix of our short- and long-term financing when it is advantageous to do so.

Commercial Paper

We have access to the commercial paper market through programs in place in the U.S. and, since 2018, Europe, to supplement the cash flows generated internally and to provide additional short-term funding for strategic investments and other funding requirements. We manage our short-term liquidity through the use of our commercial paper program by adjusting the level of commercial paper borrowings as opportunities to deploy additional capital arise and it is cost effective to do so. We had $114.4 and $162.4 of commercial paper outstanding as of December 31, 2018 and 2017, respectively. Our average daily outstanding commercial paper balance for the years ended 2018 and 2017 was $110.7 and $136.6, respectively, and the maximum outstanding commercial paper during each of those respective years was $215.5 and $165.5, respectively. There have been no other material changes that have impacted our funding and liquidity capabilities.

Revolving Credit Agreement

Our $500 revolving credit agreement (the Revolving Credit Agreement) provides for increases of up to $200 for a possible maximum total of $700 in aggregate principal amount, at the request of the Company and with the consent of the institutions providing such increased commitments. The Revolving Credit Agreement is intended to provide access to additional liquidity to be a source of alternate funding to the commercial paper program, if needed. Our policy is to maintain unused committed bank lines of credit in an amount greater than outstanding commercial paper balances. Two borrowing options are available under the Revolving Credit Agreement: (i) a competitive advance option, and (ii) a revolving credit option. The interest rates for the competitive advance option will be obtained from bids in accordance with competitive auction procedures. The interest rates under the revolving credit option will be based either on LIBOR plus spreads reflecting the Company’s credit ratings, or on the Administrative Agent’s Alternate Base Rate. As of December 31, 2018 and 2017 we had no outstanding borrowings under the Revolving Credit Agreement. In the event of a ratings downgrade of the Company to a level below investment grade, the direct and indirect significant U.S. subsidiaries of the Company would be required to guarantee the obligations under the Revolving Credit Agreement. The Revolving Credit Agreement matures in November 2021. During 2018, we revised the existing Revolving Credit Agreement to allow access to commercial paper markets in Europe.

Our credit ratings as of December 31, 2018 were as follows:

Rating Agency	Short-Term Ratings	Long-Term Ratings
Standard & Poor’s	A-2	BBB
Moody’s Investors Service	P-3	Baa3
Fitch Ratings	F2	BBB+

There were no changes to the ITT credit ratings during 2018. Please refer to the rating agency websites and press releases for more information.

Sources and Uses of Liquidity

Our principal source of liquidity is our cash flow generated from operating activities, which provides us with the ability to meet the majority of our short-term funding requirements. The following table summarizes net cash derived from operating, investing, and financing activities for the three years ended December 31, 2018, 2017, and 2016.

	2018	2017	2016
Operating activities	**$371.8**	$247.2	$240.7
Investing activities	**(52.3)**	(223.2)	(54.4)
Financing activities	**(128.8)**	(112.5)	(141.9)
Foreign exchange	**(15.3)**	20.0	(11.4)
Total net cash flow provided by (used in) continuing operations	**$175.4**	$(68.5)	$33.0
Net cash (used in) provided by discontinued operations	**(4.2)**	(2.4)	12.0
Net change in cash and cash equivalents	**$171.2**	$(70.9)	$45.0

Net cash provided by operating activities was $371.8 for the year ended December 31, 2018, an increase of $124.6. The improvement was primarily driven by higher segment operating income of $83, after adjustments for non-cash charges, such as depreciation and amortization. In addition, lower postretirement contributions of $33.8, net proceeds of $16.9 from an insurance-related settlement in 2018, lower restructuring payments of $9.6, and lower income tax payments of $8.5 contributed to the increase. These were partially offset by higher incentive compensation payments of $23, and higher environmental-related payments of $4.1.

Net cash provided by operating activities was $247.2 for the year ended December 31, 2017, an increase of $6.5. The change in net cash provided by operating activities was primarily driven by higher segment operating income of approximately $41, after adjustments for non-cash charges, such as depreciation and amortization. Lower restructuring payments of $12.5 and lower incentive compensation payments of $12 were partially offset by higher discretionary postretirement contributions of $27.2, higher asbestos-related payments of $13.8 due to the timing of insurance recoveries and higher net income taxes paid of $5.9.

Net cash used in investing activities decreased $170.9 in 2018. The decline resulted from our 2017 acquisition of Axtone for $113.7 (net of cash acquired), proceeds of $40 from the sale of a former operating location in 2018, and a reduction in capital expenditures of $17.8.

Net cash used in investing activities increased $168.8 from 2016 to 2017. The year-over-year increase reflects our acquisition of Axtone for $113.7 (net of cash acquired) and cash provided by the maturity of investments (net of purchases) in 2016 of $62.9. Capital expenditure spending of $113.3 increased $1.9 compared to the prior year.

Net cash used in financing activities increased $16.3 in 2018 due to an increase of $23.2 in repurchases of ITT common stock and a decline in proceeds from employee stock option exercises of $5.4, partially offset by a reduction in net repayments of debt of $14.1.

Net cash used for financing activities decreased $29.4 from 2016 to 2017. The change reflects a $44.9 decrease in repurchases of ITT common stock, which was partially offset by a decrease in net borrowings of $12.7.

Net cash used in discontinued operations for the year ended December 31, 2018 of $4.2 was due to environmental-related payments for sites formerly owned by ITT as well as cash payments related to the settlement of a state tax audit in the U.S. Net cash used by discontinued operations for the year ended December 31, 2017 of $2.4 was primarily due to environmental-related payments for sites formerly owned by ITT. Net cash provided by discontinued operations for the year ended December 31, 2016 of $12.0 was primarily related to net receipts during 2016 of $14.8 related to the settlement of the U.S. income tax audit in 2015 that was reimbursed by Xylem and Exelis in accordance with the Tax Matters Agreement.

Asbestos

Based on the estimated undiscounted asbestos liability as of December 31, 2018 for claims filed or estimated to be filed over the next 10 years, we have estimated that we will be able to recover approximately 44% of the asbestos indemnity and defense costs from our insurers. Actual insurance reimbursements may vary significantly from period to period and the anticipated recovery rate is expected to decline over time due to gaps in our insurance coverage, reflecting uninsured periods, the insolvency of certain insurers, prior settlements with our insurers, and our expectation that certain insurance policies will exhaust within the next 10 years. In the tenth year of our estimate, our insurance recoveries are currently projected to be approximately 21%. Additionally, future recovery rates may be impacted by other factors, such as future insurance settlements, insolvencies, and judicial determinations relevant to our coverage program, which are difficult to predict and subject to a high degree of uncertainty.

The Company has negotiated with certain of its excess insurers to reimburse the Company for a portion of its settlement and/or defense costs as incurred, frequently referred to as "coverage-in-place" agreements. Under coverage-in-place agreements, an insurer's policies remain in force and the insurer undertakes to provide coverage for the Company's present and future asbestos claims on specified terms and conditions that address, among other things, the share of asbestos claims costs to be paid by the insurer, payment terms, claims handling procedures and the expiration of the insurer's obligations. The Company has entered into policy buyout agreements with certain insurers confirming the aggregate amount of available coverage under the subject policies and setting forth a schedule for future payments to a Qualified Settlement Fund, to be disbursed for future asbestos costs. Collectively, these agreements are designed to facilitate an orderly resolution and collection of ITT's insurance and to mitigate issues that insurers may raise regarding their responsibility to respond to claims.

As of December 31, 2018, the Company has entered into coverage-in-place agreements and policy buyout agreements representing approximately 62% of our recorded asset. All of our primary insurance policies are exhausted which may result in higher net cash outflows until excess carriers begin accepting claims for reimbursement. While there are overall limits on the aggregate amount of insurance available to the Company with respect to asbestos claims, with respect to certain coverage, those overall limits were not reached by the estimated liability recorded by the Company at December 31, 2018.

Further, there is uncertainty in estimating when cash payments related to the recorded asbestos liability will be fully expended and such cash payments will continue for a number of years beyond the next 10 years due to the significant proportion of future claims included in the estimated asbestos liability and the delay between the date a claim is filed and when it is resolved. Subject to these inherent uncertainties, it is expected that cash payments related to pending claims and claims to be filed in the next 10 years will extend through approximately 2032.

Although asbestos cash outflows can vary significantly from year to year, our current net cash outflows for defense and indemnity, net of tax benefits, are projected to average $20 to $30 over the next five years, and increase to an average of approximately $35 to $45 per year over the remainder of the projection period. Total net cash outflows for defense and indemnity, net of tax, averaged $21 over the past three annual periods. Total net asbestos cash outflows also include certain administrative costs such as legal related costs for insurance asset recoveries.

In light of the uncertainties and variables inherent in the long-term projection of the Company's asbestos exposures and potential recoveries, although it is probable that the Company will incur additional costs for asbestos claims filed beyond the next 10 years, we do not believe that there is a reasonable basis for estimating the number of future claims, the nature of future claims, or the cost to resolve future claims for years beyond the next 10 years at this time. Accordingly, no liability or related asset has been recorded for any costs that may be incurred for claims asserted subsequent to 2028.

Due to these uncertainties, as well as our inability to reasonably estimate any additional asbestos liability for claims that may be filed beyond the next 10 years, it is difficult to predict the ultimate cost of resolving the pending and estimated unasserted asbestos claims. We believe it is possible that the future events affecting the key factors and other variables within the next 10 years, as well as the cost of asbestos claims

filed beyond the next 10 years, net of expected recoveries, could have a material adverse effect on our financial statements.

Funding of Postretirement Plans

The following table provides a summary of the funded status of our postretirement benefit plans as of December 31, 2018 and 2017.

	2018				2017			
	U.S. Pension	**Non-U.S. Pension**	**Other Benefits**	**Total**	U.S. Pension	Non-U.S. Pension	Other Benefits	Total
Fair value of plan assets	**$277.8**	**$ 0.6**	**$ 2.9**	**$281.3**	$320.9	$ 0.6	$5.2	$326.7
Projected benefit obligation	**291.8**	**89.4**	**118.6**	**499.8**	325.7	93.3	138.1	557.1
Funded status	**$(14.0)**	**$ (88.8)**	**$(115.7)**	**$(218.5)**	$(4.8)	$ (92.7)	$(132.9)	$(230.4)

The funded status of our U.S. pension plans declined by $9.2 during 2018 primarily due to lower equity returns. Our non-U.S. pension plans, which are typically not funded due to local regulations, had an improvement in funded status of $3.9 during 2018 due to foreign currency impacts.

While the Company has significant discretion in making voluntary contributions, the Employee Retirement Income Security Act of 1974, and applicable Internal Revenue Code regulations mandate minimum funding thresholds. Failure to satisfy the minimum funding thresholds could result in restrictions on our ability to amend a plan or make benefit payments. As of December 31, 2018, the minimum funding percentages of all ITT U.S. Qualified pension plans had been satisfied.

We make contributions to our postretirement benefit plans when considered necessary or advantageous to do so. However, the minimum funding requirements established by local government funding or taxing authorities, or established by other agreements, may influence future contributions. Funding requirements under IRS rules are a major consideration in making contributions to our U.S. pension plans. Future minimum funding requirements will depend primarily on the return on plan assets and discount rate, both determined using AFTAP guidelines. Depending on these factors, and the resulting funded status of our U.S. pension plans, the level of future minimum contributions could be material. During 2018 and 2017, we contributed $4.3 and $38.9 to our global pension plans, respectively. The 2017 amount included discretionary contributions to our U.S. pension plans of $35.0. We anticipate making contributions to our global pension plans of approximately $5 during 2019.

The funded status of our other employee-related defined benefit plans improved $17.2 during 2018 primarily due to an increase in the discount rate. We contributed $6.9 and $6.1 to our other employee-related defined benefit plans during both 2018 and 2017, respectively. We currently estimate that the 2019 contributions to our other employee-related defined benefit plans will be approximately $8. See Note 16, Postretirement Benefit Plans, for additional financial information related to our postretirement obligations.

Capital Resources

Long-term debt is generally defined as any debt with an original maturity greater than 12 months. As of December 31, 2018, we have sources of short- and long-term funding including access to the capital markets through a commercial paper program and $500 of available borrowing capacity, which may potentially be expanded to $700, under the Revolving Credit Agreement, as well as market access to longer-term markets. Our commercial paper program is supported by the Revolving Credit Agreement and our policy is to maintain unused committed bank lines of credit in an amount greater than outstanding commercial paper balances.

The table below provides long-term debt outstanding and finance lease obligations at December 31, 2018 and 2017.

	2018	2017
Current portion of long-term debt and finance leases	**$1.8**	$1.2
Non-current portion of long-term debt and finance leases	**8.8**	8.3
Total long-term debt and finance leases	**$10.6**	$9.5

Contractual Obligations

ITT's commitment to make future payments under long-term contractual obligations was as follows, as of December 31, 2018:

Contractual Obligations	Payments Due By Period				
	Total	Less Than 1 Year	1-3 Years	3-5 Years	More Than 5 Years
Long-term debt, including interest and finance leases	$10.9	$ 1.9	$ 3.5	$ 2.1	$ 3.4
Operating leases	116.3	22.2	29.4	18.3	46.4
Purchase obligations[(a)]	152.2	150.7	1.5	—	—
Other long-term obligations[(b)]	99.7	11.2	19.0	16.9	52.6
Total	$379.1	$ 186.0	$ 53.4	$ 37.3	$ 102.4

In addition to the amounts presented in the table above, we have recorded liabilities for pending asbestos claims and asbestos claims estimated to be filed over the next 10 years and uncertain tax positions of $849.3 and $25.4, respectively, in our Consolidated Balance Sheet at December 31, 2018. These amounts have been excluded from the contractual obligations table due to an inability to reasonably estimate the timing of payments in individual years. In addition, while we make contributions to our postretirement benefit plans when considered necessary or advantageous to do so, the minimum funding requirements established by local government funding or taxing authorities, or established by other agreements, may influence future contributions. As such, expected contributions to our postretirement benefit plans have been excluded from the table above.

(a) Represents unconditional purchase agreements that are enforceable and legally binding and that specify all significant terms to purchase goods or services, including fixed or minimum quantities to be purchased; fixed, minimum or variable price provisions; and the approximate timing of the transaction. Purchase agreements that are cancellable without penalty have been excluded.

(b) Other long-term obligations include amounts recorded on our December 31, 2018 Consolidated Balance Sheet, including estimated environmental payments and employee compensation agreements. We estimate based on historical experience that we will spend between $6 and $8 per year on environmental investigation and remediation, a portion of which we are legally mandated to perform through various orders and agreements with state and federal oversight agencies. At December 31, 2018, our recorded environmental liability was $66.8.

Off-Balance Sheet Arrangements

Off-balance sheet arrangements represent transactions, agreements or other contractual arrangements with unconsolidated entities, where an obligation or contingent interest exists. Our off-balance sheet arrangements, as of December 31, 2018, consist of indemnities related to acquisition and disposition agreements and certain third-party guarantees.

Indemnities

Since our founding in 1920, we have acquired and disposed of numerous entities. The related acquisition and disposition agreements allocate certain assets and liabilities among the parties and contain various representation and warranty clauses and may provide indemnities for a misrepresentation or breach of the representations and warranties by either party or for assumed or excluded liabilities. These provisions address a variety of subjects. The term and monetary amounts of each such provision are defined in the specific agreements and may be affected by various conditions and external factors. Many of the provisions have expired either by operation of law or as a result of the terms of the agreement. We do not have a liability recorded for these expired provisions and are not aware of any claims or other information that would give rise to material payments under such provisions.

As part of the 2011 spin-off, ITT LLC agreed to assume certain liabilities and provide certain indemnifications and cross-indemnifications among ITT LLC, Exelis and Xylem, subject to limited exceptions with respect to employee claims. The provisions address a variety of subjects, including asserted and unasserted product liability matters (*e.g.*, asbestos claims, product warranties) which relate to certain products manufactured, repaired and/or sold prior to the date of the 2011 spin-off. These provisions

last indefinitely and are not affected by Harris' acquisition of Exelis, or Harris' pending merger with L3 Technologies. In addition, ITT LLC, Exelis and Xylem agreed to certain cross-indemnifications with respect to other liabilities and obligations. ITT LLC expects Exelis and Xylem to fully perform under the terms of the Distribution Agreement and therefore has not recorded a liability for matters for which we have been assumed or indemnified. In addition, both Exelis and Xylem have made asbestos indemnity claims that could give rise to material payments under the indemnity provided by ITT LLC; such claims are included in our estimate of asbestos liabilities.

Guarantees

We had $127.9 of guarantees, letters of credit and similar arrangements outstanding at December 31, 2018, primarily pertaining to commercial or performance guarantees and insurance matters. We have not recorded any material loss contingencies under these guarantees, letters of credit and similar arrangements as of December 31, 2018 as the likelihood of nonperformance by the underlying obligors is considered remote. From time to time, we may provide certain third-party guarantees that may be affected by various conditions and external factors, some of which could require that payments be made under such guarantees. We do not consider the maximum exposure or current recorded liabilities under our third-party guarantees to be material either individually or in the aggregate. We do not believe such payments would have a material adverse impact on our financial statements.

KEY PERFORMANCE INDICATORS AND NON-GAAP MEASURES

Management reviews a variety of key performance indicators including revenue, segment operating income and margins, earnings per share, order growth, free cash flow, backlog, and working capital, some of which are non-GAAP. In addition, we consider certain measures to be useful to management and investors when evaluating our operating performance for the periods presented. These measures provide a tool for evaluating our ongoing operations and management of assets from period to period. This information can assist investors in assessing our financial performance and measures our ability to generate capital for deployment among competing strategic alternatives and initiatives, including, but not limited to, acquisitions, dividends, and share repurchases. Some of these metrics, however, are not measures of financial performance under accounting principles generally accepted in the United States of America (GAAP) and should not be considered a substitute for measures determined in accordance with GAAP. We consider the following non-GAAP measures, which may not be comparable to similarly titled measures reported by other companies, to be key performance indicators:

- "Organic revenue" and "organic orders" are defined as revenue and orders, excluding the impacts of foreign currency fluctuations, acquisitions and divestitures. Divestitures include sales of portions of our business that did not meet the criteria for presentation as a discontinued operation. The period-over-period change resulting from foreign currency fluctuations is estimated using a fixed exchange rate for both the current and prior periods. Management believes that reporting organic revenue and organic orders provides useful information to investors by helping identify underlying trends in our business and facilitating easier comparisons of our revenue performance with prior and future periods and to our peers.

Reconciliations of organic revenue for the years ended December 31, 2018 and 2017 are provided below.

	Motion Technologies	Industrial Process	Connect & Control Technologies	Eliminations	Total ITT
2018 Revenue	$1,274.1	$827.1	$646.6	$(2.7)	$2,745.1
Acquisitions	(5.5)	—	—	—	(5.5)
Foreign currency translation	(42.7)	2.0	(5.1)	0.1	(45.7)
2018 Organic revenue	1,225.9	829.1	641.5	(2.6)	2,693.9
2017 Revenue	1,176.0	807.2	605.6	(3.5)	2,585.3
Organic revenue growth	$49.9	$21.9	$35.9	$0.9	$108.6
Percentage change	4.2%	2.7%	5.9%		4.2%
2017 Revenue	$1,176.0	$807.2	$605.6	$(3.5)	$2,585.3
Acquisitions	(74.0)	—	—	—	(74.0)
Foreign currency translation	(22.7)	(5.7)	(1.0)	(0.1)	(29.5)
2017 Organic revenue	1,079.3	801.5	604.6	(3.6)	2,481.8
2016 Revenue	983.4	830.1	596.3	(4.4)	2,405.4
Organic revenue growth (decline)	$95.9	$(28.6)	$8.3	$0.8	$76.4
Percentage change	9.8%	(3.4)%	1.4%		3.2%

Reconciliations of organic orders for the years ended December 31, 2018 and 2017 are provided below.

	Motion Technologies	Industrial Process	Connect & Control Technologies	Eliminations	Total ITT
2018 Orders	$1,295.6	$902.1	$696.3	$(2.1)	$2,891.9
Acquisitions	(17.7)	—	—	—	(17.7)
Foreign currency translation	(44.9)	1.5	(5.3)	—	(48.7)
2018 Organic orders	1,233.0	903.6	691.0	(2.1)	2,825.5
2017 Orders	1,198.8	799.8	624.1	(3.3)	2,619.4
Organic orders growth	$34.2	$103.8	$66.9	$1.2	$206.1
Percentage change	2.9 %	13.0 %	10.7 %		7.9 %
2017 Orders	$1,198.8	$799.8	$624.1	$(3.3)	$2,619.4
Acquisitions	(70.2)	—	—	—	(70.2)
Foreign currency translation	(22.0)	(4.6)	(1.0)	—	(27.6)
2017 Organic orders	1,106.6	795.2	623.1	(3.3)	2,521.6
2016 Orders	998.4	779.1	602.4	(5.1)	2,374.8
Organic orders growth	$108.2	$16.1	$20.7	$1.8	$146.8
Percentage change	10.8 %	2.1 %	3.4 %		6.2 %

"Adjusted segment operating income" is defined as operating income, adjusted to exclude special items that include, but are not limited to, restructuring costs, realignment costs, certain acquisition-related expenses, and unusual or infrequent operating items. Special items represent significant charges or credits that impact current results, which management views as unrelated to the Company's ongoing operations and performance. We believe that adjusted segment operating income is useful to investors and other users of our financial statements in evaluating ongoing operating profitability, as well as in evaluating operating performance in relation to our competitors

Reconciliations of segment operating income to adjusted segment operating income for the years ended December 31, 2018, 2017 and 2016 are provided in the tables below.

Year Ended December 31, 2018	Motion Technologies	Industrial Process	Connect & Control Technologies	Total Segment
Segment operating income	$223.4	$91.4	$96.5	$411.3
Restructuring costs	2.3	0.1	2.1	4.5
Acquisition-related expenses	(0.4)	—	—	(0.4)
Realignment costs and other[(a)]	(6.2)	—	5.0	(1.2)
Adjusted segment operating income	$219.1	$91.5	$103.6	$414.2
Year Ended December 31, 2017				
Segment operating income	$190.2	$65.8	$68.4	$324.4
Restructuring costs	2.3	7.4	3.3	13.0
Acquisition-related expenses	6.4	(2.7)	0.4	4.1
Realignment costs and other[(a)]	—	1.2	9.4	10.6
Adjusted segment operating income	$198.9	$71.7	$81.5	$352.1
Year Ended December 31, 2016				
Segment operating income	$171.3	$39.6	$66.3	$277.2
Restructuring costs	2.5	20.5	1.5	24.5
Acquisition-related expenses	4.3	—	1.5	5.8
Realignment costs and other	(0.1)	4.1	4.5	8.5
Adjusted segment operating income	$178.0	$64.2	$73.8	$316.0

(a) Realignment costs and other at Motion Technologies includes income of $6.2, net of legal expenses,

related to an intellectual property settlement in 2018.

Realignment costs and other at Industrial Process primarily includes $1.1 associated with a management reorganization in 2017, and an impairment of intangible assets of $4.1 in 2016.
Realignment costs and other at Connect & Control Technologies includes $5 related to a DOJ civil matter in both 2018 and 2017, and costs associated with an action to move certain acquired production lines of $4.4 and $4.5 during 2017 and 2016, respectively.

- "Adjusted income from continuing operations" and "adjusted income from continuing operations per diluted share" are defined as income from continuing operations attributable to ITT Inc. and income from continuing operations attributable to ITT Inc. per diluted share, adjusted to exclude special items that include, but are not limited to, asbestos-related costs, restructuring costs, realignment costs, pension settlement and curtailment costs, certain acquisition-related expenses, income tax settlements or adjustments, and unusual or infrequent items. Special items represent significant charges or credits, on an after-tax basis, that impact current results which management views as unrelated to the Company's ongoing operations and performance. The after-tax basis of each special item is determined using the jurisdictional tax rate of where the expense or benefit occurred. We believe that adjusted income from continuing operations is useful to investors and other users of our financial statements in evaluating ongoing operating profitability, as well as in evaluating operating performance in relation to our competitors.

A reconciliation of adjusted income from continuing operations, including adjusted earnings per diluted share, to income from continuing operations and income from continuing operations per diluted share for the years ended December 31, 2018, 2017 and 2016 are provided in the table below.

	2018	2017	2016
Income from continuing operations attributable to ITT Inc.	**$332.4**	$115.0	$181.9
Tax-related special items[(a)]	**(28.4)**	116.1	5.9
(Gain) costs related to sale of a former operating location, net of tax expense (benefit) of $11.5, $(2.0), and $(1.0), respectively	**(27.0)**	3.1	1.7
Asbestos-related expense (benefit), net of tax (benefit) expense of $(1.1), $7.4, and $9.5, respectively	**3.8**	(12.5)	(16.1)
Restructuring costs, net of tax benefit of $0.9, $3.9, and $7.1, respectively	**4.3**	9.2	19.2
Realignment costs, net of tax benefit of $0.0, $2.2, and $1.4, respectively[(b)]	**—**	4.0	3.1
Acquisition-related (benefit) costs, net of tax expense (benefit) of $0.2, $(0.8), and $(2.2), respectively	**(0.2)**	3.4	3.6
Pension curtailment, settlement, or special termination benefit, net of tax benefit of $0.4, $1.4, and $4.7, respectively	**1.3**	2.3	8.0
Other unusual or infrequent items, net of tax expense of $1.2, $7.5, and $0.1, respectively[(c)]	**0.7**	(10.2)	0.8
Adjusted income from continuing operations	**$286.9**	$230.4	$208.1
Income from continuing operations attributable to ITT Inc. per diluted share	**$3.75**	$1.29	$2.02
Adjusted income from continuing operations per diluted share	**$3.23**	$2.59	$2.32

(a) The following table details significant components of the tax-related special items. See Note 6, Income Taxes, to our Consolidated Financial Statements for further information.

	2018	2017	2016
Change in deferred tax asset valuation allowance	**$(23.7)**	$(0.1)	$(0.2)
Charge on undistributed foreign earnings	**(4.5)**	(14.7)	24.7
Change in uncertain tax positions	**(4.0)**	(3.6)	(14.5)
U.S. federal tax law change	**(0.9)**	143.9	—
Excess tax benefit from equity compensation activity	**—**	(2.7)	—
Other	**4.7**	(6.7)	(4.1)
Net tax-related special items	**$(28.4)**	$116.1	$5.9

(b) Realignment costs include expenses in 2017 and 2016 to relocate certain acquired production lines at Connect & Control Technologies, and 2017 costs associated with a management reorganization at Industrial Process.

(c) Adjustments for unusual or infrequent items in 2018 includes income related to an intellectual property settlement and costs related to a DOJ civil matter.

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Adjustments for unusual or infrequent items in 2017 includes income from an insurance receivable, costs related to a DOJ civil matter, income related to an amendment to the environmental QSF, and a reversal of accrued interest related to uncertain tax positions.
Adjustments for unusual or infrequent items in 2016 includes an impairment of a trade name and a reversal of accrued interest related to uncertain tax positions.

- "Adjusted free cash flow" is defined as net cash provided by operating activities less capital expenditures, adjusted for cash payments for restructuring costs, realignment actions, net asbestos cash flows and other significant items that impact current results which management views as unrelated to the Company's ongoing operations and performance. Due to other financial obligations and commitments, including asbestos, the entire free cash flow may not be available for discretionary purposes. We believe that adjusted free cash flow provides useful information to investors as it provides insight into the primary cash flow metric used by management to monitor and evaluate cash flows generated by our operations. A reconciliation of adjusted free cash flow is provided below.
- "Adjusted free cash flow conversion" is defined as adjusted free cash flow divided by adjusted income from continuing operations.

	2018	2017	2016
Net cash - Operating activities	**$371.8**	$247.2	$240.7
Capital expenditures	**(95.5)**	(113.3)	(111.4)
Insurance settlement agreement, net	**(16.9)**	—	—
Net asbestos cash flows	**40.8**	45.3	31.5
Restructuring cash payments	**8.2**	17.8	30.3
Discretionary pension contributions, net of tax	**—**	22.1	—
Payments related to the sale of a former operating location	**—**	5.1	2.6
Realignment and other cash payments	**0.5**	6.2	6.8
Adjusted free cash flow	**$308.9**	$230.4	$200.5
Adjusted income from continuing operations	**286.9**	230.4	208.1
Adjusted free cash flow conversion	**107.7 %**	100.0 %	96.3 %

- "Working capital" is defined as the sum of Receivables, net, Inventory, net, and Current contract assets, less Accounts payable and Current contract liabilities. In 2018, we updated our working capital definition to include Current contract assets and Current contract liabilities. Working capital ratio is defined as the sum of Receivables, net, Inventory, net, and Current contract assets divided by the sum of Accounts payable and Current contract liabilities. We believe that working capital provides useful information to investors as it provides insight into both a company's operational efficiency and its short-term financial health. The working capital ratio indicates whether a company has enough short-term assets to cover its short-term obligations. A reconciliation of working capital is provided below.

	2018	2017	2016
Receivables, net	**$540.0**	$629.6	$523.9
Inventory, net	**380.5**	311.9	295.2
Current contract assets	**21.8**	—	—
Less: Accounts payable	**339.2**	351.4	301.7
Less: Current contract liabilities	**61.0**	—	—
Working capital	**$542.1**	$590.1	$517.4
Working capital ratio	**2.4 x**	2.7 x	2.7 x

CRITICAL ACCOUNTING ESTIMATES

The preparation of financial statements and related disclosures in accordance with GAAP requires us to make judgments, estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. Significant accounting policies used in the preparation of the financial statements are discussed in Note 1, "Description of Business, Basis of Presentation and Summary of Significant Accounting Policies," to the Consolidated Financial Statements. An accounting policy is deemed critical if it requires an accounting estimate to be made based on assumptions about matters that are highly uncertain at the time the estimate is made, if different estimates reasonably could have been used, or if changes to the estimate that are reasonably possible could materially affect the financial statements. Senior management has discussed the development, selection and disclosure of these estimates with the Audit Committee of ITT's Board of Directors.

The accounting estimates and assumptions discussed below are those that we consider most critical to fully understanding our financial statements and evaluating our results as they are inherently uncertain, involve the most subjective or complex judgments, include areas where different estimates reasonably could have been used, and the use of an alternative estimate that is reasonably possible could materially affect the financial statements. We base our estimates on historical experience and other data and assumptions believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Management believes that the accounting estimates employed and the resulting balances reported in the Consolidated Financial Statements are reasonable; however, actual results could differ materially from our estimates and assumptions.

Asbestos Matters

Subsidiaries of ITT, ITT LLC and Goulds Pumps LLC, have been sued along with many other companies in product liability lawsuits alleging personal injury due to asbestos exposure. These claims generally allege that certain products sold by our subsidiaries prior to 1985 contained a part manufactured by a third party (*e.g.*, a gasket) that contained asbestos. To the extent that these third-party parts may have contained asbestos, it was encapsulated in the gasket (or other) material and was non-friable.

Estimating our exposure to pending asbestos claims and those that may be filed in the future is subject to significant uncertainty and risk as there are multiple variables that can affect the timing, severity, quality, quantity and resolution of claims. The methodology used to project future asbestos costs is based largely on the Company's recent experience in resolving asbestos claims. To estimate the Company's exposure for pending claims, we use recent dismissal rates and settlement averages to calculate the expected cost of those cases. To estimate the unasserted claims, the Company relies on previously conducted epidemiological studies estimating the population of U.S. workers across 11 different industry and occupation categories believed to have been exposed to asbestos. We use relevant information from those studies to calculate an estimate of the number of claims to be filed against the Company over the next 10 years and then apply our recent experience on dismissals and settlement averages to calculate the estimated costs to be incurred to resolve those unasserted claims. In addition, the estimate is augmented for the costs of defending asbestos claims in the tort system. The asbestos liability has not been discounted to present value due to the inability to reliably forecast the timing of future cash flows. The Company retains a consulting firm to assist management in estimating our potential exposure to pending asbestos claims and for claims estimated to be filed over the next 10 years. The methodology to project future asbestos costs is one in which the underlying assumptions are separately assessed for their reasonableness and then each is used as an input to the liability estimate. Our assessment of the underlying assumptions concludes on one value for each assumption.

The liability estimate is most sensitive to assumptions surrounding mesothelioma and lung cancer claims, as together, the estimated costs to resolve pending and estimated future mesothelioma and lung cancer claims represent approximately 99% of the indemnity liability, but only 39% of pending claims.

The assumptions used by the Company are interdependent and no one factor predominates in estimating

the asbestos liability. While there are other potential inputs to the model used to estimate our asbestos exposures for pending and estimated future claims, our methodology relies on the best input available for each individual assumption and, due to the interdependencies, does not create a range of reasonably possible outcomes. Projecting future asbestos costs is subject to numerous variables and uncertainties that are inherently difficult to predict. In addition to the uncertainties surrounding the key assumptions, additional uncertainty related to asbestos claims arises from the long latency period prior to the manifestation of an asbestos-related disease, changes in available medical treatments and associated medical costs, changes in plaintiff behavior resulting from bankruptcies of other companies that are potential defendants or co-defendants, uncertainties surrounding the litigation process from jurisdiction to jurisdiction, and the impact of potential legislative or judicial changes.

The forecast period used to estimate our potential exposure to projected asbestos claims is a judgment based on a number of factors, including volatility in asbestos litigation in general, the number and type of claims filed, recent experience with pending claims activity and whether our past experience is expected to continue into the future. Developments related to asbestos tend to be long-cycle, changing over multi-year periods. We closely monitor these and other factors and periodically assess whether an alternative forecast period is appropriate.

We record a corresponding asbestos-related asset that represents our best estimate of probable insurance recoveries related to the recorded asbestos liability. In developing this estimate, the Company considers coverage-in-place and other settlement agreements with its insurers, as well as a number of additional factors, including expected levels of future cost recovery, the financial viability of the insurance companies, the method by which losses will be allocated to the various insurance policies and the years covered by those policies, the extent to which settlement and defense costs will be reimbursed by the insurance policies, and interpretation of the various policy and contract terms and limits and their interrelationships. The asbestos-related asset has not been discounted to present value, consistent with the asbestos liability as the timing of the insurance recoveries, including those under coverage-in-place and other settlement agreements, is dependent on the timing of payments of the asbestos liability.

The Company retains a consulting firm to assist management in estimating probable insurance recoveries related to pending asbestos claims and claims estimated to be filed over the next 10 years. The analysis of policy terms and the likelihood of recovery from solvent insurers are provided by external legal counsel and includes a risk assessment where policy terms or other factors are not certain and allocates asbestos settlement and defense costs among our insurers.

Based on the estimated undiscounted asbestos liability as of December 31, 2018 (for claims filed or estimated to be filed over the next 10 years), we have estimated that we will be able to recover 44% of asbestos indemnity and defense costs from our insurers. However, there is uncertainty in estimating when cash payments related to the recorded asbestos liability will be fully expended and such cash payments will continue for a number of years beyond the next 10 years due to the lag time between the date a claim is filed and when it is resolved. Actual insurance reimbursements may vary significantly from period to period and the anticipated recovery rate is expected to decline over time due to exhaustion of policies and the insolvency of certain insurers. In the 10th year of our estimate, our insurance recoveries are currently projected to be approximately 21%. Future recovery rates may be impacted (positively and negatively) by other factors, such as future insurance settlements, unforeseen insolvencies and judicial determinations relevant to our coverage program, which are difficult to predict and subject to a high degree of uncertainty.

Our estimated asbestos liability and related receivables are based on management’s best estimate of future events largely based on past experience; however, past experience may not prove a reliable predictor of the future. Future events affecting the key assumptions and other variables for either the asbestos liability or the related receivables could cause actual costs and recoveries to be materially higher or lower than currently estimated. For example, a significant upward or downward trend in the number of claims filed, depending on the nature of the alleged injury, the jurisdiction where filed and the quality of the product identification could change the estimated liability, as would substantial adverse verdicts at trial. A legislative solution, structured settlement transaction, or significant change in relevant case law could also change the estimated liability. Further, the bankruptcy of an insurer or settlements with our insurers, whether through coverage-in-place agreements or policy buyouts, could change the estimated amount of recoveries. Furthermore, any predictions with respect to the variables impacting our estimate of the asbestos liability and related asset are subject to even greater uncertainty as the projection period lengthens. In light of the uncertainties and variables inherent in the long-term projection of the Company’s asbestos exposures and potential recoveries, although it is probable that the Company will incur additional costs for asbestos claims filed beyond the next 10 years, we do not believe there is a reasonable basis for estimating the number of future claims, the nature of future claims, or the cost to resolve future claims for years beyond the next 10 years at this time. Accordingly, no accrual or receivable has been recorded for any costs which may be incurred for claims asserted subsequent to 2028.

Due to these uncertainties, as well as our inability to reasonably estimate any additional asbestos liability for claims which may be filed beyond the next 10 years, it is difficult to predict the ultimate cost of resolving all pending and estimated unasserted asbestos claims. We believe it is possible that the future events affecting the key factors and other variables within the next 10 years, as well as the cost of asbestos claims filed beyond the next 10 years, net of expected recoveries, could have a material adverse effect on our financial statements.

Revenue Recognition

Revenue is derived from the sale of products and services to customers. We recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which we expect to be entitled in exchange for those goods or services. For product sales, other than certain long-term construction and production type contracts where we have no alternative use for the product and have an enforceable right to payment, we recognize revenue at the time control passes to the customer, generally when products are shipped and the contractual terms have been fulfilled.

We recognize revenue for certain highly customized long-term design and build projects using the cost-to-total cost method, based upon the percentage of costs incurred to total projected costs. Revenue and profit recognized under the cost-to-total cost method are based on management's estimates such as total contract revenues, contract costs and the extent of progress toward completion. Due to the long-term nature of the contracts, these estimates are subject to uncertainties and require significant judgment. Estimates of contract costs include labor hours and rates, and material costs. These estimates consider historical performance, the complexity of the work to be performed, the estimated time to complete the project, and other economic factors such as inflation and market rates. We update our estimates on a periodic basis and any revisions to such estimates are recorded in earnings in the period in which they are determined. Provisions for estimated losses, if any, on uncompleted long-term contracts, are made in the period in which such losses are determined.

For contracts recognized at a point in time, provisions for estimated losses, if any, on uncompleted arrangements, are recognized in the period in which such losses are determined. These estimates are subject to uncertainties and require significant judgment and may consider historical performance, the complexity of the work to be performed, the estimated time to complete the project, and other economic factors such as inflation.

Additionally, accruals for estimated expenses related to sales returns and warranties are made at the time products are sold. Reserves for sales returns, rebates and other allowances are established using historical information on the frequency of returns for a particular product and period over which products can be returned. For distributors and resellers, our typical return period is less than 180 days. Future market conditions and product transitions may require us to take actions to increase customer incentive offerings, possibly resulting in a reduction in revenue at the time the incentive is offered.

Warranty accruals are established using historical information on the nature, frequency and average cost of warranty claims and estimates of future costs. Our standard product warranty terms generally include post-sales support and repairs or replacement of a product at no additional charge for a specified period of time. While we engage in extensive product quality programs and processes, we base our estimated warranty obligation on product warranty terms offered to customers, ongoing product failure rates, materials usage, service delivery costs incurred in correcting a product failure, as well as specific product class failures outside of our baseline experience and associated overhead costs. If actual product failure rates, repair rates or any other post-sales support costs differ from these estimates, revisions to the estimated warranty liability would be required.

For certain highly complex contracts, design, engineering and other preproduction costs may be capitalized if the costs relate directly to a contract or anticipated contract that the entity can specifically identify, the costs generate or enhance resources of the entity that will be used in satisfying performance obligations in the future and the costs are expected to be recovered. In addition to direct labor and materials to fulfill a contract or anticipated contract, we exercise judgment in determining which costs are allocated, including allocations of contract management and depreciation of tooling used to fulfill the contract. Additionally, overall contract profitability is estimated in determining cost recoverability.

Income Taxes

Deferred income tax assets and liabilities are determined based on the estimated future tax effects of differences between the financial reporting and tax bases of assets and liabilities, applying currently enacted tax rates in effect for the year in which we expect the differences will reverse. We periodically assess the likelihood that we will be able to recover our deferred tax assets and reflect any changes to our

estimate of the amount we are more likely than not to realize as a valuation allowance, with a corresponding adjustment to earnings or other comprehensive income (loss), as appropriate. The ultimate realization of deferred tax assets depends on the generation of future taxable income (including the reversals of deferred tax liabilities) during the periods in which those deferred tax assets will become deductible.

The Company assesses all available positive and negative evidence regarding the realizability of its deferred tax assets. Significant judgment is required in assessing the need for any valuation allowance recorded against deferred tax assets. In assessing the need for a valuation allowance, we consider all available evidence, both positive and

negative, including the future reversal of existing taxable temporary differences, taxable income in carryback periods, prudent and feasible tax planning strategies, estimated future taxable income, and whether we have a recent history of losses. The valuation allowance can be affected by changes to tax regulations, interpretations and rulings, changes to enacted statutory tax rates, and changes to future taxable income estimates.

Our effective tax rate reflects the impact of certain undistributed foreign earnings for which we have not provided U.S. taxes because these earnings are considered indefinitely reinvested outside of the U.S. We plan foreign earnings remittance amounts based on projected cash flow needs, as well as the working capital and long-term investment requirements of our foreign subsidiaries and our domestic operations. Based on these assumptions, we estimate the amount we will distribute to the U.S. and accrue U.S. and foreign taxes on these planned foreign remittance amounts. Material changes in our estimates of cash, working capital and long-term investment requirements in the various jurisdictions in which we do business could impact our effective tax rate. Our provision for income taxes could be adversely impacted by changes in our geographic mix of earnings or changes in the enacted tax rates in the jurisdictions in which we conduct our business.

The calculation of our deferred and other tax balances involves significant management judgment when dealing with uncertainties in the application of complex tax regulations and rulings in a multitude of taxing jurisdictions across our global operations. The Company is routinely audited by U.S. federal, state and foreign tax authorities, the results of which could result in proposed assessments against the Company. We recognize potential liabilities and record tax liabilities for anticipated tax audit issues based on our estimate of whether, and to the extent to which, additional taxes will be due. Furthermore, we recognize the tax benefit from an uncertain tax position only if it is more likely than not that the tax position will be sustained on examination by the taxing authorities, based on the technical merits of the position in consideration of applicable tax statutes and related interpretations and precedents and the expected outcome of the proceedings (or negotiations) with the taxing authorities. Tax benefits recognized in the financial statements from such a position are measured based on the largest benefit that has a greater than 50% likelihood of being realized on ultimate settlement.

We adjust our liability for uncertain tax positions in light of changing facts and circumstances; however, the ultimate resolution of a tax examination may differ from the amounts recorded in the financial statements for a number of reasons, including the Company’s decision to settle rather than litigate a matter, relevant legal precedent related to similar matters, and the Company’s success in supporting its filing positions with the tax authorities. If our estimate of tax liabilities proves different than the ultimate outcome, such differences will affect the provision for income taxes in the period in which such determination is made.

Goodwill and Other Intangible Assets

We review goodwill and indefinite-lived intangible assets for impairment annually and whenever events or changes in circumstances indicate the carrying value of an asset may not be recoverable. We also review the carrying value of our finite-lived intangible assets for potential impairment when impairment indicators arise. We conduct our annual impairment tests as of the first day of the fourth quarter. When reviewing for impairment, we may opt to make an initial qualitative evaluation, which considers present events and circumstances, to determine the likelihood of impairment. Our decision to perform a qualitative impairment assessment for an individual reporting unit in a given year is influenced by a number of factors, including the significance of the excess of the reporting unit's estimated fair value over carrying value at the last quantitative assessment date, changes in macroeconomic, industry and reporting-unit specific conditions and the amount of time in between quantitative fair value measurements. If the likelihood of impairment is not considered to be more likely than not, then no further testing is performed.

In cases when we opt not to perform a qualitative evaluation or the qualitative evaluation indicates that the likelihood of impairment is more likely than not, we then perform a two-step impairment test for goodwill. In the first step, we compare the estimated fair value of each reporting unit to its carrying value. If the estimated fair value of the reporting unit exceeds the carrying value of the net assets assigned to that reporting unit, goodwill is not impaired and we are not required to perform further testing. If the carrying

value of the net assets assigned to the reporting unit exceeds its fair value, then we must perform the second step of the impairment test in order to measure the impairment loss to be recorded, if any. If the carrying value of a reporting unit's goodwill exceeds its implied fair value, then we record an impairment loss equal to the difference. In our annual impairment test for indefinite-lived intangible assets, we compare the fair value of those assets to their carrying value. We recognize an impairment loss when the estimated fair value of the indefinite-lived intangible asset is less than its carrying value.

We estimate the fair value of our reporting units using an income approach. Under the income approach, we calculate fair value based on the present value of estimated future cash flows. We estimate the fair value of our indefinite-lived intangible assets using the relief from royalty method. The relief from royalty method estimates the portion of a company's earnings attributable to an intellectual property asset based on an assumed royalty rate that the company would have paid had the asset not been owned.

Determining the fair value of a reporting unit or an indefinite-lived intangible asset is judgmental in nature and involves the use of significant estimates and assumptions, particularly related to future operating results and cash flows. These estimates and assumptions include, but are not limited to, revenue growth rates and operating margins used to calculate projected future cash flows, risk-adjusted discount rates, assumed royalty rates, future economic and market conditions and the identification of appropriate market comparable data. In addition, the identification of reporting units and the allocation of assets and liabilities to the reporting units when determining the carrying value of each reporting unit also requires judgment. Goodwill is tested for impairment at the reporting unit level, which, based on the applicable accounting guidance, is either the operating segment or one level below (*e.g.*, the divisions of our Connect & Control Technology segment). The fair value of our reporting units and indefinite-lived intangible assets are based on estimates and assumptions that are believed to be reasonable. Significant changes to these estimates and assumptions could adversely impact our conclusions. Actual future results may differ from those estimates. Further, had different reporting units been identified or had different valuation techniques or assumptions been utilized, the results of our impairment tests could have resulted in an impairment loss, which could have been material.

Commencing in 2018, each reporting unit will be tested for impairment quantitatively at a minimum once every three years. In 2018, none of the quantitative and qualitative impairment tests resulted in an impairment. See Note 12, Goodwill and Other Intangible Assets, net, for more information.

Environmental Liabilities

We are subject to various federal, state, local and foreign environmental laws and regulations that require environmental assessment or remediation efforts. Accruals for environmental exposures are recorded on a site-by-site basis when it is probable that a liability has been incurred and the amount of the liability can be reasonably estimated, based on current law and existing technologies. Significant judgment is required to determine both the likelihood of a loss and the estimated amount of loss. Engineering studies, probability techniques, historical experience and other factors are used to identify and evaluate remediation alternatives and their related costs in estimating our reserve for environmental liabilities. Our environmental reserve of $66.8 at December 31, 2018, represents management’s estimate of undiscounted costs expected to be incurred related to environmental assessment or remediation efforts, as well as related legal fees, without regard to potential recoveries from insurance companies or other third parties. Our estimated liability is reduced to reflect the participation of other potentially responsible parties in those instances where it is probable that such parties are legally responsible and financially capable of paying their respective share of the relevant costs and that share can be reasonably estimated. Our environmental accruals are reviewed and adjusted for progress of investigation and remediation efforts and as additional technical or legal information become available, such as the impact of negotiations with regulators and other potentially responsible parties, settlements, rulings, advice of legal counsel, and other current information.

We closely monitor our environmental responsibilities, together with trends in the environmental laws. Environmental remediation reserves are subject to numerous inherent uncertainties that affect our ability to estimate our share of the costs. Such uncertainties involve incomplete information regarding particular sites and other potentially responsible parties, uncertainty regarding the nature and extent of contamination at each site, the extent of remediation required under existing regulations, our share of any remediation liability, if any, widely varying cost estimates associated with potential alternative remedial approaches, the length of time required to remediate a particular site, the potential effects of continuing improvements in remediation technology, and changes in environmental standards and regulatory requirements. While environmental laws and regulations are subject to change, the nature of such change is inherently unpredictable and the timing of potential changes is uncertain. The effect of legislative or regulatory changes on environmental standards could be material to the Company’s financial statements. Additionally, violations by us of such laws and regulations, discovery of previously unknown or more extensive contamination, litigation involving environmental impacts, our inability to recover costs associated with any such developments, or financial insolvency of other potentially responsible parties could have a material

adverse effect on our financial statements.

Although it is not possible to predict with certainty the ultimate costs of environmental remediation, the reasonably possible high-end range of our estimated environmental liability at December 31, 2018 was $115.9.

Recent Accounting Pronouncements

See Note 2, Recent Accounting Pronouncements, in the Notes to the Consolidated Financial Statements for a complete discussion of recent accounting pronouncements.

QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

As a result of our global operating and financing activities, we are exposed to market risks from changes in foreign currency exchange rates, interest rates, and commodity prices, which may adversely affect our operating results and financial position. The impact from changes in market conditions is generally minimized through our normal operating and financing activities. However, we may use derivative instruments, primarily forward contracts, interest rate swaps and futures contracts, to manage some of these exposures. We do not use derivative financial instruments for trading or other speculative purposes. To minimize the risk of counterparty non-performance, derivative instruments are entered into with major financial institutions and there is no significant concentration with any one counterparty.

Foreign Currency Exchange Rate Exposures

Our foreign currency exchange rate risk relates to receipts from customers, payments to suppliers and intercompany transactions denominated in foreign currencies. Our principal currency exposures relate to the Euro, Mexican peso, Polish zloty, South Korean won, Chinese renminbi, and Czech koruna. Based on a sensitivity analysis at December 31, 2018, a hypothetical 10% change in the foreign currency exchange rates for the year ended December 31, 2018 would have resulted in translation impact to our pre-tax earnings of approximately $30, due primarily to the Euro. This calculation assumes that all currencies change in the same direction and proportion relative to the U.S. dollar and that there are no indirect effects, such as changes in non-U.S. dollar sales volumes or prices. This calculation does not take into account the impact of the foreign currency forward exchange contracts discussed above and we did not have any such contracts in place as of December 31, 2018.

Effective July 1, 2018, Argentina was determined to be a highly inflationary economy and we have changed the functional currency of our operations in Argentina to the U.S. dollar as a result. The impact of revaluing our monetary assets and liabilities is not material.

Interest Rate Exposures

As of December 31, 2018, our outstanding variable rate debt was $114.4. We estimate that a hypothetical increase in interest rates of 100 basis points would result in approximately $1 of additional annual interest expense based on current borrowing levels.

Commodity Price Exposures

Portions of our business are exposed to volatility in the prices of certain commodities, such as steel, gold, copper, nickel, iron, aluminum, tin, and rubber as well as specialty alloys, including titanium that we purchase in the raw form, or that are used in purchased component parts. When practical, we attempt to control such costs through fixed-price contracts with suppliers; however, we are prone to exposure as these contracts expire. We evaluate hedging opportunities to mitigate or minimize the risk of operating margin erosion resulting from the volatility of commodity prices. Assuming all other variables remain constant, we estimate that a hypothetical 10% change in steel prices, excluding any impact of purchased component parts, would impact pre-tax earnings by approximately $6 to $8. We estimate that a hypothetical 10% change in prices for any other commodity would not be material to our financial statements.

FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

See Index to Consolidated Financial Statements herein.

CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

CONTROLS AND PROCEDURES

Attached as exhibits to the Form 10-K are certifications of the Company’s Chief Executive Officer (CEO) and Chief Financial Officer (CFO), which are required in accordance with Rule 13a-14 under the Exchange Act, as amended.

(a) Evaluation of Disclosure Controls and Procedures

The Company, with the participation of various levels of management, including the CEO and CFO, conducted an evaluation of effectiveness of the design and operation of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) of the Exchange Act) as of December 31, 2018. Based on such evaluation, such officers have concluded that, as of the end of the period covered by this report, the Company’s disclosure controls and procedures are effective.

The Company's Disclosure Committee has the responsibility of considering and evaluating the materiality of information and reviewing disclosure obligations on a timely basis. The Disclosure Committee meets regularly and assists the CEO and the CFO in designing, establishing, reviewing and evaluating the Company’s disclosure controls and procedures.

(b) Management’s Report on Internal Control Over Financial Reporting

The Company’s management is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act. The Company’s internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with accounting principles generally accepted in the United States of America.

Internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, completely, accurately and fairly reflect the transactions and dispositions of the Company’s assets; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of the financial statements in accordance with accounting principles generally accepted in the United States of America; (iii) provide reasonable assurance that Company receipts and expenditures are made only in accordance with the authorization of management and the directors of the Company, and (iv) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of assets that could have a material effect on the Consolidated Financial Statements. Internal control over financial reporting includes the controls themselves, monitoring and internal auditing practices and actions taken to correct any identified deficiencies.

Management assessed the effectiveness of the Company’s internal control over financial reporting as of December 31, 2018. Management based this assessment on criteria for effective internal control over financial reporting described in the 2013 "Internal Control — Integrated Framework" released by the Committee of Sponsoring Organizations (COSO) of the Treadway Commission. Management's assessment included an evaluation of the design of the Company’s internal control over financial reporting and testing of the operational effectiveness of its internal control over financial reporting. Management reviewed the results of its assessment with the Audit Committee of our Board of Directors.

Based on this assessment, management determined that, as of December 31, 2018, the Company maintained effective internal control over financial reporting.

The Company’s management, including the CEO and the CFO, does not expect that our internal control over financial reporting, because of inherent limitations, will prevent or detect all errors and all fraud. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may be inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Management’s assessment, included herein, should be read in conjunction with the certifications and the report issued by Deloitte & Touche LLP, an independent registered public accounting firm, as stated in their report, which appears subsequent to Item 9B in this Annual Report on Form 10-K.

(c) Changes in Internal Control over Financial Reporting

During the three months ended December 31, 2018, no change occurred in our internal control over financial reporting that materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

OTHER INFORMATION

Disclosure pursuant to Section 219 of the Iran Threat Reduction & Syria Human Rights Act (ITRA)

This disclosure is made pursuant to Section 219 of the Iran Threat Reduction and Syria Human Rights Act of 2012 which added subsection (r) to Section 13 of the Exchange Act (Section 13(r)). Section 13(r) requires an issuer to disclose in its annual or quarterly reports whether it or any of its affiliates have knowingly engaged in certain activities, transactions or dealings relating to Iran. Disclosure of such activities, transactions or dealings is required even when conducted outside the United States by non-U.S. persons in compliance with applicable law, and whether or not such activities are sanctionable under U.S. law.

In its 2012 Annual Report, ITT described its acquisition of all the shares of Joh. Heinr. Bornemann GmbH (Bornemann) in November 2012, as well as certain activities of Bornemann in Iran and the wind down of those activities in accordance with a General License issued on December 26, 2012 (the General License) by the Office of Foreign Assets Control. As permitted by the General License, on or before March 8, 2013, Bornemann completed the wind-down activities and ceased all activities in Iran. As required to be disclosed by Section 13(r), the gross revenues and operating income to Bornemann from its Iranian activities subsequent to its acquisition by ITT were Euros 2.2 million and Euros 1.5 million, respectively. Prior to its acquisition by ITT, Bornemann issued a performance bond to its Iranian customer in the amount of Euros 1.3 million (the Bond). Bornemann requested that the Bond be canceled prior to March 8, 2013; however, the former customer refused this request and as a result the Bond remains outstanding. Bornemann did not receive gross revenues or operating income, or pay interest, with respect to the Bond in any subsequent periods through December 31, 2018, however, Bornemann did pay annual fees of approximately Euros 11 thousand in each of 2018, 2017 and 2016 to the German financial institution which is maintaining the Bond.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

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

Opinion on Internal Control over Financial Reporting

We have audited the internal control over financial reporting of ITT Inc. and subsidiaries (the "Company") as of December 31, 2018, based on criteria established in *Internal Control - Integrated* Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2018, based on criteria established in Internal Control - Integrated Framework (2013) issued by COSO.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated financial statements as of and for the year ended December 31, 2018, and the related notes (collectively referred to as the “financial statements”), of the Company and our report dated February 22, 2019, expressed an unqualified opinion on those financial statements.

Basis of Opinion

The Company’s management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management’s Report on Internal Control Over Financial Reporting. Our responsibility is to express an opinion on the Company’s internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to 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 audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control over Financial Reporting

A company’s internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with 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.

/s/ Deloitte & Touche LLP
Stamford, Connecticut
February 22, 2019

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PART III

DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

Information required by this Item 10 is incorporated by reference from the information provided under the sections entitled “Voting Items,” “How to Vote,” "Election of Directors (Proxy Item No. 1)," "Corporate Governance and Related Matters-Overview of Committees-Audit Committee," “Audit Committee Report” and "Section 16 Beneficial Ownership Reporting Compliance" in our Proxy Statement for the 2019 Annual Meeting of Shareholders (2019 Proxy Statement).

Information required by this Item 10 with respect to executive officers of the Company is contained under the heading "Executive Officers of the Company" in Part I of this Form 10-K.

ITT has adopted corporate governance principles and charters for each of its standing committees. The principles address director qualification standards and responsibilities, access to management and independent advisors, compensation, orientation and continuing education, management succession principles and board and committee self-evaluation. The corporate governance principles and charters are available on the Company’s website at www.itt.com/investors/governance/. A copy of the corporate governance principles and charters is also available to any shareholder who requests a copy from the Company’s secretary.

ITT has also adopted a written code of ethics, the "Code of Conduct," which is applicable to all directors, employees and officers (including the Company’s principal executive officer, principal financial officer, principal accounting officer or controller, or person performing similar functions). The Company’s Code of Conduct is available on our website at www.itt.com. We intend to satisfy the disclosure requirement under Item 5.05 of Form 8-K regarding an amendment to, or waiver from, a provision of our Code of Conduct by posting such information on our website at www.itt.com.

Pursuant to New York Stock Exchange (NYSE) Listing Company Manual Section 303A.12(a), the Company submitted a Section 12(a) CEO Certification to the NYSE in 2018. The Company also filed with the SEC, as exhibits to the Company’s current Annual Report on Form 10-K, the certifications required under Section 302 of the Sarbanes-Oxley Act for its Chief Executive Officer and Chief Financial Officer.

EXECUTIVE COMPENSATION

Information required by this Item 11 is incorporated by reference to the discussion under the headings "2018 Non-Management Director Compensation," "Compensation Tables," "Compensation Discussion and Analysis," "Compensation and Personnel Committee Report" and "Corporate Governance and Related Matters-Compensation Committee Interlocks and Insider Participation" in our 2019 Proxy Statement.

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

Information required by this Item 12 is incorporated by reference to the discussion under the caption "Stock Ownership of Directors, Executive Officers, and Certain Shareholders," "Section 16 Beneficial Ownership Reporting Compliance" and "Equity Compensation Plan Information" in our 2019 Proxy Statement.

CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS AND DIRECTOR INDEPENDENCE

Information required by this item is incorporated by reference to the discussions under the captions "Corporate Governance and Related Matters-Policies for Approving Related Party Transactions" and "Corporate Governance and Related Matters-Director Independence" in our 2019 Proxy Statement.

PRINCIPAL ACCOUNTING FEES AND SERVICES

Information about the fees for 2018 and 2017 for professional services rendered by our independent registered public accounting firm is incorporated by reference to the discussion under the heading "Ratification of Appointment of the Independent Registered Public Accounting Firm (Proxy Item No. 2)" of our 2019 Proxy Statement. Our Audit Committee’s policy on pre-approval of audit and permissible non-audit

services of our independent registered public accounting firm is also incorporated by reference to the discussion under the heading "Ratification of Appointment of the Independent Registered Public Accounting Firm (Proxy Item No. 2)" of our 2019 Proxy Statement.

PART IV

EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

(a) Documents filed as a part of this report:

1. See Index to Consolidated Financial Statements appearing on page 59 for a list of the financial statements filed as a part of this report.
2. See Exhibit Index on page II-1 for a list of the exhibits filed or incorporated herein as a part of this report.

(b) Financial Statement Schedules are omitted because of the absence of the conditions under which they are required or because the required information is included in the Consolidated Financial Statements filed as part of this report.

FORM 10-K SUMMARY

Not Applicable.

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

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

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of ITT Inc. and subsidiaries (the "Company") as of December 31, 2018 and 2017, the related consolidated statements of operations, comprehensive income, shareholders' equity, and cash flows, for each of the three years in the period ended December 31, 2018, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2018 and 2017, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2018, in conformity with accounting principles generally accepted in the United States of America.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2018, based on the criteria established in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated February 22, 2019, expressed an unqualified opinion on the Company's internal control over financial reporting.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to 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. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ Deloitte & Touche LLP
Stamford, Connecticut
February 22, 2019
We have served as the
Company's auditor since
2002.

CONSOLIDATED STATEMENTS OF OPERATIONS

(IN MILLIONS, EXCEPT PER SHARE AMOUNTS) YEARS ENDED DECEMBER 31	**2018**	2017	2016
Revenue	**$2,745.1**	$2,585.3	$2,405.4
Costs of revenue	**1,857.9**	1,765.4	1,644.5
Gross profit	**887.2**	819.9	760.9
General and administrative expenses	**259.1**	258.4	260.5
Sales and marketing expenses	**168.2**	169.5	169.8
Research and development expenses	**98.4**	93.5	80.5
Gain on sale of long-lived assets	**(40.7)**	(0.9)	(0.9)
Asbestos-related expense (benefit), net	**4.9**	(19.9)	(25.6)
Operating income	**397.3**	319.3	276.6
Interest and non-operating expenses, net	**6.3**	9.9	18.2
Income from continuing operations before income tax	**391.0**	309.4	258.4
Income tax expense	**57.7**	194.6	76.0
Income from continuing operations	**333.3**	114.8	182.4
Income (loss) from discontinued operations, including tax (expense) benefit of $(0.3), $1.9, and $(0.3), respectively	**1.3**	(1.5)	4.2
Net income	**334.6**	113.3	186.6
Less: Income (loss) attributable to noncontrolling interests	**0.9**	(0.2)	0.5
Net income attributable to ITT Inc.	**$333.7**	$113.5	$186.1
Amounts attributable to ITT Inc.:			
Income from continuing operations, net of tax	**$332.4**	$115.0	$181.9
Income (loss) from discontinued operations, net of tax	**1.3**	(1.5)	4.2
Net income	**$333.7**	$113.5	$186.1
Earnings (loss) per share attributable to ITT Inc.:			
Basic earnings per share:			
Continuing operations	**$3.79**	$1.30	$2.04
Discontinued operations	**0.02**	(0.01)	0.05
Net income	**$3.81**	$1.29	$2.09
Diluted earnings per share:			
Continuing operations	**$3.75**	$1.29	$2.02
Discontinued operations	**0.01**	(0.01)	0.05
Net income	**$3.76**	$1.28	$2.07
Weighted average common shares – basic	**87.7**	88.3	89.2
Weighted average common shares – diluted	**88.7**	89.0	89.9

The accompanying Notes to Consolidated Financial Statements are an integral part of the above statements of operations.

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

(IN MILLIONS) YEARS ENDED DECEMBER 31	**2018**	2017	2016
Net income	**$334.6**	$113.3	$186.6
Other comprehensive (loss) income:			
Net foreign currency translation adjustment	**(33.3)**	95.4	(36.0)
Net change in postretirement benefit plans, net of tax impacts of $(1.6), $(5.5), and $(6.9), respectively	**6.0**	7.6	8.5
Net change investment securities, net of tax impacts of $0.0, $0.0, and $0.0, respectively	**—**	—	0.3
Other comprehensive (loss) income	**(27.3)**	103.0	(27.2)
Comprehensive income	**307.3**	216.3	159.4
Less: Comprehensive income (loss) attributable to noncontrolling interests	**0.9**	(0.2)	0.5
Comprehensive income attributable to ITT Inc.	**$306.4**	$216.5	$158.9
Disclosure of reclassification adjustments and other adjustments to postretirement benefit plans (See Note 16)			
Reclassification adjustments:			
Amortization of prior service benefit, net of tax expense of $1.1, $1.8, and $2.1, respectively	**$(3.3)**	$(3.0)	$(3.5)
Amortization of net actuarial loss, net of tax benefit of $(2.4), $(4.1), and $(4.4), respectively	**7.4**	7.9	8.0
Loss on plan curtailment, net of tax benefit of $0.0, $(1.4), and $0.0, respectively	**—**	2.3	—
Loss on plan settlement, net of tax benefit of $(0.4), $0.0, and $(4.7), respectively	**1.3**	—	8.0
Other adjustments:			
Prior service cost, net of tax benefit of $0.1, $0.8, and $0.0, respectively	**—**	(1.3)	(0.4)
Net actuarial gain (loss), net of tax benefit (expense) of $0.2, $(2.6), and $0.1, respectively	**(0.4)**	4.6	(4.1)
Unrealized change from foreign currency translation	**1.0**	(2.9)	0.5
Net change in postretirement benefit plans, net of tax	**$6.0**	$7.6	$8.5
Disclosure of reclassification adjustments to investment securities			
Realized loss on investing securities, net of tax benefit of $0.0, $0.0, and $0.0, respectively	**$—**	$—	$0.3

The accompanying Notes to Consolidated Financial Statements are an integral part of the statements of comprehensive income.

CONSOLIDATED BALANCE SHEETS

(IN MILLIONS, EXCEPT PER SHARE AMOUNTS) DECEMBER 31	**2018**	2017
Assets		
Current assets:		
Cash and cash equivalents	**$561.2**	$389.8
Receivables, net	**540.0**	629.6
Inventories, net	**380.5**	311.9
Other current assets	**163.4**	147.4
Total current assets	**1,645.1**	1,478.7
Plant, property and equipment, net	**518.8**	521.7
Goodwill	**875.9**	886.8
Other intangible assets, net	**136.1**	156.2
Asbestos-related assets	**309.6**	304.0
Deferred income taxes	**164.5**	149.9
Other non-current assets	**196.8**	202.9
Total non-current assets	**2,201.7**	2,221.5
Total assets	**$3,846.8**	$3,700.2
Liabilities and Shareholders' Equity		
Current liabilities:		
Short-term loans and current maturities of long-term debt	**$116.2**	$163.6
Accounts payable	**339.2**	351.4
Accrued liabilities	**416.7**	384.4
Total current liabilities	**872.1**	899.4
Asbestos-related liabilities	**775.1**	800.1
Postretirement benefits	**208.2**	227.3
Other non-current liabilities	**166.5**	175.6
Total non-current liabilities	**1,149.8**	1,203.0
Total liabilities	**2,021.9**	2,102.4
Shareholders' equity:		
Common stock:		
Authorized – 250.0 shares, $1 par value per share		
Issued and Outstanding – 87.6 and 88.2 shares, respectively	**87.6**	88.2
Retained earnings	**2,110.3**	1,856.1
Accumulated other comprehensive loss:		
Postretirement benefit plans	**(131.6)**	(137.6)
Cumulative translation adjustments	**(243.9)**	(210.6)
Total ITT Inc. shareholders' equity	**1,822.4**	1,596.1
Noncontrolling interests	**2.5**	1.7
Total shareholders' equity	**1,824.9**	1,597.8
Total liabilities and shareholders' equity	**$3,846.8**	$3,700.2

The accompanying Notes to Consolidated Financial Statements are an integral part of the above balance sheets.

CONSOLIDATED STATEMENTS OF CASH FLOWS

(IN MILLIONS) YEARS ENDED DECEMBER 31	**2018**	2017	2016
Operating Activities			
Income from continuing operations attributable to ITT Inc.	**$332.4**	$115.0	$181.9
Adjustments to income from continuing operations			
Depreciation and amortization	**109.4**	105.3	102.0
Equity-based compensation	**21.6**	18.1	12.6
Gain on sale of long-lived assets	**(40.7)**	(0.9)	(0.9)
Asbestos-related expense (benefit), net	**4.9**	(19.9)	(25.6)
Deferred income tax (benefit) expense	**(14.7)**	147.0	20.9
Asbestos-related payments, net	**(40.8)**	(45.3)	(31.5)
Contributions to postretirement plans	**(11.2)**	(45.0)	(19.0)
Changes in assets and liabilities:			
Change in receivables	**(2.7)**	(59.3)	22.5
Change in inventories	**(13.3)**	14.2	(7.2)
Change in accounts payable	**(4.2)**	16.8	0.7
Change in accrued expenses	**5.7**	17.2	(27.4)
Change in income taxes	**14.4**	(14.8)	(5.7)
Other, net	**11.0**	(1.2)	17.4
Net Cash – Operating activities	**371.8**	247.2	240.7
Investing Activities			
Capital expenditures	**(95.5)**	(113.3)	(111.4)
Proceeds from sale of businesses and other assets	**43.2**	3.8	3.0
Acquisitions, net of cash acquired	**—**	(113.7)	(8.8)
Purchases of investments	**—**	—	(60.6)
Maturities of investments	**—**	—	123.5
Other, net	**—**	—	(0.1)
Net Cash – Investing activities	**(52.3)**	(223.2)	(54.4)
Financing Activities			
Commercial paper, net (repayments) borrowings	**(44.5)**	48.9	19.0
Short-term revolving loans, borrowings	**246.5**	77.3	27.7
Short-term revolving loans, repayments	**(233.8)**	(177.3)	(78.3)
Long-term debt issued	**3.2**	7.0	—
Long-term debt, repaid	**(2.7)**	(1.3)	(1.1)
Repurchase of common stock	**(56.1)**	(32.9)	(77.8)
Dividends paid	**(47.3)**	(45.4)	(44.6)
Proceeds from issuance of common stock	**5.8**	11.2	12.3
Other, net	**0.1**	—	0.9
Net Cash – Financing activities	**(128.8)**	(112.5)	(141.9)
Exchange rate effects on cash and cash equivalents	**(15.3)**	20.0	(11.4)
Net cash from discontinued operations – operating activities	**(4.2)**	(2.4)	12.0
Net change in cash and cash equivalents	**171.2**	(70.9)	45.0
Cash and cash equivalents – beginning of year (includes restricted cash of $1.2, $1.2, and $1.2, respectively)	**391.0**	461.9	416.9
Cash and Cash Equivalents – end of Period (includes restricted cash of $1.0, $1.2, and $1.2, respectively)	**$562.2**	$391.0	$461.9
Supplemental Cash Flow Disclosures			
Cash paid (received) during the year for:			
Interest	**$3.3**	$3.8	$4.5
Income taxes, net of refunds received	**53.5**	62.0	56.1

The accompanying Notes to Consolidated Financial Statements are an integral part of the above statements of cash flows.

CONSOLIDATED STATEMENTS OF CHANGES IN SHAREHOLDERS’ EQUITY

(IN MILLIONS, EXCEPT SHARE AMOUNTS)	Common Stock		Retained Earnings	Accumulated Other Comprehensive Loss	Noncontrolling Interest	Total Shareholders' Equity
	(Shares)	($Dollars)				
December 31, 2015	**89.5**	**$ 89.5**	**$ 1,696.7**	**$ (424.0)**	**$ 3.3**	**$ 1,365.5**
Activity from stock incentive plans	1.1	1.1	27.0	—	—	28.1
Share repurchases	(2.2)	(2.2)	(75.6)	—	—	(77.8)
Net income	—	—	186.1	—	0.5	186.6
Dividends declared ($0.496 per share)	—	—	(44.6)	—	—	(44.6)
Dividend to noncontrolling interest	—	—	—	—	(1.9)	(1.9)
Purchase of noncontrolling interest	—	—	(0.4)	—	—	(0.4)
Total other comprehensive loss, net of tax	—	—	—	(27.2)	—	(27.2)
Other	—	—	—	—	0.1	0.1
December 31, 2016	**88.4**	**88.4**	**1,789.2**	**(451.2)**	**2.0**	**1,428.4**
Activity from stock incentive plans	0.7	0.7	29.9	—	—	30.6
Share repurchases	(0.9)	(0.9)	(32.0)	—	—	(32.9)
Cumulative adjustment for accounting change (See Note 2)	—	—	1.0	—	—	1.0
Net income (loss)	—	—	113.5	—	(0.2)	113.3
Dividends declared ($0.512 per share)	—	—	(45.5)	—	—	(45.5)
Total other comprehensive income, net of tax	—	—	—	103.0	—	103.0
Other	—	—	—	—	(0.1)	(0.1)
December 31, 2017	**88.2**	**88.2**	**1,856.1**	**(348.2)**	**1.7**	**1,597.8**
Activity from stock incentive plans	0.5	0.5	27.0	—	—	27.5
Share repurchases	(1.1)	(1.1)	(55.0)	—	—	(56.1)
Cumulative adjustment for accounting change	—	—	(4.1)	—	—	(4.1)
Net income	—	—	333.7	—	0.9	334.6
Dividends declared ($0.536 per share)	—	—	(47.4)	—	—	(47.4)
Total other comprehensive loss, net of tax	—	—	—	(27.3)	—	(27.3)
Other	—	—	—	—	(0.1)	(0.1)
December 31, 2018	**87.6**	**$ 87.6**	**$ 2,110.3**	**$ (375.5)**	**$ 2.5**	**$ 1,824.9**

The accompanying Notes to Consolidated Financial Statements are an integral part of the above statements of changes in shareholders’ equity.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

(DOLLARS AND SHARES (EXCEPT PER SHARE AMOUNTS) IN MILLIONS, UNLESS OTHERWISE STATED)

NOTE 1
DESCRIPTION OF BUSINESS, BASIS OF PRESENTATION AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Description of Business

ITT Inc. is a diversified manufacturer of highly engineered critical components and customized technology solutions for the transportation, industrial, and oil and gas markets. Unless the context otherwise indicates, references herein to "ITT," "the Company," and such words as "we," "us," and "our" include ITT Inc. and its subsidiaries. ITT operates through three segments: Motion Technologies, consisting of friction and shock and vibration equipment; Industrial Process, consisting of industrial flow equipment and services; and Connect & Control Technologies, consisting of electronic connectors, fluid handling, motion control, and noise and energy absorption products. Financial information for our segments is presented in Note 3, Segment Information.

On May 16, 2016, we consummated a corporate reorganization into a holding company structure. As a result of the reorganization ITT Inc., an Indiana corporation that was previously a wholly owned subsidiary of ITT Corporation, became the publicly traded holding company of ITT Corporation and its subsidiaries and the successor issuer to ITT Corporation under Rule 12g-3(a) under the Securities Exchange Act of 1934 (Exchange Act). As the successor issuer, ITT Inc. common stock was deemed to be registered under Section 12(b) of the Exchange Act and ITT Inc. succeeded to ITT Corporation’s obligation to file reports, proxy statements and other information required by the Exchange Act with the SEC. For additional information regarding the holding company reorganization, please refer to the Current Report on Form 8-K that we filed with the SEC on May 16, 2016.

On October 31, 2011, ITT completed the tax-free spin-off of its Defense and Information Solutions business, Exelis Inc. (Exelis), and its water-related businesses, Xylem Inc. (Xylem) by way of a distribution of all of the issued and outstanding shares of Exelis common stock and Xylem common stock, on a pro rata basis, to ITT shareholders of record on October 17, 2011. This transaction is referred to in this report as the “2011 spin-off.” On May 29, 2015, Harris Corporation acquired Exelis. On October 14, 2018, Harris and L3 Technologies agreed to a merger which is set to close in 2019.

Basis of Presentation

The Consolidated Financial Statements and Notes thereto were prepared in conformity with accounting principles generally accepted in the United States of America (GAAP).

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenue and expenses during the reporting period. Estimates are revised as additional information becomes available. Estimates and assumptions are used for, but not limited to, asbestos-related liabilities and recoveries from insurers, revenue recognition, unrecognized tax benefits, deferred tax valuation allowances, projected benefit obligations for postretirement plans, accounting for business combinations, goodwill and other intangible asset impairment testing, environmental liabilities, allowance for doubtful accounts and inventory valuation. Actual results could differ from these estimates.

Certain prior year amounts have been reclassified to conform to the current year presentation.

Significant Accounting Policies

Principles of Consolidation

Our consolidated financial statements include the accounts of all majority-owned subsidiaries. ITT consolidates companies in which it has a controlling financial interest or when ITT is considered the primary beneficiary of a variable interest entity. We account for investments in companies over which we have the ability to exercise significant influence, but do not hold a controlling interest under the equity method, and we record our proportionate share of income or losses in the Consolidated Statements of Operations. The

results of companies acquired or disposed of during the fiscal year are included in the Consolidated Financial Statements from the effective date of acquisition or up to the date of disposal or distribution. All intercompany transactions have been eliminated.

Revenue Recognition

Revenue is derived from the sale of products and services to customers. We recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which we expect to be entitled in exchange for those goods or services.

For product sales, we consider practical and contractual limitations in determining whether there is an alternative use for the product. For example, long-term design and build contracts are typically highly customized to a customer's specifications. For contracts with no alternative use and an enforceable right to payment for work performed to date, including a reasonable profit if the contract were terminated at the customer's convenience for reason other than nonperformance, we recognize revenue over time. All other product sales are recognized at a point in time.

For contracts recognized over time, we use the cost-to-total cost method or the units of delivery method, depending on the nature of the contract, including length of production time.

For contracts recognized at a point in time, we recognize revenue when control passes to the customer, which is generally based on shipping terms that address when title and risk and rewards pass to the customer. However, we also consider certain customer acceptance provisions as certain contracts with customers include installation, testing, certification or other acceptance provisions. In instances where contractual terms include a provision for customer acceptance, we consider whether we have previously demonstrated that the product meets objective criteria specified by either the seller or customer in assessing whether control has passed to the customer.

For service contracts, we recognize revenue as the services are rendered if the customer is benefiting from the service as it is performed, or otherwise upon completion of the service. Separately priced extended warranties are recognized as a separate performance obligation over the warranty period.

The transaction price in our contracts consists of fixed consideration and the impact of variable consideration including returns, rebates and allowances and penalties. Variable consideration is generally estimated using a probability-weighted approach based on historical experience, known trends and current factors including market conditions and status of negotiations.

When there is more than one performance obligation, the transaction price is allocated to the performance obligations based on the relative estimated standalone selling prices. If not sold separately, estimated standalone selling prices are determined considering various factors including market and pricing trends, geography, product customization and profit objectives. Revenue is recognized when the appropriate revenue recognition criteria for the individual performance obligations have been satisfied.

Revenue is reported net of any required taxes collected from customers and remitted to government authorities, with the collected taxes recorded as current liabilities until remitted to the relevant government authority.

Shipping and handling activities are accounted for as activities to fulfill a promise to transfer a product to a customer. As such, shipping and handling activities are not evaluated as a separate performance qualification.

For most contracts, payment is due from the customer within 30 to 90 days after the product is delivered or the service has been performed. For design and build contracts, we generally collect progress payments from the customer throughout the term of the contract, resulting in contract assets or liabilities depending on the timing of the payments. Contract assets consist of unbilled amounts when revenue recognized exceeds customer billings. Contract liabilities consist of advance payments and billings in excess of revenue recognized.

Design and engineering costs for highly complex products to be sold under a long-term production-type contract are capitalized and amortized in a manner consistent with revenue recognition of the related contract or anticipated contract. Other design and development costs are capitalized only if there is a contractual guarantee for reimbursement. Costs to obtain a contract (e.g., commissions) for contracts greater than one year are capitalized and amortized in a manner consistent with revenue recognition of the related contract.

Product Warranties

Our standard product warranty terms generally include post-sales support and repairs or replacement of a product at no additional charge for a specified period of time. Accruals for estimated expenses related to product warranties are made at the time revenue is recognized and are recorded as a component of costs of revenue. We estimate the liability for warranty claims based on our standard warranties, the historical frequency of claims and the cost to replace or repair our products under warranty. Factors that influence our warranty liability include the number of units sold, the length of warranty term, historical and anticipated rates of warranty claims and the cost per claim.

Asbestos-Related Liabilities and Assets
Subsidiaries of ITT, including ITT LLC and Goulds Pumps LLC, have been named as a defendant in numerous product liability lawsuits alleging personal injury due to asbestos exposure. We accrue the estimated value of pending claims and unasserted claims estimated to be filed over the next 10 years, including legal fees, on an undiscounted basis, due to the inability to reliably forecast the timing of future cash flows. Assumptions utilized in estimating the liability for both pending and unasserted claims include: disease type, average settlement costs, percentage of claims settled or dismissed, the number of claims estimated to be filed against the Company in the future and the costs to defend such claims.
The Company has also recorded an asbestos-related asset composed of insurance receivables. The asbestos-related asset represents our best estimate of probable recoveries from third parties for pending claims, as well as unasserted claims estimated to be filed over the next 10 years. In developing this estimate, the Company considers coverage-in-place and other settlement agreements with its insurers, as well as a review of expected levels of future recoveries, the financial viability of the insurance companies, the method by which losses will be allocated to the various insurance policies and the years covered by those policies, and interpretation of the various policy and contract terms and limits and their interrelationships. Consistent with the asbestos liability, the asbestos-related asset has not been discounted to present value due to the inability to reliably forecast the timing of future cash flows. Under coverage-in-place agreements, an insurer's policies remain in force and the insurer undertakes to provide coverage for the Company's pending and future asbestos claims on specified terms and conditions. Insurance payments under coverage-in-place agreements are made to the Company as asbestos claims are settled or adjudicated. The Company's buyout agreements provide an agreed upon amount of available coverage for future asbestos claims under the subject policies to be paid to a Qualified Settlement Fund (QSF) on a specific schedule as agreed upon by the Company and its insurer. However, assets in the QSF are only available and distributed when qualifying asbestos expenditures are submitted for reimbursement as defined in the QSF agreement. Therefore, recovery of insurance reimbursements under these types of agreements is dependent on the timing of the payment of the liability and, consistent with the asbestos liability, have not been discounted to present value.
In the third quarter each year we conduct an asbestos remeasurement with the assistance of outside consultants to review and update, as appropriate, the underlying assumptions used to estimate our asbestos liability and related assets, including a reassessment of the time horizon over which a reasonable estimate of unasserted claims can be projected. In addition, as part of our ongoing review of our net asbestos exposure, each quarter we assess the most recent data available for the key inputs and assumptions, comparing the data to the expectations on which the most recent annual liability and asset estimates were based. Provided the quarterly review does not indicate a more detailed evaluation of our asbestos exposure is required, each quarter we record a net asbestos expense to maintain a rolling 10-year time horizon.
Postretirement Benefit Plans
ITT sponsors numerous pension and other employee-related defined benefit plans (collectively, postretirement benefit plans). The majority of these plans are closed to new participants. Postretirement benefit obligations are generally determined, where applicable, based on participant years of service, future compensation, and age at retirement or termination. The determination of projected benefit obligations and the recognition of expenses related to postretirement benefit plans are dependent on various assumptions that are judgmental. The assumptions involved in the measurement of our postretirement benefit plan obligations and net periodic postretirement costs primarily relate to discount rates, long-term expected rates of return on plan assets, mortality and termination rates, and other factors. Management develops each assumption using relevant Company experience in conjunction with market-related data for each individual country in which such plans exist. Actual results that differ from our assumptions are accumulated and are amortized over the estimated future working life, or remaining lifetime, of the plan participants depending on the nature of the retirement plan. For the recognition of net periodic postretirement cost, the calculation of the long-term expected return on plan assets is generally derived using a market-related value of plan

assets based on yearly average asset values at the measurement date over the last 5 years.
The fair value of plan assets is estimated based on market prices or estimated fair value at the measurement date.
The funded status of all plans is recorded on our balance sheet. Actuarial gains and losses and prior service costs or credits that have not yet been recognized through net income are recorded in accumulated other comprehensive income within shareholders’ equity, net of taxes, until they are amortized as a component of net periodic postretirement cost.
Research & Development
Research and development activities are charged to expense as incurred.

Income Taxes

We determine the provision for income taxes using the asset and liability approach. Under this approach, deferred income tax assets and liabilities are determined based on the estimated future tax effects of differences between the financial reporting and tax bases of assets and liabilities, applying currently enacted tax rates in effect for the year in which we expect the differences will reverse. The ultimate realization of deferred tax assets is dependent on the generation of future taxable income (including the reversals of deferred tax liabilities) during the periods in which those deferred tax assets will become deductible.

We record a valuation allowance against our deferred tax assets when it is more likely than not that all or a portion of the deferred tax assets will not be realized. In assessing the need for a valuation allowance, the Company considers all available positive and negative evidence regarding the realizability of its deferred tax assets, including the future reversal of existing taxable temporary differences, taxable income in carryback periods, prudent and feasible tax planning strategies, estimated future taxable income, and whether we have a recent history of losses. The valuation allowance can be affected by changes to tax regulations, interpretations and rulings, changes to enacted statutory tax rates, and changes to future taxable income estimates.

We have not provided deferred tax liabilities for the impact of U.S. income taxes on book over tax basis which we consider indefinitely reinvested outside the U.S. We plan foreign earnings remittance amounts based on projected cash flow needs, as well as the working capital and long-term investment requirements of foreign subsidiaries and our domestic operations.

Furthermore, we recognize the tax benefit from an uncertain tax position only if it is more likely than not that the tax position will be sustained on examination by the taxing authorities, based on the technical merits of the position in consideration of applicable tax statutes and related interpretations and precedents and the expected outcome of the proceedings (or negotiations) with the taxing authorities. Tax benefits recognized in the financial statements from such a position are measured based on the largest benefit that has a greater than 50% likelihood of being realized on ultimate settlement.

Earnings Per Share

Basic earnings per common share considers the weighted average number of common shares outstanding. Diluted earnings per share considers the outstanding shares utilized in the basic earnings per share calculation as well as the dilutive effect of outstanding stock options and restricted stock that do not contain rights to nonforfeitable dividends. Diluted shares outstanding include the dilutive effect of in-the-money options, unvested restricted stock units and unvested performance stock units. The dilutive effect of such equity awards is calculated based on the average share price for each reporting period using the treasury stock method. Common stock equivalents are excluded from the computation of earnings per share if they have an anti-dilutive effect.

Cash and Cash Equivalents

ITT considers all highly liquid investments purchased with an original maturity or remaining maturity at the time of purchase of three months or less to be cash equivalents. Cash equivalents primarily include fixed-maturity time deposits and money market investments. We record the fixed maturity time deposits at amortized cost and accrue interest during the maturity period. Restricted cash was $1.0 and $1.2 as of December 31, 2018 and 2017, respectively. Restricted cash is presented within Other current assets and Other non-current assets.

Concentrations of Credit Risk

Financial instruments that potentially subject ITT to significant concentrations of credit risk consist principally of cash and cash equivalents, accounts receivable from trade customers, investments and derivatives. We maintain cash and cash equivalents with various financial institutions located in different geographical regions, and our policy is designed to limit exposure to any individual counterparty. As part of our risk management processes, we perform periodic evaluations of the relative credit standing of the financial institutions. We have not sustained any material credit losses during the previous three years from financial instruments held at financial institutions.

Credit risk with respect to accounts receivable is generally diversified due to the large number of entities comprising ITT's customer base and their dispersion across many different industries and geographic regions. However, our largest customer represents approximately 12% and 11% of the December 31, 2018 and 2017 outstanding trade accounts receivable balance, respectively. ITT performs ongoing credit evaluations of the financial condition of its third-party distributors, resellers and other customers and requires collateral, such as letters of credit and bank guarantees, in certain circumstances.

Factoring of Trade Receivables

Factoring arrangements, whereby substantially all economic risks and rewards associated with trade receivables are transferred to a third party, are accounted for by derecognizing the trade receivables upon receipt of cash proceeds from the factoring arrangement. Factoring arrangements, whereby some, but not substantially all, of the economic

risks and rewards are transferred to a third party and the assets subject to the factoring arrangement remain under the Company's control are accounted for by not derecognizing the trade receivables and recognizing any related obligations to the third party.

Allowance for Doubtful Accounts

We determine our allowance for doubtful accounts using a combination of factors to reduce our trade receivables balances to their estimated net realizable amount. We maintain an allowance for doubtful accounts based on a variety of factors including the length of time receivables are past due, macroeconomic trends and conditions, significant one-time events, historical experience and the financial condition of our customers. We record a specific reserve for individual accounts when we become aware of specific customer circumstances, such as in the case of bankruptcy filings or deterioration in the customer's operating results or financial position. The past due or delinquency status of a receivable is based on the contractual payment terms of the receivable. If circumstances related to the specific customer change, we adjust estimates of the recoverability of receivables as appropriate.

Inventories

Inventories, which include the costs of material, labor and overhead, are stated at the lower of cost or market, with cost generally computed on a first-in, first-out (FIFO) basis. Estimated losses from obsolete and slow-moving inventories are recorded to reduce inventory values to their estimated net realizable value and are charged to cost of sales. At the point of loss recognition, a new cost basis for that inventory is established and subsequent changes in facts and circumstances do not result in a recovery in carrying value. Inventories valued under the last-in, first-out (LIFO) method represent 13.9% and 12.1% of total 2018 and 2017 inventories, respectively. We have a LIFO reserve of $11.0 and $9.6 recorded as of December 31, 2018 and 2017, respectively.

Cost of sales is generally reported using standard cost techniques with full overhead absorption that approximates actual cost.

Plant, Property and Equipment

Plant, property and equipment, including capitalized interest applicable to major project expenditures, are recorded at cost. Depreciation is computed on a straight-line basis over the estimated useful lives of the assets. Leasehold improvements are depreciated over the life of the lease or the asset, whichever is shorter. Fully depreciated assets are retained in property and accumulated depreciation accounts until disposal. Repairs and maintenance costs are expensed as incurred.

The Company enters into operating and finance leases for the use of premises and equipment. Rent expense related to operating lease agreements are recorded on a straight line basis, considering lease incentives and escalating rental payments.

Capitalized Internal Use Software

Costs incurred in the preliminary project stage of developing or acquiring internal use software are expensed as incurred. After the preliminary project stage is completed, management has approved the project and it is probable that the project will be completed and the software will be used for its intended purpose, ITT capitalizes certain internal and external costs incurred to acquire or create internal use software, principally related to software coding, designing system interfaces and installation and testing of the software. ITT amortizes capitalized internal use software costs using the straight-line method over the estimated useful life of the software, generally from 3 to 7 years.

Investments

Investments in fixed-maturity time deposits having an original maturity exceeding three months at the time of purchase, referred to as short-term time deposits, are classified as held-to-maturity and are recorded at amortized cost, which approximates fair value. There were no short-term time deposits held as of December 31, 2018 and December 31, 2017.

Investments in corporate-owned life insurance (COLI) policies are recorded at their cash surrender values as of the balance sheet date. The Company's investments in COLI policies are included in other non-current assets in the consolidated balance sheets and were $104.4 and $102.8 at December 31, 2018 and 2017, respectively. Changes in the cash surrender value during the period generally reflect gains or losses in the

fair value of assets, premium payments, and policy redemptions. Gains from COLI investments of $2.8, $3.8, and $3.0 were recorded within general and administrative expenses in the Consolidated Statements of Operations during years ended December 31, 2018, 2017 and 2016, respectively. A policy redemption of $1.2 occurred in 2018. The COLI policy investments were made with the intention of utilizing them as a long-term funding source for deferred compensation obligations, which as of December 31, 2018 and 2017 were approximately $11.9 and $12.5, respectively, however, the COLI policies do not represent a committed funding source for these obligations and as such they are subject to claims from creditors, and we can designate them for another purpose at any time.

Long-Lived Asset Impairment
Long-lived assets, including intangible assets with finite lives and capitalized internal use software, are tested for impairment whenever events or changes in circumstances indicate their carrying value may not be recoverable. We assess the recoverability of long-lived assets based on the undiscounted future cash flow the assets are expected to generate and recognize an impairment loss when estimated undiscounted future cash flows expected to result from the use of the asset plus net proceeds expected from disposition of the asset, if any, are less than the carrying value of the asset. When an impairment is identified, we reduce the carrying amount of the asset to its estimated fair value based on a discounted cash flow approach or, when available and appropriate, to comparable market values.
Goodwill and Intangible Assets
Goodwill represents purchase consideration paid in a business combination that exceeds the values assigned to the net assets of the acquired business. Intangible assets include customer relationships, proprietary technology, trademarks, patents and other intangible assets. Intangible assets with a finite life are generally amortized on a straight-line basis over an estimated economic useful life, which generally ranges from 10-20 years, and are tested for impairment if indicators of impairment are identified. Certain of our intangible assets have an indefinite life, namely certain brands and trademarks.
Goodwill and indefinite-lived intangible assets are not amortized, but rather are tested for impairment annually (or more frequently if impairment indicators arise, such as changes to the reporting unit structure, significant adverse changes in the business climate or an adverse action or assessment by a regulator). We conduct our annual impairment testing on the first day of the fourth fiscal quarter. We may perform an initial qualitative evaluation which considers present events and circumstances, to determine the likelihood of impairment. If the likelihood of impairment is not considered to be more likely than not, then no further testing is performed. If it is considered to be more likely than not that the asset is impaired based on the qualitative evaluation or we elect not to perform a qualitative evaluation, then a two-step quantitative impairment test is performed. If the carrying value of the reporting unit exceeds its estimated fair value, then the second step of the impairment test is performed in order to measure the impairment loss to be recorded, if any. If the carrying value of a reporting unit’s goodwill exceeds its implied fair value, then we record an impairment loss equal to the difference. For indefinite-lived intangibles, if it is considered to be more likely than not that the asset is impaired, we compare the fair value of those assets to their carrying value. We recognize an impairment loss when the estimated fair value of the indefinite-lived intangible asset is less than its carrying value.
We estimate the fair value of our reporting units using an income approach. Under the income approach, we estimate fair value based on the present value of estimated future cash flows. We estimate the fair value of our indefinite-lived intangible assets using the relief from royalty method. The relief from royalty method estimates the portion of a company’s earnings attributable to an intellectual property asset based on an assumed royalty rate that the company would have paid had the asset not been owned.
Business Combinations
ITT allocates the purchase price of its acquisitions to the tangible and intangible assets acquired, liabilities assumed, and non-controlling interests in the acquiree based on their estimated fair value at the acquisition date. Changes to acquisition date fair values prior to the expiration of the measurement period, a period not to exceed 12 months from date of acquisition, are recorded as an adjustment to the associated goodwill in the reporting period in which the adjustment amounts are determined. Changes to acquisition date fair values after expiration of the measurement period are recorded in earnings. The excess of the acquisition price over those estimated fair values is recorded as goodwill. Acquisition-related expenses are expensed as incurred and the costs associated with restructuring actions initiated after the acquisition are recognized separately from the business combination.
Commitments and Contingencies
We record accruals for commitments and loss contingencies when it is probable that a liability has been incurred and the amount of loss can be reasonably estimated. Significant judgment is required to determine both probability and the estimated amount of loss, and these assessments can involve a series of complex

judgments about future events and may rely on estimates and assumptions that have been deemed reasonable by management. We review these accruals quarterly and adjust the accruals to reflect the impact of negotiations, settlements, rulings, advice of legal counsel, and other current information. See Note 20, Commitments and Contingencies for additional information.

Environmental-Related Liabilities and Assets

Accruals for environmental matters are recorded on a site-by-site basis when it is probable that a liability has been incurred and the amount of the liability can be reasonably estimated, based on current law and existing technologies. Our estimated liability is reduced to reflect the participation of other potentially responsible parties in those instances where it is probable that such parties are legally responsible and financially capable of paying their respective shares of the relevant costs, and that share can be reasonably estimated. Accruals for environmental liabilities are primarily included in other non-current liabilities at undiscounted amounts and exclude claims for recoveries from insurance

companies or other third parties.
The Company records an asset related to its environmental exposures for insurance and other third parties. The environmental-related asset represents our best estimate of probable recoveries from third parties for costs incurred in past periods, as well as costs estimated to be incurred in future periods.
Environmental costs and related recoveries are recorded within general and administrative expenses in the Consolidated Statements of Operations.

Foreign Currency

The national currencies of our foreign subsidiaries are generally the functional currencies. Balance Sheet accounts are translated at the exchange rate in effect at the end of each period, except for equity which is translated at historical rates; Statement of Operations accounts are translated at the average rates of exchange prevailing during the period. Gains and losses resulting from foreign currency translation are reflected in the cumulative translation adjustments component of shareholders' equity.
For foreign subsidiaries that do not use the local currency as their functional currency, foreign currency assets and liabilities are remeasured to the foreign subsidiary's functional currency using end of period exchange rates, except for nonmonetary balance sheet accounts, which are remeasured at historical exchange rates.
For transactions denominated in other than the functional currency, revenue and expenses are remeasured at average exchange rates in effect during the reporting period in which the transactions occurred, except for expenses related to nonmonetary assets and liabilities. Transaction gains or losses from foreign currency remeasurement are reported in general and administrative expenses in the Consolidated Statements of Operations. During 2018, 2017, and 2016, we recognized transaction losses of $1.2, $12.4, and $1.0, respectively.

Derivative Financial Instruments

ITT may use derivative financial instruments, primarily foreign currency forward contracts, to mitigate exposure from foreign currency exchange rate fluctuations as it pertains to receipts from customers, payments to suppliers and intercompany transactions. We record derivatives at their fair value as either an asset or liability. For derivatives not designated as hedges, adjustments to reflect changes in the fair value of our derivatives are included in earnings. For cash flow hedges that qualify and are designated for hedge accounting, the effective portion of the change in fair value of the derivative is recorded in accumulated other comprehensive loss and subsequently recognized in earnings when the hedged transaction affects earnings. Any ineffective portion is recognized immediately in earnings. As of December 31, 2018, no derivatives were designated as hedges. The differentials paid or received on interest rate swap agreements are recognized as adjustments to interest expense. Derivative contracts involve the risk of non-performance by the counterparty. The fair value of our foreign currency contracts are determined using the net position of the contracts and the applicable spot rates and forward rates as of the reporting date.

NOTE 2
RECENT ACCOUNTING PRONOUNCEMENTS

The Company considers the applicability and impact of all accounting standard updates (ASUs). ASUs not listed below were assessed and determined to be either not applicable or are expected to have minimal impact on our consolidated financial position or results of operations.

Recently Adopted Accounting Pronouncements

In May 2014, the FASB issued ASU 2014-09 amending the existing accounting standards for revenue recognition. The new standard was effective for ITT as of January 1, 2018. Most revenue streams are recorded consistently under both the new standard and the previous standard. However, the timing of revenue recognition of certain design and build contracts in our Industrial Process segment, recognized using the percentage of completion method under the previous standard, is now dependent on certain terms within the contract and therefore will vary based on the new guidance. ITT adopted this guidance using a modified retrospective approach. As of the date of adoption, we had recognized $49 of revenue and $5 of operating income on open contracts in our Industrial Process segment using the percentage of

completion method that are recognized at a point in time under the new guidance, resulting in a cumulative adjustment to the opening balance in retained earnings of $4, net of tax. The comparative information has not been restated and continues to be reported under the accounting guidance in effect in those periods. Additionally, the new guidance resulted in a change in balance sheet presentation. Certain progress payments, previously presented as a reduction of inventory, are now presented within accrued liabilities. Unbilled receivables, previously presented within receivables, net, are now presented within other current or non-current assets.

The cumulative effect of the changes made to our consolidated January 1, 2018 balance sheet related to the adoption of ASU 2014-09 is as follows:

	Balance as of December 31, 2017	Cumulative Effect of Adjustments	Balance as of January 1, 2018
Assets:			
Receivables, net	$629.6	$(71.9)	$557.7
Inventories, net	311.9	66.3	378.2
Other current assets	147.4	43.2	190.6
Deferred income taxes	149.9	1.0	150.9
Liabilities:			
Accrued liabilities	384.4	43.7	428.1
Other non-current liabilities	175.6	(1.0)	174.6
Equity:			
Retained earnings	1,856.1	(4.1)	1,852.0

The impacts to our Consolidated Statements of Operations during 2018, and our Consolidated Balance Sheet as of December 31, 2018 had we not adopted ASU 2014-09 are as follows:

As of or for the Periods Ended December 31, 2018	As Reported	Amounts under previous standard	Effect of Change
Statement of Operations			