

Allegion plc  
Form 10-K  
February 20, 2018  
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UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K

(Mark One)

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

For the fiscal year ended December 31, 2017

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. 001-35971

ALLEGION PUBLIC LIMITED COMPANY

(Exact name of registrant as specified in its charter)

Ireland

(State or other jurisdiction of incorporation or organization)

98-1108930

(I.R.S. Employer  
Identification No.)

Block D

Iveagh Court

Harcourt Road

Dublin 2, Ireland

(Address of principal executive offices)

Registrant's telephone number, including area code: +(353) (1) 2546200

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

Title of each class Name of each exchange on which registered

Ordinary Shares, New York Stock Exchange

Par Value \$0.01 per Share

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

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.

YES  NO

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the

Act. YES  NO

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

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T

(§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). YES  NO

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§229.405 of this chapter) 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.

YES  NO

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

YES  NO

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

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Large accelerated filer  Accelerated filer  ..

Non-accelerated filer  Smaller reporting company  ..

(Do not check if a 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

The aggregate market value of ordinary shares held by non-affiliates on June 30, 2017 was approximately \$7.7 billion based on the closing price of such stock on the New York Stock Exchange.

The number of ordinary shares outstanding as of February 16, 2018 was 95,185,418.

**DOCUMENTS INCORPORATED BY REFERENCE**

Portions of the registrant's definitive proxy statement to be filed within 120 days of the close of the registrant's fiscal year in connection with the registrant's Annual General Meeting of Shareholders to be held June 5, 2018 (the "Proxy Statement") are incorporated by reference into Part II and Part III of this Form 10-K.

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ALLEGION PLC

Form 10-K

For the Fiscal Year Ended December 31, 2017

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CAUTIONARY STATEMENT FOR FORWARD LOOKING STATEMENTS

Certain statements in this report, other than purely historical information, are "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995, Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. These forward-looking statements generally are identified by the words "believe," "project," "expect," "anticipate," "estimate," "forecast," "outlook," "intend," "strategy," "plan," "may," "should," "will," "would," "will be," "will continue," "will likely result," or the negative thereof or variations thereon or similar terminology generally intended to identify forward-looking statements.

Forward-looking statements may relate to such matters as projections of revenue, margins, expenses, tax provisions, earnings, cash flows, benefit obligations, dividends, share purchases or other financial items; any statements of the plans, strategies and objectives of management for future operations, including those relating to any statements concerning expected development, performance or market share relating to our products and services; any statements regarding future economic conditions or our performance; any statements regarding pending investigations, claims or disputes; any statements of expectation or belief; and any statements of assumptions underlying any of the foregoing. These statements are based on currently available information and our current assumptions, expectations and projections about future events. While we believe that our assumptions, expectations and projections are reasonable in view of the currently available information, you are cautioned not to place undue reliance on our forward-looking statements. You are advised to review any further disclosures we make on related subjects in materials we file with or furnish to the SEC. Forward-looking statements speak only as of the date they are made and are not guarantees of future performance. They are subject to future events, risks and uncertainties - many of which are beyond our control - as well as potentially inaccurate assumptions, that could cause actual results to differ materially from our expectations and projections. We do not undertake to update any forward-looking statements.

Factors that might affect our forward-looking statements include, among other things:

- economic, political and business conditions in the markets in which we operate;
- the demand for our products and services;
- competitive factors in the industry in which we compete;
- the ability to protect and use intellectual property;
- fluctuations in currency exchange rates;
- the ability to complete and integrate any acquisitions;
- our ability to operate efficiently and productively;
- our ability to manage risks related to our information technology and cyber-security;
- changes in tax requirements (including tax rate changes, new tax laws and revised tax law interpretations);
- the outcome of any litigation, governmental investigations or proceedings;
- interest rate fluctuations and other changes in borrowing costs;
- other capital market conditions, including availability of funding sources and currency exchange rate fluctuations;
- availability of and fluctuations in the prices of key commodities and the impact of higher energy prices;
- potential further impairment of our goodwill, indefinite-lived intangible assets and/or our long-lived assets;
- the possible effects on us of future legislation or interpretations in the U.S. that may limit or eliminate potential U.S. tax benefits resulting from our incorporation in a non-U.S. jurisdiction, such as Ireland, or deny U.S. government contracts to us based upon our incorporation in such non-U.S. jurisdiction; and
- the impact our outstanding indebtedness may have on our business and operations.

Some of the significant risks and uncertainties that could cause actual results to differ materially from our expectations and projections are described more fully in Item 1A "Risk Factors." You should read that information in conjunction with "Management's Discussion and Analysis of Financial Condition and Results of Operations" in Item 7 of this report and our Consolidated Financial Statements and related notes in Item 8 of this report. We note such information for investors as permitted by the Private Securities Litigation Reform Act of 1995.

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PART I

Item 1. BUSINESS

Overview

Allegion plc ("Allegion," "we," "us" or "the Company") is a leading global provider of security products and solutions that keep people safe, secure and productive. We make the world safer as a company of experts, securing the places where people thrive, and we create peace of mind by pioneering safety and security. We offer an extensive and versatile portfolio of mechanical and electronic security products across a range of market-leading brands. Our experts across the globe deliver high-quality security products, services and systems, and we use our deep expertise to serve as trusted partners to end-users who seek customized solutions to their security needs.

Allegion Principal Products

Door closers and controls	Doors and door systems
Electronic security products	Electronic and biometric access control systems
Exit devices	Locks, locksets, portable locks and key systems
Time, attendance and workforce productivity systems	Other accessories

Access control security products and solutions are critical elements in every building and home. Many door openings are configured to maximize a room's particular form and function while also meeting local and national building and safety code requirements and end-user security needs. Most buildings have multiple door openings, each serving its own purpose and requiring different specific access-control solutions. Each door must fit exactly within its frame, be prepared precisely for its hinges, synchronize with its specific lockset and corresponding latch and align with a specific key to secure the door. Moreover, security products are increasingly linked electronically, creating additional functionality and complexity.

We believe our ability to deliver a wide range of solutions that can be custom-configured to meet end-users' security needs is a key driver of our success. We accomplish this with:

- Our extensive and versatile product portfolio, combined with our deep expertise, which enables us to deliver the right products and solutions to meet diverse security and functional specifications;
- Our consultative approach and expertise, which enables us to develop the most efficient and appropriate building security and access-control specifications to fulfill the unique needs of our end-users and their partners, including architects, contractors, home-builders and engineers;
- Our access to and management of key channels in the market, which is critical to delivering our products in an efficient and consistent manner; and
- Our enterprise excellence capabilities, including our global manufacturing operations and agile supply chain, which facilitate our ability to deliver specific product and system configurations to end-users worldwide, quickly and efficiently.

We believe that the security products industry is growing and will continue to benefit from several global macroeconomic and long-term demographic trends, including:

- stabilization of construction markets in key North American markets;
- the convergence of mechanical and electronic security products;
- heightened awareness of security requirements;
- increased global urbanization; and
- the shift to a digital, interconnected environment.

We believe the security products industry will also benefit from continued growth in institutional, commercial, and residential end-markets. We also expect growth in the global electronic product categories we serve to outperform the

security products industry as end-users adopt newer technologies in their facilities.

We operate in three geographic regions: Americas; Europe, Middle East, India and Africa ("EMEA"); and Asia Pacific. We sell our products and solutions under the following brands:

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Allegion  
Brands  
(listed  
for each  
region)

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We sell a wide range of security products and solutions for end-users in commercial, institutional and residential facilities worldwide, including into the education, healthcare, government, hospitality, commercial office and single and multi-family residential markets. Our corporate brands are CISA®, Interflex®, LCN®, Schlage®, SimonsVoss®, and Von Duprin®. We believe LCN, Schlage, and Von Duprin hold the No. 1 position in their primary product categories in North America and CISA, Interflex, and SimonVoss hold the No.1 or No. 2 position in their primary product categories in certain European markets.

For the year ended December 31, 2017, we generated revenues of \$2,408.2 million and operating income of \$488.2 million.

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## History and Developments

We were incorporated in Ireland on May 9, 2013, to hold the commercial and residential security businesses of Ingersoll Rand plc ("Ingersoll Rand"). On December 1, 2013, we became a stand-alone public company after Ingersoll Rand completed the separation of these businesses from the rest of Ingersoll Rand via the transfer of these businesses from Ingersoll Rand to us and the issuance by us of ordinary shares directly to Ingersoll Rand's shareholders (the "Spin-off"). Our security businesses have long and distinguished operating histories. Several of our brands were established more than 75 years ago and many of our brands originally created their categories:

- Von Duprin, established in 1908, was awarded the first exit device patent;
- Schlage, established in 1920, was awarded the first patents granted for the cylindrical lock and the push button lock;
- LCN, established in 1926, created the first door closer;
- CISA, established in 1926, devised the first electronically controlled lock; and
- SimonsVoss, established in 1995, created the first keyless digital transponder.

We have built upon these founding legacies since our entry into the security products market through the acquisition of Schlage, Von Duprin and LCN in 1974. Today, we continue to develop and introduce innovative and market-leading products. Recent examples of successful product launches are illustrated in the table below:

Product	Brands	Year	Innovation
Residential Locks and Levers	Schlage Touch, Connect, Sense, Control, SEL, Custom	2015/2016/ 2017	New single and multi-family residential electronic locking platforms that provide for keyless entry (Touch), connected locking (Connect), integration with the Internet of Things (IoT) and Apple HomeKit, Amazon Alexa, Google Assistant and Android platforms (Sense), multi-family interconnected locking (Control), 4-in-1 locks, fingerprint sensors, and smart card or code access (SEL).  A new range with universal functionality (Custom) allows homeowners to change from a doorknob to a lever and convert a non-locking door to lockable in minutes. Access control platforms and proximity readers and smart credentials upgraded for improved strength and durability (Schlage). Comprehensive offerings featuring mechanical, wired electrified and wireless electronic solutions for common aesthetic and consistent user experience throughout a building. Wireless locks able to be managed with ENGAGE™ web and mobile apps or with our Software Alliance Member (SAM) systems (Schlage LE and NDE).
Commercial Locks and Electronic Access Platforms	Schlage, CISA, SimonsVoss	2015/2016/ 2017	Multipoint locking line (CISA) designed for high security European applications, correcting for heat distortion. MobileKey (SimonsVoss) provides facility managers highly secure and sophisticated access control with mobile phone technology. Cast Aluminum Series closers (LCN) were specially designed to deliver consistent, dependable and long-term performance.
Closers	LCN, Briton, CISA, ITO Kilit	2015/2016/ 2017	New closers (Briton, CISA, ITO Kilit) significantly expanded the European standard portfolio in 2017, offering affordable quality and specialty applications.
Exit Devices		2016/2017	

Von Duprin,  
CISA

Concealed vertical cables (Von Duprin) give doors aesthetics, strength and security in an exit device system that is easy to install and maintain.

Bike Lighting  
and Portable  
Locking  
Solutions

AXA, Kryptonite, 2017  
Trellock

e-Fast motorized push bars (CISA) now include lighting features. Innovation in bike safety and security from each of our Global Portable Security brands (AXA, Kryptonite and Trellock), ranging from compact dynamo lights and e-bike lights to USB and battery powered lights, as well as new lines of folding locks, integrated chains and electronic ring locks and mobile applications for bikes and motorcycles.

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## Industry and Competition

The global markets we serve encompass commercial, institutional and residential construction markets throughout North America, Europe, the Middle East and Asia-Pacific. In recent years, growth in electronic security products and solutions continues to outperform the industry as a whole as end-users adopt newer technologies in their facilities. We expect the security products industry will benefit from favorable long-term demographic trends such as continued urbanization of the global population, increased concerns about safety and security and technology-driven innovation.

The security products markets are highly competitive and fragmented throughout the world, with a number of large multi-national companies and thousands of smaller regional and local companies. This high fragmentation primarily reflects local regulatory requirements and highly variable end-user needs. We believe our principal global competitors are Assa Abloy AB and dorma+kaba Group. We also face competition in various markets and product categories throughout the world, including from Spectrum Brands Holdings, Inc. in the North American residential market. As we move into more technologically-advanced product categories, we may also compete against new, more specialized competitors.

Our success depends on a variety of factors, including brand and reputation, product breadth, quality and delivery capabilities, price and service capabilities. As many of our businesses sell through wholesale distribution, our success also depends on building and partnering with a strong channel network. Although price often serves as an important customer decision criterion, we also compete based on the breadth and quality of our products and solutions, our ability to custom-configure solutions to meet individual end-user requirements and our global supply chain.

## Our Reporting Segments

We manufacture and sell mechanical and electronic security products and solutions in approximately 130 countries. Approximately 96% of our 2017 revenues were to customers in the North America, Western Europe and the Asia-Pacific regions.

The following table presents the relative percentages of total segment revenue attributable to each reporting segment for each of the last three fiscal years. See Note 20, "Business Segment Information," to our annual consolidated financial statements for information regarding net revenues, operating income, and total assets by reportable segment:

	For the Years Ended December 31		
	2017	2016	2015
Americas	73%	74%	75%
EMEIA	22%	21%	19%
Asia Pacific	5%	5%	6%

Our Americas segment provides security products and solutions in approximately 30 countries throughout North America, Central America, the Caribbean and South America. The segment offers a broad range of products and solutions including locks, locksets, portable locks, key systems, door closers, exit devices, doors and door systems, electronic products, and access control and time and attendance systems to end-users in the commercial, institutional and residential markets, including into the education, healthcare, government, commercial office and single and multi-family residential markets. This segment's primary brands are LCN, Schlage, and Von Duprin.

Our EMEIA segment provides security products and solutions in approximately 85 countries throughout Europe, the Middle East, India and Africa. The segment offers the same portfolio of products as the Americas segment, as well as

workforce productivity solutions. This segment's primary brands are AXA, Bricard, CISA, Interflex and SimonsVoss. This segment also resells North American LCN, Schlage, and Von Duprin products, primarily in the Middle East.

Our Asia Pacific segment provides security products and solutions in approximately 15 countries throughout Asia Pacific. The segment offers the same portfolio of products as the Americas segment. This segment's primary brands are Brio, FSH, Legge, Milre, and Schlage.

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### Products and Services

We offer an extensive and versatile portfolio of mechanical and electronic security products across a range of market-leading brands:

**Locks, locksets, portable locks and key systems:** A broad array of cylindrical and mortise door locksets, security levers, and master key systems that are used to protect and control access. We also offer a range of portable security products, including bicycle, small vehicle and travel locks.

**Door closers and exit devices:** An extensive portfolio of life-safety products generally installed on fire doors and facility entrances and exits. Door closers are devices that automatically close doors after they are opened. Exit devices are generally horizontal attachments to doors and enable rapid egress.

**Electronic security products and access control systems:** A broad range of electrified locks, access control systems, biometric hand reader systems, key card and reader systems and accessories, including Internet of Things (IoT) and cloud-based solutions.

**Time, attendance and workforce productivity systems:** Products and services designed to help business customers manage and monitor workforce access control parameters, attendance and employee scheduling. We offer ongoing aftermarket services in addition to design and installation offerings.

**Doors and door systems:** A portfolio of hollow metal, glass, wood, and specialty doors and door systems.

**Other accessories:** A variety of additional security and product components, including hinges, door levers, door stops, lights, louvers, weather stripping, thresholds, and other accessories, as well as certain bathroom fittings.

### Customers

We sell most of our products and solutions through distribution and retail channels, ranging from specialty distribution to wholesalers. We have built a network of channel partners that help our customers choose the right solution to meet their security needs and help commercial and institutional end-users fulfill and install orders. We also sell through a variety of retail channels, ranging from large do-it-yourself home improvement centers to small, specialty showroom outlets. We work with our retail partners on developing marketing and merchandising strategies to maximize their sales per square foot of shelf space. Through our Interflex business and Global Portable Security brands, we also provide products and solutions directly to end-users.

Our 10 largest customers represented approximately 25% of our total revenues in 2017. No single customer represented 10% or more of our total revenues in 2017.

### Sales and Marketing

In markets where we sell through commercial and institutional distribution channels, we employ sales professionals around the world who work with a combination of end-users, security professionals, architects, contractors, engineers and distribution partners to develop specific custom-configured solutions for our end-users' needs. Our field sales professionals are assisted by specification writers who work with architects, engineers and consultants to help design door openings and security systems to meet end-users' functional, aesthetic and regulatory requirements. Both groups are supported by dedicated customer care and technical sales-support specialists worldwide. We also support our sales efforts with a variety of marketing efforts, including trade-specific advertising, cooperative distributor merchandising, digital marketing, and marketing at a variety of industry trade shows.

In markets in which we sell through retail and home-builder distribution channels, we have teams of sales, merchandising and marketing professionals who help drive brand and product awareness through our channel partners and to consumers. We utilize a variety of advertising and marketing strategies, including traditional consumer media, retail merchandising, digital marketing, retail promotions, and builder and consumer trade shows, to support these

teams.

We also work actively with several industry bodies around the world to help promote effective and consistent safety and security standards. For example, we are members of Builders Hardware Manufacturers Association (BHMA), Security Industry Association, Smart Card Alliance, American Society of Healthcare Engineering, American Institute of Architects, Construction Specification Institute, ASSOFERMA (Italy), BHE (Germany) and UNIQ (France). We also have established the Safety and Security Institute in China, which helps to educate government officials, architects and builders and advocates for consistent building codes and standards that address end-users' safety and security.

#### Production and Distribution

We manufacture our products in our geographic markets around the world. We operate 31 production and assembly facilities, including 14 in the Americas region, 12 in EMEIA and 5 in Asia Pacific. We own 15 of these facilities and lease the others. Our

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strategy is to produce in the region of use, wherever appropriate, to allow us to be closer to the end-user and increase efficiency and timely product delivery. Much of our United States (U.S.) based residential portfolio is manufactured in the Baja Region of Mexico under a NAFTA Maquiladora.

In managing our network of production facilities, we focus on eliminating excess capacity, reducing cycle time through productivity, and harmonizing production practices and safety procedures.

We distribute our products through a broad network of channel partners. In addition, third-party logistics providers perform storage and distribution services for us to support certain parts of our distribution network.

Raw Materials

We support our region-of-use production strategy with corresponding region-of-use supplier partners, where available. Our global and regional commodity teams work with production leadership, product management and materials management teams to ensure adequate materials are available for production.

We purchase a wide range of raw materials, including steel, zinc, brass and other non-ferrous metals, to support our production facilities. Where appropriate, we may enter into fixed-cost contracts to lower overall costs.

Intellectual Property

Intellectual property, inclusive of certain patents, trademarks, copyrights, know-how, trade secrets and other proprietary rights, is important to our business. We create, protect and enforce our intellectual property investments in a variety of ways. We work actively in the U.S. and internationally to try to ensure the protection and enforcement of our intellectual property rights. We use trademarks on nearly all of our products and believe that such distinctive marks are an important factor in creating a market for our goods, in identifying us and in distinguishing our products from others. We consider our Schlage, Von Duprin, LCN, CISA, SimonsVoss, Interflex and other associated trademarks to be among our most valuable assets, and we have registered these trademarks in a number of countries. Although certain proprietary intellectual property rights are important to our success, we do not believe we are materially dependent on any particular patent or license, or any particular group of patents or licenses.

Facilities

We operate through a broad network of sales offices, engineering centers, 31 production facilities and several distribution centers throughout the world. Our active properties represent approximately 7.0 million square feet, of which approximately 47% is leased.

The following table shows the location of our worldwide production facilities:

Production Facilities

Americas	EMEIA	Asia Pacific
Blue Ash, Ohio	Clamecy, France	Auckland, New Zealand
Bogota, Colombia	Dubai, United Arab Emirates	Bucheon, South Korea
Chino, California	Durchhausen, Germany	Jinshan, China
Ensenada, Mexico	Duzce, Turkey	Melbourne, Australia
Indianapolis, Indiana	Faenza, Italy	Sydney, Australia
Irving, Texas	Feuquieres, France	
McKenzie, Tennessee	Monsampolo, Italy	
Perrysburg, Ohio	Muenster, Germany	
Princeton, Illinois	Osterfeld, Germany	

Security, Colorado      Renchen, Germany  
Snoqualmie, Washington      Siewierz, Poland  
Tecate, Mexico      Veenendaal, Netherlands  
Tijuana, Mexico  
Toronto, Ontario

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Research and Development

We are committed to investing in highly productive research and development capabilities, particularly in electro-mechanical systems. Our research and development ("R&D") expenditures were approximately \$48.3 million, \$47.3 million and \$45.2 million for the years ended December 31, 2017, 2016 and 2015, respectively.

We concentrate on developing technology innovations that will deliver growth through the introduction of new products and solutions, and also on driving continuous improvements in product cost, quality, safety and sustainability.

We manage our R&D team as a global group with an emphasis on a global collaborative approach to identify and develop new technologies and worldwide product platforms. We are organized on a regional basis to leverage expertise in local standards and configurations. In addition to regional engineering centers in each geographic region, we also operate a global engineering center of excellence in Bangalore, India.

Seasonality

Our business experiences seasonality that varies by product line. Because more construction and do-it-yourself projects occur during the second and third calendar quarters of each year in the Northern Hemisphere, our security product sales, typically, are higher in those quarters than in the first and fourth calendar quarters. However, our Interflex business typically experiences higher sales in the fourth calendar quarter due to project timing. Revenue by quarter for the years ended December 31, 2017, 2016 and 2015 are as follows:

	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
2017	23%	26%	25%	26%
2016	22%	26%	26%	26%
2015	22%	25%	26%	27%

Employees

We currently have approximately 10,000 employees.

Environmental Regulation

We have a dedicated environmental program that is designed to reduce the utilization and generation of hazardous materials during the manufacturing process as well as to remediate identified environmental concerns. As to the latter, we are currently engaged in site investigations and remediation activities to address environmental cleanup from past operations at current and former production facilities. The Company regularly evaluates its remediation programs and considers alternative remediation methods that are in addition to, or in replacement of, those currently utilized by the Company based upon enhanced technology and regulatory changes.

We are sometimes a party to environmental lawsuits and claims and have received notices of potential violations of environmental laws and regulations from the U.S. Environmental Protection Agency (the "EPA") and similar state authorities. We have also been identified as a potentially responsible party ("PRP") for cleanup costs associated with off-site waste disposal at federal Superfund and state remediation sites. For all such sites, there are other PRPs and, in most instances, our involvement is minimal.

In estimating our liability, we have assumed that we will not bear the entire cost of remediation of any site to the exclusion of other PRPs who may be jointly and severally liable. The ability of other PRPs to participate has been taken into account, based on our understanding of the parties' financial condition and probable contributions on a per site basis. Additional lawsuits and claims involving environmental matters are likely to arise from time to time in the future.

We incurred \$3.2 million, \$23.3 million, and \$4.4 million of expenses during the years ended December 31, 2017, 2016, and 2015, respectively, for environmental remediation at sites presently or formerly owned or leased by us. As of December 31, 2017 and 2016, we have recorded reserves for environmental matters of \$28.9 million and \$30.6 million. Of these amounts \$8.9 million and \$9.6 million, respectively, relate to remediation of sites previously disposed by us. Given the evolving nature of environmental laws, regulations and technology, the ultimate cost of future compliance is uncertain.

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Available Information

We are required to file annual, quarterly, and current reports, proxy statements, and other documents with the U.S. Securities and Exchange Commission ("SEC"). The public may read and copy any materials filed with the SEC at the SEC's Public Reference Room at 100 F Street, N.E., Washington, D.C. 20549. The public may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. Also, the SEC maintains an Internet website that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC. The public can obtain any documents that are filed by us at <http://www.sec.gov>.

In addition, this Annual Report on Form 10-K, as well as future quarterly reports on Form 10-Q, current reports on Form 8-K and any amendments to all of the foregoing reports, are made available free of charge on our Internet website (<http://www.allegion.com>) as soon as reasonably practicable after such reports are electronically filed with or furnished to the SEC. The contents of our website are not incorporated by reference in this report.

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Item 1A. RISK FACTORS

You should carefully consider the risks below, together with all the other information included in this Form 10-K, in evaluating us, our ordinary shares and our senior notes. If any of the risks below actually occurs, our business, financial conditions, results of operations and cash flows could be materially and adversely affected. Any such adverse effect may cause the trading price of our ordinary shares to decline, and as a result, you could lose all or part of your investment in us. Our business may also be adversely affected by risks and uncertainties not known to us or risks that we currently believe to be immaterial.

Risks Related to Our Business

Our global operations subject us to economic risks.

We are incorporated in Ireland and operate in countries worldwide. Our global operations depend on products manufactured, purchased and sold in the U.S. and internationally, including in Australia, China, Europe, Korea, Mexico, New Zealand and Turkey. The political, economic and regulatory environments in which we operate are becoming increasingly volatile and uncertain. Accordingly, we are subject to risks that are inherent in operating globally, including:

- changes in laws and regulations or imposition of currency restrictions and other restraints in various jurisdictions;
- limitation of ownership rights, including expropriation of assets by a local government, and limitation on the ability to repatriate earnings;
- sovereign debt crises and currency instability in developed and developing countries;
- changes in applicable tax regulations and interpretations;
- imposition of burdensome tariffs and quotas;
- difficulty in staffing and managing global operations;
- difficulty in enforcing agreements, collecting receivables and protecting assets through non-U.S. legal systems;
- political unrest, national and international conflict, including war, civil disturbances and terrorist acts; and
- economic downturns and social and political instability.

These risks could increase our cost of doing business in the U.S. and internationally, increase our counterparty risk, disrupt our operations, disrupt the ability of suppliers and customers to fulfill their obligations, increase our effective tax rate, increase the cost of our products, limit our ability to sell products in certain markets, reduce our operating margin and negatively impact our ability to compete.

Our business relies on the commercial and residential construction and remodeling markets.

We primarily rely on the commercial and residential construction and remodeling markets, which are marked by cyclicalities based on overall economic conditions. Weakness or instability in these markets may cause current and potential customers to delay or choose not to make purchases, which could negatively impact the demand for our products and services.

Increased competition, including from technical developments, could adversely affect our business.

The markets in which we operate include a large number of participants, including multi-national companies, regional companies and small local companies. We primarily compete on the basis of quality, innovation, expertise, breadth of product offering and price. We may be unable to effectively compete on all these bases. If we are unable to anticipate evolving trends in the market or the timing and scale of our competitors' activities and initiatives, the demand for our products and services could be negatively impacted.

In addition, we compete in a market that is experiencing the convergence of the mechanical, electronic, and digital products. Technology and innovation play significant roles in the competitive landscape. Our success depends, in part, upon the research, development, and implementation of new technologies and products. Securing key partnerships and alliances as well as employee talent, including having access to technologies, services, intellectual property, and solutions developed by others will play a significant role in our ability to effectively compete. The continual development of new technologies by existing and new competitors, including non-traditional competitors with significant resources, could adversely affect our ability to sustain operating margins and desirable levels of sales volumes. To remain competitive, we must develop new products and respond to new technologies in a timely manner.

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Our growth is dependent, in part, on the development, commercialization and acceptance of new products and services.

We must develop and commercialize new products and services in order to remain competitive in our current and future markets and in order to continue to grow our business. We cannot provide any assurance that any new product or service will be successfully commercialized in a timely manner, if ever, or, if commercialized, will result in returns greater than our investment. Investment in a product or service could divert our attention and resources from other projects that become more commercially viable in the market. We also cannot provide any assurance that any new product or service will be accepted by the market.

Changes in customer preferences and the inability to maintain beneficial relationships with large customers could adversely affect our business.

We have significant customers, particularly major retailers, although no one customer represented 10% or more of our total revenues in any of the past three fiscal years. The loss or material reduction of business, the lack of success of sales initiatives or changes in customer preferences or loyalties for our products related to any such significant customer could have a material adverse impact on our business. In addition, major customers who are volume purchasers are much larger than us and have strong bargaining power with suppliers. This limits our ability to recover cost increases through higher selling prices. Furthermore, unanticipated inventory adjustments by these customers can have a negative impact on sales.

Our brands are important assets of our businesses and violation of our trademark rights by imitators could negatively impact revenues and brand reputation.

Our brands and trademarks enjoy a reputation for quality and value and are important to our success and competitive position. Unauthorized use of our trademarks may not only erode sales of our products, but may also cause significant damage to our brand name and reputation, interfere with relationships with our customers and increase litigation costs. There can be no assurance that our on-going effort to protect our brand and trademark rights will prevent all violations.

Currency exchange rate fluctuations may adversely affect our results.

We are exposed to a variety of market risks, including the effects of changes in currency exchange rates. See "Management's Discussion and Analysis of Financial Condition and Results of Operations - Quantitative and Qualitative Disclosure About Market Risk."

Approximately 30% of our 2017 net revenues were derived outside the U.S., and we expect sales to non-U.S. customers to continue to represent a significant portion of our consolidated net revenues. Although we may enter into currency exchange contracts to reduce our risk related to currency exchange fluctuations, changes in the relative fair values of currencies occur from time to time and may, in some instances, have a material impact on our results of operations. Because we do not hedge against all of our currency exposure our business will continue to be susceptible to currency fluctuations.

We also translate assets, liabilities, revenues and expenses denominated in non-U.S. dollar currencies into U.S. dollars for our consolidated financial statements based on applicable exchange rates. Consequently, fluctuations in the value of the U.S. dollar compared to other currencies will have a material impact on the value of these items in our consolidated financial statements, even if their value has not changed in their original currency.



Our business strategy includes making acquisitions and investments that complement our existing business. These acquisitions and investments could be unsuccessful or consume significant resources, which could adversely affect our operating results.

We will continue to analyze and evaluate the acquisition of strategic businesses or product lines with the potential to strengthen our industry position or enhance our existing set of products and services offerings. We cannot assure you that we will identify or successfully complete transactions with suitable acquisition candidates in the future, nor can we assure you that completed acquisitions will be successful.

Some of the businesses we may seek to acquire or invest in may be marginally profitable or unprofitable. For these businesses to achieve acceptable levels of profitability, we must improve their management, operations, products and market penetration. We may not be successful in this regard and we may encounter other difficulties in integrating acquired businesses into our existing operations.

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Acquisitions and investments may involve significant cash expenditures, debt incurrence, operating losses and expenses. Acquisitions involve numerous other risks, including:

- diversion of management time and attention from daily operations;
- difficulties integrating acquired businesses, technologies and personnel into our business;
- difficulties realizing synergies expected to result from acquisitions;
- difficulties in obtaining and verifying the financial statements and other business information of acquired businesses;
- inability to obtain regulatory approvals and/or required financing on favorable terms;
- potential loss of key employees, key contractual relationships or key customers of acquired companies or of us;
- assumption of the liabilities and exposure to unforeseen liabilities of acquired companies;
- dilution of interests of holders of our ordinary shares through the issuance of equity securities or equity-linked securities; and
- difficulty in integrating financial reporting systems and implementing controls, procedures and policies, including disclosure controls and procedures and internal control over financial reporting, appropriate for public companies of our size at companies that, prior the acquisition, had lacked such controls, procedures and policies.

We continually look to expand our services and products into international markets. As we expand into new international markets, we will have only limited experience in marketing and operating services and products in such markets. In other instances, we may rely on the efforts and abilities of foreign business partners in such markets. Certain international markets may be slower than domestic markets in adopting our services and products, and our operations in international markets may not develop at a rate that supports our level of investment. In addition to the risks outlined above, expansion into international markets may require us to compete with local businesses with greater knowledge of the market, including the tastes and preferences of customers, and businesses with dominant market shares.

It may be difficult for us to complete transactions quickly, integrate acquired operations efficiently into our current business operations or effectively compete in new markets we enter. Any acquisitions or investments may ultimately harm our business or financial condition, as such acquisitions may not be successful and may ultimately result in impairment charges.

We may pursue business opportunities that diverge from core business.

We may pursue business opportunities that diverge from our core business, including expanding our products or service offerings, investing in new and unproven technologies, and forming new alliances with companies to distribute our products and services. We can offer no assurance that any such business opportunities will prove to be successful. Among other negative effects, our investment in new business opportunities may exceed the returns we realize. Additionally, any new investments could have higher cost structures than our current business, which could reduce operating margins and require more working capital. In the event that working capital requirements exceed operating cash flow, we may be required to draw on our revolving credit facility or pursue other external financing, which may not be readily available.

Our enterprise excellence efforts may not achieve the improvements we expect.

We utilize a number of tools to improve efficiency and productivity. Implementation of new processes to our operations could cause disruptions and there is no assurance that all of our planned enterprise excellence projects will be fully implemented, or if implemented will realize the expected improvements.

Our periodic restructuring plans may not be successful.

We have in the past restructured or made other adjustments to our workforce and manufacturing footprint in response to market changes, product changes, performance issues, change in strategies, acquisitions, and other internal and external considerations. Historically, these types of restructuring have resulted in increased restructuring costs and temporary reduced productivity. In addition, we may not achieve or sustain the expected growth or cost savings benefits of these restructurings, or do so within the expected timeframe. These effects could recur in connection with future acquisitions and other restructurings and our revenues and other results of operations could be negatively affected.

Material adverse legal judgments, fines, penalties or settlements could adversely affect our business.

We are currently and may in the future become involved in legal proceedings and disputes incidental to the operation of our business. Our business may be adversely affected by the outcome of these proceedings and other contingencies (including, without limitation, environmental matters) that cannot be predicted with certainty. As required by U.S. generally accepted accounting principles ("GAAP"), we establish reserves based on our assessment of contingencies. Subsequent developments in legal

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proceedings and other contingencies may affect our assessment and estimates of the loss contingency recorded as a reserve and we may be required to make additional material payments.

Allegations that we have infringed the intellectual property rights of third parties could negatively affect us.

We may be subject to claims of infringement of intellectual property rights by third parties. In particular, we often compete in areas having extensive intellectual property rights owned by others and we have become subject to claims alleging infringement of intellectual property rights of others. In general, if it is determined that one or more of our technologies, products or services infringes the intellectual property rights owned by others, we may be required to cease marketing those services, to obtain licenses from the holders of the intellectual property at a material cost or to take other actions to avoid infringing the intellectual property rights. The litigation process is costly and subject to inherent uncertainties, and we may not prevail in litigation matters regardless of the merits of our position. Adverse intellectual property litigation or claims of infringement against us may become extremely disruptive if the plaintiffs succeed in blocking the trade of our products and services and may have a material adverse effect on our business.

Our reputation, ability to do business and results of operations could be impaired by improper conduct by any of our employees, agents or business partners.

We are subject to regulation under a variety of U.S. federal and state and non-U.S. laws, regulations and policies including laws related to anti-corruption, export and import compliance, anti-trust and money laundering, due to our global operations. We cannot provide assurance our internal controls will always protect us from the improper conduct of our employees, agents and business partners. Any improper conduct could damage our reputation and subject us to, among other things, civil and criminal penalties, material fines, equitable remedies (including profit disgorgement and injunctions on future conduct), securities litigation and a general loss of investor confidence.

Disruptions in our global supply chain, including product manufacturing and logistical services provided by outsourcing partners, may negatively impact our business.

Our ability to meet our customers' needs and achieve cost targets depends on our ability to maintain key manufacturing and supply arrangements, including execution of supply chain optimizations and certain sole supplier or sole manufacturing arrangements. The loss or disruption of such manufacturing and supply arrangements could interrupt product supply and, if not effectively managed and remedied, have an adverse impact on our business.

We outsource certain manufacturing and logistical services to partners located throughout the world. Our reliance on these third parties reduces our control over the manufacturing and delivery process, exposing us to risks, including reduced control over quality assurance, product costs, product supply and delivery delays. If we are unable to manage these relationships, or if these third parties experience delays, disruptions, capacity constraints, regulatory issues or quality control problems in their operations or fail to meet our future requirements for timely delivery, our ability to ship and deliver certain of our hardware products to our customers could be impaired and our hardware business could be harmed.

We may be subject to risks relating to our information technology systems.

We rely extensively on information technology systems to manage and operate our business. There can be no assurance that our current information technology systems will function properly. We have invested and will continue to invest in improving our information technology systems. Some of these investments are significant and impact many important operational processes and procedures. There is no assurance that any newly implemented information technology systems will improve our current systems, will improve our operations, or will yield the expected returns on the investments. In addition, the implementation of new information technology systems may cause disruptions in

our operations and, if not properly implemented, negatively impact our business. If our information technology systems cease to function properly or if these systems do not provide the anticipated benefits, our ability to manage our operations could be impaired.

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We currently rely on a single vendor for many of the critical elements of our global information technology infrastructure and its failure to provide effective support for such infrastructure could negatively impact our business and financial results.

We have outsourced many of the critical elements of our global information technology infrastructure to a third-party service provider in order to achieve efficiencies. If the service provider does not perform or does not perform effectively, we may not be able to achieve the expected efficiencies and may have to incur additional costs to address failures in providing service by the service provider. Depending on the function involved, such non-performance, ineffective performance or failures of service may lead to business disruptions, processing inefficiencies or security breaches.

Disruptions or breaches of our information systems could adversely affect us.

Despite our implementation of network security measures, which have focused on prevention, mitigation, resilience, and recovery, our network and products may be vulnerable to cybersecurity attacks, computer viruses, break-ins and similar disruptions. Cybersecurity attacks and intrusion efforts are continuous and evolving, and in certain cases they have been successful at the most robust institutions. The scope and severity of risks that cyber threats present have increased dramatically, and include, but are not limited to, malicious software, attempts to gain unauthorized access to data, exploiting weaknesses related to vendors or other third parties that could be exploited to attack our systems, denials of service, and other electronic security breaches that could lead to disruptions in systems, unauthorized release of confidential or otherwise protected information and corruption of data. Any such event could have a material adverse effect on our business, operating results and financial condition, as we face regulatory, reputational and litigation risks resulting from potential cyber incidents, as well as the potential of incurring significant remediation costs.

Our daily business operations also require us to retain sensitive data such as intellectual property, proprietary business information and data related to customers, suppliers and business partners within our networking infrastructure. The loss or breach of such information could result in wide reaching negative impacts to our business, and as such, the ongoing maintenance and security of this information is pertinent to the success of our business operations and our strategic goals.

Our networking infrastructure and related assets may be subject to unauthorized access by hackers, employee errors, or other unforeseen activities. Such issues could result in the disruption of business processes, network degradation and system downtime, along with the potential that a third party will exploit our critical assets such as intellectual property, proprietary business information and data related to our customers, suppliers and business partners. To the extent that such disruptions occur, they may cause delays in the manufacture or shipment of our products and the cancellation of customer orders and, as a result, our business operating results and financial condition could be materially and adversely affected resulting in a possible loss of business or brand reputation.

Commodity shortages, price increases and higher energy prices could negatively affect our financial results.

We rely on suppliers to secure commodities, including steel, zinc, brass and other non-ferrous metals, required for the manufacture of our products. A disruption of deliveries from our suppliers or decreased availability of commodities could have an adverse effect on our ability to meet our commitments to customers or increase our operating costs. We believe that available sources of supply will generally be sufficient for our needs for the foreseeable future. Nonetheless, the unavailability of some commodities could have a material adverse impact on our business.

Volatility in the prices of these commodities could increase the costs of our products and services, and we may not be able to pass on these costs to our customers. We do not currently use financial derivatives to hedge against this

volatility, however, we utilize firm purchase commitments to mitigate risk. The pricing of some commodities we use is based on market prices. To mitigate this exposure, we may use annual price contracts to minimize the impact of inflation and to benefit from deflation.

Additionally, we are exposed to fluctuations in energy prices due to the instability of current market prices. Higher energy costs increase our operating costs and the cost of shipping our products and supplying services to our customers around the world. Consequently, sharp price increases, the imposition of taxes or an interruption of supply, could cause us to lose the ability to effectively manage the risk of rising energy prices and may have an adverse impact on our results of operations and cash flows.

We may be required to recognize impairment charges for our goodwill and other indefinite-lived intangible assets.

At December 31, 2017, the net carrying value of our goodwill and other indefinite-lived intangible assets totaled approximately \$761.2 million and \$75.4 million, respectively. Pursuant to GAAP, we are required to annually assess our goodwill, indefinite-lived intangibles and other long-lived assets to determine if they are impaired. In addition, interim assessments must be performed whenever events or changes in circumstances indicate that impairment may have occurred. If the testing performed indicates that impairment has occurred, we are required to record a non-cash impairment charge for the difference between the carrying value

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of the goodwill or other intangible assets and the fair value of the goodwill or other intangible assets in the period the determination is made. Disruptions to our business, end market conditions and protracted economic weakness, unexpected significant declines in operating results of reporting units, divestitures and market capitalization declines may result in additional charges for goodwill and other asset impairments. We have significant intangible assets, including goodwill with an indefinite life, which are susceptible to valuation adjustments as a result of changes in such factors and conditions.

The basis of the fair value for our impairment assessments is determined by projecting future cash flows using assumptions concerning future operating performance and economic conditions that may differ from actual cash flows. The financial and credit market volatility directly impacts our fair value measurement through our weighted average cost of capital that we use to determine our discount rate and through our stock price that we use to determine our market capitalization. Although our last analysis regarding the fair values of the goodwill and indefinite-lived intangible assets for our reporting units indicates that they exceed their respective carrying values, materially different assumptions regarding the future performance of our businesses or significant declines in our stock price could result in additional goodwill and intangible impairment losses. Specifically, an unanticipated deterioration in net revenues and operating margins generated by our EMEA and/or Asia Pacific segments could trigger future impairment in those segments. While we currently believe that our projected results will not result in future impairment, a deterioration in results or other factors could trigger a future impairment.

Successful sales and marketing efforts depend on our ability to recruit and retain qualified employees.

Our ability to successfully grow our business depends on the contributions and abilities of key executives, our sales force and other personnel, including the ability of our sales force to adapt to any changes made in the sales organization and achieve adequate customer coverage. We must therefore continue to sufficiently recruit, retain and motivate management, sales and other personnel to maintain our current business and support our projected growth. A shortage of these key employees might jeopardize our ability to grow and expand our business.

Our operations are subject to regulatory risks.

Our U.S. and non-U.S. operations are subject to a number of laws and regulations, including fire and building codes and standards, environmental and health and safety. We have incurred, and will be required to continue to incur, significant expenditures to comply with these laws and regulations. Changes to, or changes in interpretations of, current laws and regulations could require us to increase our compliance expenditures, cause us to significantly alter or discontinue offering existing products and services or cause us to develop new products and services. Altering current products and services or developing new products and services to comply with changes in the applicable laws and regulations could require significant research and development investments, increase the cost of providing the products and services and adversely affect the demand for our products and services.

We may not have been, or we may not at all times be, in full compliance with these laws and regulations. In the event a regulatory authority concludes that we are not or have not at all times been in full compliance with these laws, we could be fined, criminally charged or otherwise sanctioned.

Certain environmental laws assess liability on current or previous owners of real property or operators of manufacturing facilities for the costs of investigation, removal or remediation of hazardous substances or materials at such properties or at properties at which parties have disposed of hazardous substances. Liability for investigative, removal and remedial costs under certain U.S. federal and state laws and certain non-U.S. laws are retroactive, strict and joint and several. In addition to cleanup actions brought by governmental authorities, private parties could bring personal injury or other claims due to the presence of, or exposure to, hazardous substances. We have received notification from U.S. and non-U.S. governmental agencies, including the EPA and similar state environmental



agencies, that conditions at a number of current and formerly owned sites where we and others have disposed of hazardous substances require investigation, cleanup and other possible remedial action. These agencies may require that we reimburse the government for its costs incurred at these sites or otherwise pay for the costs of investigation and cleanup of these sites, including by providing compensation for natural resource damage claims from such sites. For more information, see "Business - Environmental Regulation."

While we have planned for future capital and operating expenditures to maintain compliance with environmental laws and have accrued for costs related to current remedial efforts, our costs of compliance, or our liabilities arising from past or future releases of, or exposures to, hazardous substances may exceed our estimates. We may also be subject to additional environmental claims for personal injury or cost recovery actions for remediation of facilities in the future based on our past, present or future business activities.

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The capital and credit markets are important to our business.

Instability in U.S. and global capital and credit markets, including market disruptions, limited liquidity and interest rate volatility, or reductions in the credit ratings assigned to us by independent ratings agencies could reduce our access to capital markets or increase the cost of funding our short and long term credit requirements. In particular, if we are unable to access capital and credit markets on terms that are acceptable to us, we may not be able to make certain investments or fully execute our business plans and strategy.

Our suppliers and customers are also dependent upon the capital and credit markets. Limitations on the ability of customers, suppliers or financial counterparties to access credit could lead to insolvencies of key suppliers and customers, limit or prevent customers from obtaining credit to finance purchases of our products and services and cause delays in the delivery of key products from suppliers.

As a global business, we have a relatively complex tax structure, and there is a risk that tax authorities will disagree with our tax positions.

Since we conduct operations worldwide through our subsidiaries, we are subject to complex transfer pricing regulations in the countries in which we operate. Transfer pricing regulations generally require that, for tax purposes, transactions between us and our affiliates be priced on a basis that would be comparable to an arm's length transaction and that contemporaneous documentation be maintained to support the tax allocation. Although uniform transfer pricing standards are emerging in many of the countries in which we operate, there is still a relatively high degree of uncertainty and inherent subjectivity in complying with these rules. To the extent that any tax authority disagrees with our transfer pricing policies, we could become subject to significant tax liabilities and penalties. Our tax returns are subject to review by taxing authorities in the jurisdictions in which we operate. Although we believe that we have provided for all tax exposures, the ultimate outcome of a tax review could differ materially from our provisions.

Changes in our effective income tax rate may have an adverse effect on our results of operations.

We are subject to taxes in Ireland, the U.S. and numerous other jurisdictions. Due to economic and political conditions, tax rates in various jurisdictions may be subject to significant change.

Our future effective tax rate may be adversely affected by a number of additional factors including:

- the jurisdictions in which profits are determined to be earned and taxed;
- the resolution of issues arising from tax audits with various tax authorities;
- changes in the enforcement environment;
- changes in the valuation of our deferred tax assets and liabilities;
- changes in jurisdictional mix of profits;
- changes in tax laws or the interpretation of such tax laws and changes in generally accepted accounting principles;
- changes in foreign tax rates or agreed upon foreign taxable base; and/or
- the repatriation of earnings from outside Ireland for which we have not previously provided for taxes.

There are risks associated with our outstanding and future indebtedness

We have approximately \$1.5 billion of outstanding indebtedness at December 31, 2017. In addition, we have a senior unsecured revolving credit facility that permits borrowings of up to an additional \$500 million. Volatility in the credit markets could adversely impact our ability to obtain favorable terms on financing in the future. A substantial portion of our cash flows from operations is dedicated to the payment of principal and interest on our indebtedness and will not be available for other purposes, including our operations, capital expenditures, payment of dividends, share

repurchase programs and future business opportunities.

Our ability to make scheduled payments or to refinance our debt obligations depends on our financial and operating performance, which is subject to prevailing economic and competitive conditions and to certain financial, business and other factors beyond our control. If our cash flows and capital resources are insufficient to fund our debt service obligations, we may be forced to reduce or delay capital expenditures, reduce or eliminate the payment of dividends, sell assets, seek additional capital or seek to restructure or refinance our indebtedness. These alternative measures may not be successful and may not permit us to meet our scheduled debt service obligations. In the absence of such operating results and resources, we could face substantial liquidity problems and might be required to sell material assets or operations to attempt to meet our debt service and other obligations.

Additionally, a portion of our borrowings at December 31, 2017 include a term loan with a variable rate of interest which exposes us to interest rate risk. We are exposed to the risk of rising interest rates to the extent that we fund our operations with short-term

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or variable-rate borrowings. At December 31, 2017, our \$1.5 billion of aggregate debt outstanding includes \$691 million of floating-rate term loans and \$800 million of our fixed-rate senior notes. We have the ability to incur up to \$500 million of additional floating-rate debt under our senior unsecured revolving credit facility. We have entered into interest rate swaps for \$250 million of our floating-rate term loans to manage our interest rate risk. A 100 basis point increase in LIBOR would have resulted in incremental 2017 interest expense of approximately \$5.6 million. If the LIBOR or other applicable base rates under our senior unsecured credit facilities increase in the future then the interest on floating-rate debt could have a material effect on our interest expense.

### Risks Relating to the Spin-off

In connection with the Spin-off, Ingersoll Rand indemnified us for certain liabilities and we indemnified Ingersoll Rand for certain liabilities. If we are required to act on these indemnities to Ingersoll Rand, we may need to divert cash to meet those obligations and our financial results could be negatively impacted. The Ingersoll Rand indemnity may not be sufficient to insure us against the full amount of liabilities for which it will be allocated responsibility, and Ingersoll Rand may not be able to satisfy its indemnification obligations in the future.

Pursuant to the Separation and Distribution Agreement, the Employee Matters Agreement and the Tax Matters Agreement with Ingersoll Rand, Ingersoll Rand agreed to indemnify us for certain liabilities, and we agreed to indemnify Ingersoll Rand for certain liabilities, in each case for uncapped amounts. Such indemnities may be significant and could negatively impact our business, particularly indemnities relating to our actions that could impact the tax-free nature of the Spin-off. Third parties could also seek to hold us responsible for any of the liabilities that Ingersoll Rand retained. Further, the indemnity from Ingersoll Rand may not be sufficient to protect us against the full amount of such liabilities, and Ingersoll Rand may not be able to fully satisfy its indemnification obligations. Moreover, even if we ultimately succeed in recovering from Ingersoll Rand any amounts for which we are held liable, we may be temporarily required to bear these losses ourselves.

If the distribution or certain internal transactions undertaken in anticipation of the spin-off are determined to be taxable for U.S. federal income tax purposes, we, our shareholders that are subject to U.S. federal income tax and/or Ingersoll Rand could incur significant U.S. federal income tax liabilities and, in certain circumstances, we could be required to indemnify Ingersoll Rand for material taxes pursuant to indemnification obligations under the Tax Matters Agreement.

Ingersoll Rand has received an IRS ruling substantially to the effect that, among other things, the distribution of our ordinary shares, together with certain related transactions, qualify under Sections 355 and 368(a) of the Internal Revenue Code ("the Code"), with the result that Ingersoll Rand and Ingersoll Rand's shareholders will not recognize any taxable income, gain or loss for U.S. federal income tax purposes as a result of the Spin-off, except to the extent of cash received in lieu of fractional shares (the "IRS Ruling"). The IRS Ruling also provided that certain internal transactions undertaken in anticipation of the distribution qualify for favorable treatment under the Code. In addition to obtaining the IRS Ruling, Ingersoll Rand received opinions from the law firm of Simpson Thacher & Bartlett LLP substantially to the effect that certain requirements, including certain requirements that the IRS did not rule on, necessary to obtain tax-free treatment have been satisfied, such that the distribution for U.S. federal income tax purposes and certain other matters relating to the distribution, including certain internal transactions undertaken in anticipation of the distribution, received tax-free treatment under Section 355 of the Code. The receipt and effectiveness of the IRS Ruling and the opinions were conditions to the distribution that were satisfied or waived by Ingersoll Rand. The IRS Ruling and the opinions rely on certain facts and assumptions and certain representations and undertakings from us and Ingersoll Rand regarding the past and future conduct of our respective businesses and other matters. Notwithstanding the IRS Ruling and the opinions, the IRS could determine on audit that the distribution or the internal transactions should be treated as taxable transactions if it determines that any of these facts, assumptions, representations or undertakings is not correct or has been violated, or that the distribution or the internal transactions

should be taxable for other reasons, including as a result of significant changes in shares or asset ownership after the distribution. A legal opinion represents the tax adviser's best legal judgment, is not binding on the IRS or the courts, and the IRS or the courts may not agree with the opinion. In addition, the opinion will be based on then current law, and cannot be relied upon if current law changes with retroactive effect. If the distribution is determined to be taxable, the distribution could be treated as a taxable dividend or capital gain for U.S. federal income tax purposes, and our shareholders could incur significant U.S. federal income tax liabilities. In addition, we or Ingersoll Rand could incur significant U.S. federal income tax liabilities if it is ultimately determined that certain internal transactions undertaken in anticipation of the distribution are taxable.

In addition, under the terms of the Tax Matters Agreement, in the event the distribution or the internal transactions were determined to be taxable as a result of actions taken after the distribution by us or Ingersoll Rand, the party responsible for such failure would be responsible for all taxes imposed on us or Ingersoll Rand as a result thereof. If such failure is not the result of actions taken after the distribution by us or Ingersoll Rand, then we would be responsible for any taxes imposed on us or Ingersoll Rand as a result of such determination. Such tax amounts could be significant.

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If the distribution is determined to be taxable for Irish tax purposes, significant Irish tax liabilities may arise.

Ingersoll Rand has received an opinion of the Irish Revenue regarding the Irish tax consequences of the distribution to the effect that certain reliefs and exemptions for corporate reorganizations apply. In addition to obtaining the opinion from Irish Revenue, Ingersoll Rand received an opinion from the law firm of Arthur Cox confirming the applicability of the relevant exemptions and reliefs to the distribution and that certain internal transactions will not trigger tax costs. These opinions rely on certain facts and assumptions and certain representations and undertakings from us and Ingersoll Rand regarding the past and future conduct of our respective businesses and other matters. Notwithstanding the opinions, Irish Revenue could determine on audit that the distribution or the internal transactions do not qualify for the relevant exemptions or reliefs if it determines that any of these facts, assumptions, representations or undertakings is not correct or has been violated. A legal opinion represents the tax adviser's best legal judgment, is not binding on Irish Revenue or the courts and Irish Revenue or the courts may not agree with the legal opinion. In addition, the legal opinion was based on then current law, and cannot be relied upon if current law changes with retroactive effect. If the distribution ultimately is determined not to fall within certain exemptions or reliefs, the distribution could result in our shareholders having an Irish tax liability as a result of the distribution (if a shareholder is an Irish resident or holds shares in Ingersoll Rand in an Irish branch or agency), or we or Ingersoll Rand could incur Irish tax liabilities.

In addition, under the terms of the Tax Matters Agreement, in the event the distribution does not qualify for certain reliefs or exemptions, then we would be responsible for any taxes imposed on us or Ingersoll Rand as a result of such determination. Such tax amounts could be significant.

### Risks Related to Our Incorporation in Ireland

Irish law differs from the laws in effect in the United States and may afford less protection to holders of our securities.

The United States currently does not have a treaty with Ireland providing for the reciprocal recognition and enforcement of judgments in civil and commercial matters. As such, there is some uncertainty as to whether the courts of Ireland would recognize or enforce judgments of U.S. courts obtained against us or our directors or officers based on U.S. federal or state civil liability laws, including the civil liability provisions of the U.S. federal or state securities laws, or hear actions against us or those persons based on those laws.

As an Irish company, we are governed by the Irish Companies Act, which differs in some material respects from laws generally applicable to U.S. corporations and shareholders, including, among others, differences relating to interested director and officer transactions and shareholder lawsuits. Likewise, the duties of directors and officers of an Irish company generally are owed to the company only. Shareholders of Irish companies generally do not have a personal right of action against directors or officers of the company and may exercise such rights of action on behalf of the company only in limited circumstances. Accordingly, holders of our securities may have more difficulty protecting their interests than would holders of securities of a corporation incorporated in a jurisdiction of the United States.

In addition, Irish law allows shareholders to authorize share capital which then can be issued by a board of directors without shareholder approval. Also, subject to specified exceptions, Irish law grants statutory preemptive rights to existing shareholders to subscribe for new issuances of shares for cash. However, we have opted out of these preemption rights in our Articles of Association as permitted under Irish company law. Irish law provides that this opt-out expires after five years unless renewed by a special resolution of the shareholders. These authorizations must be renewed by the shareholders every five years and we cannot guarantee that these authorizations will always be approved.

Changes in tax laws, regulations or treaties, changes in our status under the tax laws of many jurisdictions or adverse determinations by taxing authorities could increase our tax burden or otherwise affect our financial condition or

operating results, as well as subject our shareholders to additional taxes.

The realization of any tax benefit related to our incorporation and tax residence in Ireland could be impacted by changes in tax laws, tax treaties or tax regulations or the interpretation or enforcement thereof by the tax authorities of many jurisdictions. From time to time, proposals have been made and/or legislation has been introduced to change the tax laws of various jurisdictions or limit tax treaty benefits that if enacted could materially increase our tax burden and/or effective tax rate. For instance, recent U.S. legislative proposals could modify or eliminate the tax deductibility of various currently deductible payments, which could materially and adversely affect our effective tax rate and cash tax position. Moreover, other U.S. legislative proposals could have a material adverse impact on us by overriding certain tax treaties and limiting the treaty benefits on certain payments by our U.S. subsidiaries to our non-U.S. affiliates, which could increase our tax liability. We cannot predict the outcome of any specific legislation in any jurisdiction.

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While we monitor proposals that would materially impact our tax burden and/or effective tax rate and investigate our options, we could still be subject to increased taxation on a going forward basis no matter what action we undertake if certain legislative proposals are enacted, certain tax treaties are amended and/or our interpretation of applicable tax law is challenged and determined to be incorrect. In particular, any changes and/or differing interpretations of applicable tax law that have the effect of disregarding our incorporation in Ireland, limiting our ability to take advantage of tax treaties between jurisdictions, modifying or eliminating the deductibility of various currently deductible payments, or increasing the tax burden of operating or being resident in a particular country, could subject us to increased taxation.

Dividends received by our shareholders may be subject to Irish dividend withholding tax.

In certain circumstances, we are required to deduct Irish dividend withholding tax (currently at the rate of 20%) from dividends paid to our shareholders. In the majority of cases, shareholders residing in the United States will not be subject to Irish withholding tax, and shareholders resident in a number of other countries will not be subject to Irish withholding tax provided that they complete certain Irish dividend withholding tax forms. However, some shareholders may be subject to withholding tax, which could discourage the investment in our stock and adversely impact the price of our shares.

Dividends received by our shareholders could be subject to Irish income tax.

Dividends paid in respect of our shares generally are not subject to Irish income tax where the beneficial owner of these dividends is exempt from Irish dividend withholding tax, unless the beneficial owner of the dividend has some connection with Ireland other than his or her shareholding in Allegion.

Our shareholders who receive their dividends subject to Irish dividend withholding tax will generally have no further liability to Irish income tax on the dividends unless the beneficial owner of the dividend has some connection with Ireland other than his or her shareholding in Allegion.

Certain provisions in our Articles of Association, among other things, could prevent or delay an acquisition of us, which could decrease the trading price of our ordinary shares.

Our Memorandum and Articles of Association contain provisions to deter takeover practices, inadequate takeover bids and unsolicited offers. These provisions include, amongst others:

- a provision of our Articles of Association which generally prohibits us from engaging in a business combination with an interested shareholder (being (i) the beneficial owner of the relevant percentage of our voting shares or (ii) an affiliate or associate of us that has at any time within the last five years been the beneficial owner of the relevant percentage of our voting shares), subject to certain exceptions;
- rules regarding how shareholders may present proposals or nominate directors for election at shareholder meetings;
- the right of our Board of Directors to issue preferred shares without shareholder approval in certain circumstances, subject to applicable law; and
- the ability of our Board of Directors to set the number of directors and to fill vacancies on our Board of Directors in certain circumstances.

We believe these provisions will provide some protection to our shareholders from coercive or otherwise unfair takeover tactics. These provisions are not intended to make us immune from takeovers. However, these provisions will apply even if the offer may be considered beneficial by some shareholders and could delay or prevent an acquisition that our Board of Directors determines is in our best interests and our shareholders' best interests. These provisions may also prevent or discourage attempts to remove and replace incumbent directors.



In addition, several mandatory provisions of Irish law could prevent or delay an acquisition of us. For example, Irish law does not permit shareholders of an Irish public limited company to take action by written consent with less than unanimous consent. We also will be subject to various provisions of Irish law relating to mandatory bids, voluntary bids, requirements to make a cash offer and minimum price requirements, as well as substantial acquisition rules and rules requiring the disclosure of interests in our shares in certain circumstances. Also, Irish companies, including us, may alter their Memorandum of Association and Articles of Association only with the approval of at least 75% of the votes of the company's shareholders cast in person or by proxy at a general meeting of the company.

The agreements that we entered into with Ingersoll Rand in connection with the spin-off generally require Ingersoll Rand's consent to any assignment by us of our rights and obligations under the agreements. The consent and termination rights set forth in these agreements might discourage, delay or prevent a change of control that shareholders may consider favorable.

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Item 1B. UNRESOLVED STAFF COMMENTS

None.

Item 2. PROPERTIES

We operate through a broad network of sales offices, engineering centers, 31 production facilities and several distribution centers throughout the world. Our active properties represent about 7.0 million square feet, of which approximately 47% is leased.

The majority of our plant facilities are owned by us with the remainder under long-term lease arrangements. We believe that our plants have been well maintained, are generally in good condition and are suitable for the conduct of our business.

Item 3. LEGAL PROCEEDINGS

In the normal course of business, we are involved in a variety of lawsuits, claims and legal proceedings, including commercial and contract disputes, employment matters, product liability claims, environmental liabilities, intellectual property disputes, and tax-related matters. In our opinion, pending legal matters are not expected to have a material adverse impact on our results of operations, financial condition, liquidity or cash flows.

Executive Officers of the Registrant

The following is a list of executive officers of the Company as of February 20, 2018.

David D. Petratis, age 60, is our Chairman, President and Chief Executive Officer. Mr. Petratis served as the Chairman, President and Chief Executive Officer of Quanex Building Products Corporation (a manufacturer of engineered material and components for the building products markets) from 2008 to July 2013.

Patrick S. Shannon, age 55, is our Senior Vice President and Chief Financial Officer. Mr. Shannon served as the Vice President and Treasurer of Ingersoll-Rand plc (a global diversified company) from 2012 to October 2013.

Jeffrey N. Braun, age 58, is our Senior Vice President and General Counsel. Mr. Braun served as our Deputy General Counsel and Chief Compliance Officer from September 2013 to June 2014. Mr. Braun previously served as General Counsel of General Motors China, a subsidiary of General Motors Company (a global automotive company) from 2010 to 2013.

Timothy P. Eckersley, age 56, is our Senior Vice President - Americas. Mr. Eckersley served as Ingersoll Rand's President, Security Technologies - Americas from 2007 to November 2013.

Todd V. Graves, age 51, is our Senior Vice President - Engineering and Technology. Mr. Graves served as our Vice President - Technology and Engineering from 2013 to January 2016. Mr. Graves served as Ingersoll Rand's Vice President - Technology and Engineering, Security Technologies, from 2012 to 2013.

Tracy L. Kemp, age 49, is our Senior Vice President and Chief Information Officer. Ms. Kemp served as our Vice President and Chief Information Officer from 2013 to February 2015. Prior to that, Ms. Kemp served as Ingersoll Rand's Vice President - Chief Information Officer, Security Technologies and Residential Solutions sectors from 2011 to 2013.

Shelley A. Meador, age 46, is our Senior Vice President - Human Resources and Communications. Ms. Meador served as our Vice President - Tax from 2013 to August 2016. Ms. Meador previously served as Vice President - Tax at Hillenbrand, Inc. (a global diversified industrial company) from 2011 to 2013.

Lucia Veiga Moretti, age 53, is our Senior Vice President - EMEA. Ms. Moretti previously served as Senior Vice President and President, Delphi Product and Service Solutions for Delphi Automotive (a supplier of automotive technologies) from 2011 to February 2014.

Chris E. Muhlenkamp, age 60, is our Senior Vice President - Global Operations and Integrated Supply Chain. Mr. Muhlenkamp served as our Vice President - Global Operations and Integrated Supply Chain from 2013 to February 2014. Mr. Muhlenkamp served as Ingersoll Rand's Vice President - Operations and Global Integrated Supply Chain, Security Technologies, from 2011 to 2013.

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Douglas P. Ranck, age 59, is our Vice President, Controller and Chief Accounting Officer. Mr. Ranck served as Ingersoll Rand's Global Controller and Financial Planning and Analysis Leader - Climate Solutions from 2008 to October 2013.

Jeffrey M. Wood, age 47, is our Senior Vice President - Asia Pacific. Mr. Wood previously served as our Vice President, Global Supply Management from 2013 to January 2017. Mr. Wood also served as Senior Vice President, Supply Chain for the Buildings division of Schneider Electric SE (an energy management and automation company) from 2011 to 2013.

No family relationship exists between any of the above-listed executive officers of the Company. All officers are elected to hold office for one year or until their successors are elected and qualified.

Item 4. MINE SAFETY DISCLOSURES

Not applicable.

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## PART II

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

Information regarding the principal market for our ordinary shares and related shareholder matters is as follows:

Our ordinary shares are traded on the NYSE under the symbol ALLE. As of February 16, 2018, the number of record holders of ordinary shares was 3,010. The high and low sales price per share and the dividend declared per share for the following periods were as follows:

	Ordinary shares		
	High	Low	Dividend
2017			
First quarter	\$76.29	\$63.81	\$ 0.16
Second quarter	82.77	73.93	0.16
Third quarter	86.89	76.79	0.16
Fourth quarter	\$89.81	\$78.63	\$ 0.16
2016			
First quarter	\$65.40	\$52.95	\$ 0.12
Second quarter	69.69	63.08	0.12
Third quarter	73.49	65.83	0.12
Fourth quarter	\$69.95	\$61.47	\$ 0.12

Information regarding equity compensation plans required to be disclosed pursuant to this Item is incorporated by reference from our Proxy Statement.

## Dividend Policy

Our Board of Directors declared dividends of \$0.16 per ordinary share on February 2, 2017, April 5, 2017, September 6, 2017 and December 6, 2017. On February 7, 2018, our Board of Directors declared a dividend of \$0.21 per ordinary share payable March 29, 2018. We paid a total of \$60.9 million in cash for dividends to ordinary shareholders during the year ended December 31, 2017. Future dividends on our ordinary shares, if any, will be at the discretion of our Board of Directors and will depend on, among other things, our results of operations, cash requirements and surplus, financial condition, contractual restrictions and other factors that the Board of Directors may deem relevant, as well as our ability to pay dividends in compliance with the Irish Companies Act. Under the Irish Companies Act, dividends and distributions may only be made from distributable reserves. Distributable reserves, broadly, means the accumulated realized profits of Allegion plc (ALLE-Ireland). In addition, no distribution or dividend may be made unless the net assets of ALLE-Ireland are equal to, or in excess of, the aggregate of ALLE-Ireland's called up share capital plus undistributable reserves and the distribution does not reduce ALLE-Ireland's net assets below such aggregate.

## Issuer Purchases of Equity Securities

In February 2017, our Board of Directors approved a new stock repurchase authorization of up to \$500 million of the Company's ordinary shares ("2017 Share Repurchase Authorization"). The 2017 Share Repurchase Authorization does not have a prescribed expiration date. We paid a total of \$60.0 million to repurchase 0.8 million ordinary shares during the year ended December 31, 2017 and \$85.1 million to repurchase 1.3 million ordinary shares during the year ended December 31, 2016 under the previous authorized share repurchase plan that was established in 2014. At December 31, 2017, we have approximately \$440.0 million available under the 2017 Share Repurchase Authorization.



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## Performance Graph

The annual changes for the period shown December 1, 2013 (when our ordinary shares began trading) to December 31, 2017 in the graph on this page are based on the assumption that \$100 had been invested in Allegion plc ordinary shares, the Standard & Poor's 500 Stock Index ("S&P 500") and the Standard & Poor's 400 Capital Goods Index ("S&P 400 Capital Goods") on December 1, 2013, and that all quarterly dividends were reinvested. The total cumulative dollar returns shown on the graph represent the value that such investments would have had on December 31, 2017.

	December 1, 2013	December 31, 2013	December 31, 2014	December 31, 2015	December 31, 2016	December 31, 2017
Allegion plc	100.00	102.20	129.03	154.37	150.97	189.19
S&P 500	100.00	102.53	116.57	118.18	132.31	161.20
S&P 400 Capital Goods	100.00	104.58	104.84	99.07	130.70	162.97

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## Item 6. SELECTED FINANCIAL DATA (1)

In millions, except per share amounts:

At and for the years ended December 31,	2017	2016	2015	2014	2013	
Net revenues	\$2,408.2	\$2,238.0	\$2,068.1	\$2,118.3	\$2,069.6	
Net earnings (loss) attributable to Allegion plc ordinary shareholders:						
Continuing operations	273.3	(a)229.1	(b)154.3	(c)186.3	(d)35.9	(e), (f)
Discontinued operations	—	—	(0.4 )	(11.1 )	(3.6 )	
Total assets	2,542.0	2,247.4	2,263.0	2,015.9	2,000.6	
Total debt	1,477.3	1,463.8	1,523.1	1,264.6	1,343.9	
Total Allegion plc shareholders' equity (deficit)	401.6	113.3	25.6	(4.8 )	(66.1 )	
Earnings (loss) per share attributable to Allegion plc ordinary shareholders:						
Basic:						
Continuing operations	\$2.87	\$2.39	\$1.61	\$1.94	\$0.37	
Discontinued operations	—	—	(0.01 )	(0.12 )	(0.03 )	
Diluted:						
Continuing operations	\$2.85	\$2.36	\$1.59	\$1.92	\$0.37	
Discontinued operations	—	—	—	(0.12 )	(0.03 )	
Dividends declared per ordinary share	\$0.64	\$0.48	\$0.40	\$0.32	\$—	

Net earnings from continuing operations for the year ended December 31, 2017 includes \$44.7 million of costs (a) related to the refinancing of our credit facilities and senior notes and a net tax charge of \$53.5 million related to the U.S. Tax Reform Act.

(b) Net earnings from continuing operations for the year ended December 31, 2016 includes \$84.4 million of losses related to our previously divested systems integration business.

(c) Net earnings from continuing operations for the year ended December 31, 2015 includes \$104.2 million of losses related to the divestitures of our Venezuelan operations and our majority stake in our systems integration business.

(d) Net earnings from continuing operations for the year ended December 31, 2014 includes an after-tax, non-cash inventory impairment charge of \$18.7 million and a \$9.1 million after-tax, non-cash charge related to the devaluation of the Venezuelan bolivar.

(e) Net earnings from continuing operations for the year ended December 31, 2013 includes an after-tax, non-cash goodwill impairment charge of \$131.2 million and \$44.8 million of discrete tax adjustments consisting of \$31.5 million of expense related to valuation allowances on deferred tax assets that are no longer expected to be utilized and \$13.3 million of net tax expense resulting primarily from transactions occurring to effect the Spin-off.

(f) Net earnings from continuing operations includes \$174.5 million of centrally managed service costs and corporate allocations from Ingersoll Rand for the year ended December 31, 2013.



(1) The Company has not restated 2015, 2014, or 2013 for the impact of the adoption of ASU 2016-09 in the fourth quarter of 2016. The Company has not restated 2014 or 2013 for the impact of the adoption of ASU 2015-17 and ASU 2015-03 as of December 31, 2015. The impact of excluding the above standards in prior period presentation is not material.

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Item 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following Management's Discussion and Analysis of Financial Condition and Results of Operations contains forward-looking statements that involve risks and uncertainties. Our actual results may differ materially from the results discussed in the forward-looking statements. Factors that might cause a difference include, but are not limited to, those discussed under Item 1A. Risk Factors in this Annual Report on Form 10-K. The following section is qualified in its entirety by the more detailed information, including our consolidated financial statements and the notes thereto, which appears elsewhere in this Annual Report.

Overview

Organization

We are a leading global provider of security products and solutions operating in three geographic regions: Americas, EMEA, and Asia Pacific. We sell a wide range of security products and solutions for end-users in commercial, institutional and residential markets worldwide, including into the education, healthcare, government, commercial office and single and multi-family residential markets. Our corporate brands include Schlage, Von Duprin, LCN, CISA, SimonsVoss and Interflex.

Trends and Economic Events

Current market conditions have improved over the past few years, and we believe the security products industry will also benefit from continued growth in institutional, commercial, and residential end-markets. We also expect the security products industry will benefit from favorable long-term demographic trends such as continued urbanization of the global population, increased concerns about safety and security and technology-driven innovation.

In recent years, growth in electronic security products and solutions continues to outperform the industry, and we expect growth in the global electronic product categories we serve to continue to outperform the security products industry as a whole as end-users adopt newer technologies in their facilities. Our recent acquisitions have been made to capitalize on this trend.

The economic conditions discussed above and a number of other challenges and uncertainties that could affect our business are described under "Risk Factors."

2017 and 2016 Significant Events

Acquisitions

We completed one business acquisition in both 2017 and 2016:

Acquisitions

Business Month

Trelock June 2016

Republic January 2017

The incremental impact of the acquisitions for the twelve months ended December 31, 2017 was a net increase in revenues of approximately \$32.3 million and a net decrease to operating income of approximately \$0.6 million compared to the same period in the prior year. The incremental impact of the acquisitions and divestitures for the twelve months ended December 31, 2016 was a net increase in revenues of approximately \$63.6 million and a net

increase in operating income of approximately \$7.3 million compared to the same period in the prior year.

During the year ended December 31, 2017, we incurred \$4.7 million of due diligence and acquisition and integration costs. Acquisition related costs were not material to the 2016 Consolidated Statement of Comprehensive Income.

#### 2017 Dividends

We paid quarterly dividends of \$0.16 per ordinary share to shareholders on record as of March 13, 2017, June 13, 2017, September 15, 2017, and December 15, 2017. We paid a total of \$60.9 million in cash for dividends to ordinary shareholders during the year ended December 31, 2017.

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Restructuring charges

In conjunction with ongoing restructuring actions throughout the year primarily related to workforce reductions and the closure and consolidation of manufacturing facilities in an effort to increase efficiencies, we incurred charges of \$12.3 million for the year ended December 31, 2017.

We also incurred \$1.5 million of other non-qualified restructuring charges during the year ended December 31, 2017 related to costs directly attributable to restructuring activities, but do not fall into the severance, exit, or disposal category.

Financing activities

We entered into a new \$1.2 billion unsecured credit agreement (the "Credit Agreement"), consisting of a \$700.0 million term loan facility (the "Term Facility") and a \$500.0 million revolving credit facility (the "Revolving Facility", and together with the Term Facility, the "Credit Facilities"). The initial proceeds of \$700.0 million from the Term Facility, along with initial borrowings of \$165.0 million under the Revolving Facility, were used primarily to repay in full our previously outstanding secured credit facility, the Second Amended and Restated Credit Agreement, dated as of September 30, 2015. All obligations under the Second Amended and Restated Credit Agreement were satisfied, all commitments thereunder were terminated, and all guarantees and security interests that had been granted in connection therewith were released.

On October 2, 2017, we issued \$400.0 million of 3.200% Senior Notes due 2024 (the "3.200% Senior Notes") and \$400.0 million of 3.550% Senior Notes due 2027 (the "3.550% Senior Notes" and, together with the 3.200% Senior Notes, the "Notes"). On October 3, 2017 we used the net proceeds from the Notes to redeem in full the \$300.0 million Senior Notes due 2021 and the \$300.0 million Senior Notes due 2023, as well as to repay in full the \$165.0 million of borrowings under the Revolving Facility and other costs associated with the refinancing.

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## Results of Operations - For the years ended December 31

Dollar amounts in millions, except per share data	2017	% of Revenues	2016	% of Revenues	2015	% of Revenues
Net revenues	\$2,408.2		\$2,238.0		\$2,068.1	
Cost of goods sold	1,337.5	55.5 %	1,252.7	56.0 %	1,199.0	58.0 %
Selling and administrative expenses	582.5	24.2 %	559.8	25.0 %	510.5	24.7 %
Operating income	488.2	20.3 %	425.5	19.0 %	358.6	17.3 %
Interest expense	105.7		64.3		52.9	
Loss on divestitures	—		84.4		104.2	
Other income, net	(13.2 )		(18.2 )		(7.8 )	
Earnings before income taxes	395.7		295.0		209.3	
Provision for income taxes	119.0		63.8		54.6	
Earnings from continuing operations	276.7		231.2		154.7	
Discontinued operations, net of tax	—		—		(0.4 )	
Net earnings	276.7		231.2		154.3	
Less: Net earnings attributable to noncontrolling interests	3.4		2.1		0.4	
Net earnings attributable to Allegion plc	\$273.3		\$229.1		\$153.9	
Diluted net earnings per ordinary share attributable to Allegion plc ordinary shareholders:						
Continuing operations	\$2.85		\$2.36		\$1.59	
Discontinued operations	—		—		—	
Net earnings	\$2.85		\$2.36		\$1.59	

## Net Revenues

Net revenues for the year ended December 31, 2017 increased by 7.6%, or \$170.2 million, compared to the same period in 2016 due to the following:

Pricing	1.8 %
Volume	3.9 %
Acquisitions	1.4 %
Currency exchange rates	0.5 %
Total	7.6 %

The increase in net revenues was primarily driven by higher volumes and improved pricing in all segments, incremental revenue from the acquisitions discussed above, and favorable foreign currency exchange rate movements relative to the US Dollar.

Net revenues for the year ended December 31, 2016 increased by 8.2%, or \$169.9 million, compared to the same period in 2015 due to the following:

Pricing	1.0 %
Volume	4.8 %
Acquisitions / divestitures	3.0 %
Currency exchange rates	(0.6)%
Total	8.2 %



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The increase in net revenues was primarily driven by higher volumes and improved pricing in all segments and incremental revenue from acquisitions in our EMEIA segment, offset by unfavorable foreign currency exchange rate movements due to the strengthening of the US dollar against currencies in EMEIA, primarily the British pound.

**Cost of Goods Sold**

For the year ended December 31, 2017, cost of goods sold as a percentage of revenue decreased to 55.5% from 56.0% due to the following:

Pricing and productivity in excess of inflation	(0.5)%
Volume/product mix	0.4 %
Acquisitions	0.5 %
Currency exchange rates	(0.1)%
Environmental remediation charge	(0.7)%
Restructuring / acquisition costs	(0.1)%
Total	(0.5)%

Costs of goods sold as a percentage of revenue for the year ended December 31, 2017 decreased primarily due to pricing and productivity benefits in excess of inflation, favorable foreign currency exchange rate movements, a decrease related to an environmental remediation charge in the prior year, and decreased restructuring costs. These decreases were offset by unfavorable product mix and volume and the impact of acquisitions.

For the year ended December 31, 2016, cost of goods sold as a percentage of revenue decreased to 56.0% from 58.0% due to the following:

Pricing and productivity in excess of inflation	(1.3)%
Acquisitions / divestitures	(0.5)%
Investment spending	0.2 %
Currency exchange rates	(0.3)%
Non-cash inventory impairment	(0.2)%
Environmental remediation charge	0.7 %
Restructuring / acquisition costs	(0.6)%
Total	(2.0)%

Costs of goods sold as a percentage of revenue for the year ended December 31, 2016 decreased primarily due to productivity benefits in excess of inflation, the impact of the acquisitions discussed above, favorable foreign currency exchange rate movements and decreased restructuring costs primarily in our EMEIA segment. These decreases were offset by increased investment spending and a charge for a change in approach for environmental remediation related to two sites in the Americas.

**Selling and Administrative Expenses**

For the year ended December 31, 2017, selling and administrative expenses as a percentage of revenue decreased to 24.2% from 25.0% due to the following:

Productivity in excess of inflation	(0.7)%
Volume leverage	(0.9)%
Acquisitions	(0.2)%
Investment spending	0.7 %
Restructuring / acquisition costs	0.3 %
Total	(0.8)%

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Selling and administrative expenses as a percentage of revenue for the year ended December 31, 2017 decreased primarily due to favorable leverage due to increased volume, productivity benefits in excess of inflation, and acquisitions. These decreases were partially offset due to increased investment spending and higher restructuring and acquisition costs.

For the year ended December 31, 2016, selling and administrative expenses as a percentage of revenue increased to 25.0% from 24.7% due to the following:

Other inflation in excess of productivity	0.8 %
Volume leverage	(1.2)%
Acquisitions / divestitures	0.7 %
Investment spending	0.4 %
Restructuring / acquisition costs	(0.4)%
Total	0.3 %

Selling and administrative expenses as a percentage of revenue for the year ended December 31, 2016 increased primarily due to acquisitions, increased investment spending and inflation in excess of productivity. These increases were offset by favorable leverage due to increased volume and lower restructuring and acquisition costs.

Operating Income/Margin

Operating income for the year ended December 31, 2017 increased \$62.7 million from the same period in 2016 and operating margin increased to 20.3% from 19.0% for the same period in 2016 due to the following:

in millions	Operating Income	Operating Margin
December 31, 2016	\$ 425.5	19.0 %
Pricing and productivity in excess of inflation	35.0	1.2 %
Volume/product mix	29.4	0.5 %
Currency exchange rates	4.3	0.1 %
Investment spending	(15.3 )	(0.7 )%
Acquisitions	(0.6 )	(0.3 )%
Environmental remediation charge	15.0	0.7 %
Restructuring / acquisition costs	(5.1 )	(0.2 )%
December 31, 2017	\$ 488.2	20.3 %

Operating income and operating margin both increased due to favorable volume/product mix in all of our segments, pricing improvements and productivity in excess of inflation, favorable foreign currency exchange rate movements, and lower environmental remediation charges in the current year due to a charge in the prior year for a change in approach for environmental remediation related to two sites in the Americas. These increases were partially offset by investment spending and the impact of acquisitions and higher restructuring and acquisition costs.

Operating income for the year ended December 31, 2016 increased \$66.9 million and operating margin increased to 19.0% from 17.3% for the same period in 2015 due to the following:



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in millions	Operating Income	Operating Margin	
December 31, 2015	\$ 358.6	17.3	%
Pricing and productivity in excess of inflation	13.6	0.5	%
Volume/product mix	44.0	1.2	%
Non-cash inventory impairment	4.2	0.2	%
Currency exchange rates	4.6	0.3	%
Investment spending	(12.3 )	(0.6 )	%
Acquisitions / divestitures	7.3	(0.2 )	%
Environmental remediation charge	(15.0 )	(0.7 )	%
Restructuring / acquisition costs	20.5	1.0	%
December 31, 2016	\$ 425.5	19.0	%

Operating income increased primarily due to favorable volume/product mix in all of our segments, pricing improvements and productivity in excess of inflation, lower restructuring and acquisition costs, the impact of acquisitions and divestitures, inventory impairment charges in Venezuela in the prior year that did not occur in the current year and favorable foreign currency exchange rate movements. These increases were partially offset by investment spending and a charge for a change in approach for environmental remediation related to two sites in the Americas.

Operating margin increased primarily due to favorable volume/product mix in all of our segments, pricing improvements and productivity in excess of inflation, lower restructuring and acquisition costs, inventory impairment charges in Venezuela in the prior year and favorable foreign currency exchange rate movements. These increases were partially offset by investment spending, the impact of acquisitions and divestitures, and a charge for a change in approach for environmental remediation related to two sites in the Americas.

## Interest Expense

Interest expense for the year ended December 31, 2017 increased \$41.4 million compared to the same period in 2016. Interest expense increased primarily due to \$44.7 million of costs associated with the refinancing of our Credit Facilities, issuance of our new 3.200% and 3.550% Senior Notes, and redemption of our previously outstanding Senior Notes due 2021 and 2023.

Interest expense for the year ended December 31, 2016 increased \$11.4 million compared with the same period of 2015. Interest expense increased primarily due to increased debt balances from the September 2015 issuance of the Senior Notes due 2023.

## Loss on Divestitures

During the year ended December 31, 2015 we entered into an agreement to sell a majority stake in our systems integration business in China and recorded a pre-tax charge of \$78.1 million (\$82.4 million after tax charges) to write the carrying value of the assets and liabilities down to their estimated fair value less costs to complete the transaction. During the year ended December 31, 2016 we recorded an additional after tax charge of \$84.4 million to further write-down the carrying value of consideration receivable related to this divestiture.

## Other income, net

The components of Other income, net, for the year ended December 31 were as follows:

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In millions	2017	2016	2015
Interest income	\$(1.2 )	\$(1.9 )	\$(1.5)
Exchange loss	0.7	2.0	4.9
(Earnings) loss from and (gains) on the sale of equity investments	(5.4 )	(3.6 )	0.3
Other	(7.3 )	(14.7 )	(11.5)
Other income, net	\$(13.2)	\$(18.2)	\$(7.8)

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For the year ended December 31, 2017, Other income, net decreased by \$5.0 million compared to the same period in 2016. During the year ended December 31, 2017 we recorded a cumulative gain of \$5.4 million from the sale of iDevices, LLC, and gains of \$7.3 million related to legal entity liquidations in our Asia Pacific region, of which \$2.2 million has been attributed to noncontrolling interests.

For the year ended December 31, 2016, Other income, net increased by \$10.4 million compared with the same period in 2015. During the year ended December 31, 2016 we recorded gains from the sale of marketable securities of \$12.4 million, which is included within Other in the table above. Additionally, earnings from equity method investments increased primarily due to a gain recognized by an investment in 2016.

Provision for Income Taxes

On December 22, 2017, the President of the United States signed comprehensive tax legislation commonly referred to as the Tax Cuts and Jobs Act (the “Tax Reform Act”). The Tax Reform Act makes broad and complex changes to the U.S. tax code which will impact our year ended December 31, 2017 including, but not limited to (1) reducing the U.S. federal corporate tax rate, (2) requiring a one-time transition tax on certain unrepatriated earnings of foreign subsidiaries that may electively be paid over eight years, and (3) requiring a review of the future realizability of deferred tax balances.

For the year ended December 31, 2017, our effective tax rate was 30.1% compared to 21.6% for the year ended December 31, 2016. The effective income tax rate for the year ended December 31, 2017 was negatively impacted by a \$53.5 million tax charge related to the Tax Reform Act, which was partially offset by the release of \$10.4 million of valuation allowances. The effective income tax rate for the year ended December 31, 2016 was negatively impacted by \$84.4 million (before and after tax) of charges related to the divestiture of our systems integration business in China during 2015.

For the year ended December 31, 2016, our effective tax rate was 21.6% compared to 26.1% for the year ended December 31, 2015. The effective income tax rate for the year ended December 31, 2016 was negatively impacted by \$84.4 million (before and after tax) of charges related to the divestiture of our systems integration business in China during 2015. The effective income tax rate for the ended December 31, 2015 was negatively impacted by \$111.3 million (\$115.0 million after tax) of charges related to the divestiture of our systems integration business in China, the divestiture of our business in Venezuela and the devaluation of the Venezuelan bolivar. Excluding these charges, the effective tax rate for the year ended December 31, 2016 increased primarily due to increases in uncertain tax positions in 2016 that were partially offset by favorable changes in the mix of income earned in lower rate jurisdictions and the continued execution of our tax strategies.

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## Review of Business Segments

We operate in and report financial results for three segments: Americas, EMEIA, and Asia Pacific. These segments represent the level at which our chief operating decision maker reviews company financial performance and makes operating decisions.

Segment operating income is the measure of profit and loss that our chief operating decision maker uses to evaluate the financial performance of the business and as the basis for resource allocation, performance reviews, and compensation. For these reasons, we believe that Segment operating income represents the most relevant measure of Segment profit and loss. Our chief operating decision maker may exclude certain charges or gains, such as corporate charges and other special charges, from operating income to arrive at a Segment operating income that is a more meaningful measure of profit and loss upon which to base our operating decisions. We define Segment operating margin as Segment operating income as a percentage of net revenues.

The segment discussions that follow describe the significant factors contributing to the changes in results for each segment included in continuing operations.

## Segment Results of Operations - For the years ended December 31

in millions	2017	2016	% Change	2016	2015	% Change
Net revenues						
Americas	\$1,767.5	\$1,645.7	7.4 %	\$1,645.7	\$1,558.4	5.6 %
EMEIA	523.5	485.9	7.7 %	485.9	386.3	25.8 %
Asia Pacific	117.2	106.4	10.2 %	106.4	123.4	(13.8)%
Total	\$2,408.2	\$2,238.0		\$2,238.0	\$2,068.1	
Segment operating income (loss)						
Americas	\$503.3	\$448.1	12.3 %	\$448.1	\$418.0	7.2 %
EMEIA	45.2	35.9	25.9 %	35.9	8.6	317.4 %
Asia Pacific	9.5	6.1	55.7 %	6.1	(3.4 )	279.4 %
Total	\$558.0	\$490.1		\$490.1	\$423.2	
Segment operating margin						
Americas	28.5	% 27.2	%	27.2	% 26.8	%
EMEIA	8.6	% 7.4	%	7.4	% 2.2	%
Asia Pacific	8.1	% 5.7	%	5.7	% (2.8)	%

## Americas

Our Americas segment is a leading provider of security products and solutions in approximately 30 countries throughout North America, Central America, the Caribbean and South America. The segment sells a broad range of products and solutions including, locks, locksets, portable locks, key systems, door closers, exit devices, doors and door systems, electronic product and access control systems to end-users in commercial, institutional and residential facilities, including into the education, healthcare, government, commercial office and single and multi-family residential markets. This segment's primary brands are Schlage, Von Duprin and LCN.

## 2017 vs 2016

## Net revenues

Net revenues for the year ended December 31, 2017 increased by 7.4%, or \$121.8 million, compared to the same period in 2016 due to the following:



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Pricing	2.0%
Volume	3.8%
Acquisitions	1.4%
Currency exchange rates	0.2%
Total	7.4%

The increase in revenues was due to higher volumes, improved pricing, the impact of an acquisition in January 2017, and favorable foreign currency exchange rate movements. Net revenues from non-residential products for the year ended December 31, 2017 increased high single digits compared to the same period in the prior year due to market growth, product launches and channel initiatives. Net revenues from residential products for the year ended December 31, 2017 increased mid-single digits compared to the same period in the prior year primarily due to domestic market growth.

## Operating income/margin

Segment operating income for the year ended December 31, 2017 increased \$55.2 million and segment operating margin increased to 28.5% from 27.2% compared to the same period in 2016 due to the following:

in millions	Operating Income	Operating Margin
December 31, 2016	\$ 448.1	27.2 %
Pricing and productivity in excess of inflation	29.3	1.2 %
Volume / Product mix	22.2	0.3 %
Currency exchange rates	2.6	0.1 %
Investment spending	(10.7 )	(0.6 )%
Acquisitions	0.3	(0.4 )%
Environmental remediation charge	15.0	0.9 %
Restructuring / acquisition costs	(3.5 )	(0.2 )%
December 31, 2017	\$ 503.3	28.5 %

Operating income increased primarily due to pricing improvements and productivity in excess of inflation, favorable volume/product mix, favorable foreign currency exchange rate movements, lower environmental remediation charges in the current year due to a charge in the prior year for a change in approach for environmental remediation related to two sites in the U.S., and the impact of acquisitions. These increases were partially offset by increased investment spending primarily for new product development and channel development and restructuring and acquisition costs.

Operating margin increased primarily due to pricing improvements and productivity in excess of inflation, favorable volume/product mix, favorable foreign currency exchange rate movements, and lower environmental remediation charges in the current year due to a charge in the prior year for a change in approach for environmental remediation related to two sites in the U.S. These increases were partially offset by increased investment spending primarily for new product development and channel development, restructuring and acquisition costs, and the impact of acquisitions.

## 2016 vs 2015

## Net revenues

Net revenues for the year ended December 31, 2016 increased by 5.6%, or \$87.3 million, compared to the same period in 2015 due to the following:

Pricing	0.9 %
Volume	5.6 %

Acquisitions	(0.6)%
Currency exchange rates	(0.3)%
Total	5.6 %

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The increase in revenues was primarily due to higher volumes and improved pricing. Net revenues from non-residential products for the year ended December 31, 2016 increased mid to high single digits compared to the same period in the prior year due to market growth, product launches, and channel initiatives. Net revenues from residential products for the year ended December 31, 2016 increased low single digits compared to the same period in the prior year primarily due to domestic market growth. These increases were partially offset by unfavorable foreign currency exchange movements and the 2015 divestiture of our Venezuelan operation.

## Operating income/margin

Segment operating income for the year ended December 31, 2016 increased \$30.1 million and segment operating margin increased to 27.2% from 26.8% compared to the same period in 2015 due to the following:

in millions	Operating Income	Operating Margin	
December 31, 2015	\$ 418.0	26.8	%
Pricing and productivity in excess of inflation	9.9	0.4	%
Volume / Product mix	40.2	1.0	%
Non-cash inventory impairment	4.2	0.3	%
Currency exchange rates	6.5	0.5	%
Investment spending	(6.4 )	(0.4 )	%
Acquisitions / divestitures	(7.4 )	(0.3 )	%
Environmental remediation charge	(15.0 )	(1.0 )	%
Restructuring / acquisition costs	(1.9 )	(0.1 )	%
December 31, 2016	\$ 448.1	27.2	%

The increases were primarily due to favorable volume/product mix, inventory impairment charges year-over-year in Venezuela, pricing improvements and productivity in excess of inflation and favorable foreign currency exchange rate movements. These increases were partially offset by the divestiture of our Venezuelan operations, increased investment spending primarily for new product development and channel development, restructuring and acquisition costs and a charge for a change in approach for environmental remediation at two sites in the U.S.

## EMEIA

Our EMEIA segment provides security products and solutions in approximately 85 countries throughout Europe, the Middle East, India and Africa. The segment offers end-users a broad range of products, services and solutions including, locks, locksets, portable locks, key systems, door closers, exit devices, doors and door systems, electronic product and access control systems, as well as time and attendance and workforce productivity solutions. This segment's primary brands are AXA, Bricard, CISA, Interflex and SimonsVoss. This segment also resells Schlage, Von Duprin and LCN products, primarily in the Middle East.

2017 vs 2016

## Net revenues

Net revenues for the year ended December 31, 2017 increased by 7.7%, or \$37.6 million, compared to the same period in 2016 due to the following:

Pricing	1.6%
Volume	3.1%
Acquisitions	1.6%
Currency exchange rates	1.4%
Total	7.7%



The increase in revenues was due to higher volumes, improved pricing, the impact of an acquisition made in the prior year, and favorable foreign currency exchange rate movements.

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## Operating income/margin

Segment operating income for the year ended December 31, 2017 increased \$9.3 million and segment operating margin increased to 8.6% from 7.4% compared to the same period in 2016 due to the following:

in millions	Operating		
	Income	Margin	
December 31, 2016	\$ 35.9	7.4	%
Pricing and productivity in excess of inflation	5.1	0.9	%
Volume / Product mix	5.2	0.8	%
Currency exchange rates	1.3	0.1	%
Investment spending	(2.4 )	(0.5 )	%
Acquisitions	(0.9 )	(0.3 )	%
Restructuring / acquisition costs	1.0	0.2	%
December 31, 2017	\$ 45.2	8.6	%

The increases were primarily due to pricing improvements and productivity in excess of inflation, improvements in volume/product mix, favorable foreign currency exchange rate movements, and year-over-year change in restructuring and acquisition costs. These increases were partially offset by increased investment spending and the impact from an acquisition in the prior year.

2016 vs 2015

## Net revenue

Net revenues for the year ended December 31, 2016 increased by 25.8%, or \$99.6 million, compared to the same period in 2015 due to following:

Pricing	1.2	%
Volume	1.0	%
Acquisitions / divestitures	25.4	%
Currency exchange rates	(1.8 )	%
Total	25.8	%

The increase in revenues was primarily due to the full-year impact of acquisitions made in 2015, slightly higher volumes and improved pricing offset by unfavorable foreign currency exchange rate movements.

## Operating income/margin

Segment operating income for the year ended December 31, 2016 increased \$27.3 million and operating margin increased to 7.4% from 2.2% compared to the same period in 2015 due to the following:

in millions	Operating		
	Income	Margin	
December 31, 2015	\$ 8.6	2.2	%
Pricing and productivity in excess of inflation	9.4	1.6	%
Volume / Product mix	0.2	—	%
Currency exchange rates	(1.9 )	(0.5 )	%
Investment spending	(2.2 )	(0.6 )	%
Acquisitions / divestitures	9.0	1.4	%
Restructuring / acquisition costs	12.8	3.3	%
December 31, 2016	\$ 35.9	7.4	%

The increases were primarily due to pricing improvements and productivity in excess of inflation, the impact of 2015 acquisitions, slight improvement in volume/product mix and year-over-year change in restructuring and acquisition costs. These increases were partially offset by unfavorable foreign currency exchange rate movements and increased investment spending.



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## Asia Pacific

Our Asia Pacific segment provides security products and solutions in approximately 15 countries throughout the Asia Pacific region. The segment offers end-users a broad range of products, services and solutions including, locks, locksets, portable locks, key systems, door closers, exit devices, electronic product and access control systems. This segment's primary brands are Milre, Schlage, Legge, Brio and FSH.

## 2017 vs 2016

## Net revenues

Net revenues for the year ended December 31, 2017 increased by 10.2%, or \$10.8 million, compared to the same period in 2016, due to the following:

Pricing	0.4 %
Volume	7.3 %
Acquisitions	0.7 %
Currency exchange rates	1.8 %
Total	10.2%

The increase in revenues was due to higher volumes, improved pricing, the impact of an acquisition made in the prior year, and favorable foreign currency exchange rate movements.

## Operating income/margin

Segment operating income for the year ended December 31, 2017 increased \$3.4 million and segment operating margin increased to 8.1% from 5.7% compared with the same period in 2016 due to the following:

in millions	Operating	
	Income	Margin
December 31, 2016	\$ 6.1	5.7 %
Pricing and productivity in excess of inflation	1.5	1.3 %
Volume / Product mix	2.0	1.3 %
Currency exchange rates	0.4	0.3 %
Investment spending	(0.4 )	(0.4 )%
Acquisitions	(0.1 )	(0.1 )%
December 31, 2017	\$ 9.5	8.1 %

The increases were primarily related to pricing improvements and productivity in excess of inflation, improved volume/product mix, and favorable foreign currency exchange rate movements. These increases were partially offset by increased investment spending and the impact of an acquisition in the prior year.

## 2016 vs 2015

## Net revenues

Net revenues for the year ended December 31, 2016 decreased by 13.8%, or \$17.0 million, compared with the same period of 2015, due to the following:

Pricing	0.4 %
Volume	7.1 %
Acquisitions / divestitures	(19.7)%
Currency exchange rates	(1.6 )%
Total	(13.8)%



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The decrease in revenues was primarily due to the divestiture of our systems integration business in China in the fourth quarter of 2015, as well as unfavorable foreign currency exchange rate movements. These decreases were partially offset by higher volumes, acquisition revenue and slightly improved pricing in our remaining business.

## Operating income/margin

Segment operating income for the year ended December 31, 2016 increased \$9.5 million and segment operating margin increased to 5.7% from (2.8)% compared with the same period in 2015 due to the following:

in millions	Operating Income	Operating Margin
December 31, 2015	\$ (3.4 )	(2.8 )%
Inflation in excess of pricing and productivity	(0.4 )	(0.1 )%
Volume / Product mix	3.5	2.8 %
Investment spending	(1.1 )	(0.9 )%
Acquisitions / divestitures	5.6	5.1 %
Restructuring / acquisition costs	1.9	1.6 %
December 31, 2016	\$ 6.1	5.7 %

The increases were primarily related to improved volume/product mix, the divestiture of our systems integration business in China in 2015, acquisitions and the year-over-year change in restructuring and acquisition costs. These increases were partially offset by increased investment spending and inflation in excess of pricing and productivity.

## Liquidity and Capital Resources

## Sources and uses of liquidity

Our primary source of liquidity is cash provided by operating activities. Cash provided by operating activities is used to invest in new product development, fund capital expenditures and fund working capital requirements and is expected to be adequate to service any future debt, pay any declared dividends and potentially fund acquisitions and share repurchases. Our ability to fund these capital needs depends on our ongoing ability to generate cash provided by operating activities, and to access our borrowing facilities (including unused availability under our Revolving Facility) and capital markets. We believe that our future cash provided by operating activities, availability under our Revolving Facility and access to funds on hand and capital markets, will provide adequate resources to fund our operating and financing needs.

The following table reflects the major categories of cash flows for the years ended December 31. For additional details, please see the Consolidated Statements of Cash Flows in the Consolidated Financial Statements.

In millions	2017	2016	2015
Cash provided by continuing operating activities	\$347.2	\$377.5	\$257.4
Cash used in investing activities	(50.2 )	(64.0 )	(533.8 )
Cash (used in) provided by financing activities	\$(150.9)	\$(196.0)	\$195.0

## Operating activities

Net cash provided by continuing operating activities for the year ended December 31, 2017 decreased \$30.3 million compared to the same period in 2016. Operating cash flows for 2017 reflect a discretionary \$50.0 million contribution to the U.S. qualified defined benefit pension plan and increased cash paid for taxes, which were partially offset by higher net earnings compared to the same period in the prior year.

Net cash provided by continuing operating activities for the year ended December 31, 2016 increased \$120.1 million compared to the same period in 2015. Operating cash flows for 2016 reflect higher net earnings compared to the same period in 2015.

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## Investing activities

Net cash used in investing activities for the year ended December 31, 2017 decreased \$13.8 million compared to the same period in the prior year. The decrease in net cash used in investing activities is primarily due to \$15.6 million in proceeds from the sale of an equity investment during 2017 that did not occur in the prior year and a \$10.6 million decrease of cash payments related to acquisitions. These changes were partially offset by \$14.1 million of cash received from the sale of marketable securities in 2016 that did not recur in the current year.

Net cash used in investing activities for the year ended December 31, 2016 decreased \$469.8 million compared to the same period in the prior year. During the year ended December 31, 2016, cash used for acquisitions decreased \$479.9 million compared to the year ended December 31, 2015. This was partially offset by an increase in capital expenditures of \$7.3 million compared to 2015.

## Financing activities

Net cash used in financing activities for the year ended December 31, 2017 decreased \$45.1 million compared to the same period in the prior year. The decrease in cash used in financing activities is due to net proceeds from debt issuances over debt repayments of \$10.1 million in 2017 versus net debt repayments of \$64.4 million during 2016. Current year debt financing activity includes the redemption of the 2021 and 2023 Senior Notes for a total of \$600.0 million and the settlement of the previously outstanding Term Loan A Facility of \$856.3 million, offset by the issuance of the 3.200% and 3.550% Senior Notes in an aggregate amount of \$800.0 million and a new term loan facility maturing on September 12, 2022 (the "Term Facility") in the amount of \$700.0 million. Additionally, during the year ended December 31, 2017, we repurchased \$60.0 million of common shares, compared to \$85.1 million during 2016. We also made dividend payments to ordinary shareholders of \$60.9 million during the current year, compared to \$46.0 million in 2016.

Net cash used in financing activities for the year ended December 31, 2016 increased \$391.0 million compared to the same period in the prior year. Net repayments of debt totaled \$64.4 million for the year ended December 31, 2016 primarily associated with required amortization payments from our previously outstanding Term Loan A Facility and repayments of other borrowings. Proceeds from long-term debt were \$300.0 million for the year ended December 31, 2015. Cash used in other financing activities increased \$48.3 million for the year ended December 31, 2016 compared to the prior year primarily due to higher dividend payments and increased repurchases of our ordinary shares partially offset by lower debt issuance costs, lower proceeds from shares issued under incentive plans and a reduction in dividends paid to noncontrolling interests.

## Capitalization

Borrowings at December 31 consisted of the following:

In millions	2017	2016
Term Loan A Facility	\$—	\$879.8
Term Facility	691.3	—
Revolving Facility	—	—
5.750% Senior Notes due 2021	—	300.0
5.875% Senior Notes due 2023	—	300.0
3.200% Senior Notes due 2024	400.0	—
3.550% Senior Notes due 2027	400.0	—
Other debt	1.0	2.3
Total borrowings outstanding	1,492.3	1,482.1
Less discounts and debt issuance costs, net	(15.0)	(18.3)



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Total debt	1,477.3	1,463.8
Less current portion of long term debt	35.0	48.2
Total long-term debt	\$1,442.3	\$1,415.6

As of December 31, 2017, we have a Credit Agreement in place that provides for up to \$1,200.0 million in unsecured financing, consisting of a \$700.0 million term loan facility (the “Term Facility”) and a \$500.0 million revolving credit facility (the “Revolving Facility” and, together with the Term Facility, the “Credit Facilities”). The Credit Facilities mature on September 12, 2022. The

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Term Facility amortizes in quarterly installments at the following rates: 1.25% per quarter starting December 31, 2017 through December 31, 2020, 2.5% per quarter from March, 31, 2021 through June 30, 2022, with the balance due on September 12, 2022. The Revolving Facility provides aggregate commitments of up to \$500.0 million, which includes up to \$100.0 million for the issuance of letters of credit. At December 31, 2017, there were no borrowings outstanding on the Revolving Facility, and we had \$17.4 million of letters of credit outstanding.

Outstanding borrowings under the Credit Facilities accrue interest, at our option of (i) a LIBOR rate plus the applicable margin or (ii) a base rate plus the applicable margin. The applicable margin ranges from 1.125% to 1.500% depending on our credit ratings. To manage our exposure to fluctuations in LIBOR rates, we have interest rate swaps to fix the interest rate for \$250.0 million of the outstanding borrowings (see Note 10).

As of December 31, 2017, we also have \$400.0 million outstanding of 3.200% Senior Notes due 2024 (the “3.200% Senior Notes”) and \$400.0 million outstanding of 3.550% Senior Notes due 2027 (the “3.550% Senior Notes” and, together with the 3.200% Senior Notes, the “Notes”), both of which were issued on October 2, 2017. The Notes require semi-annual interest payments on April 1 and October 1 of each year, and will mature on October 1, 2024 and October 1, 2027, respectively.

Historically, the majority of our earnings were considered to be permanently reinvested in jurisdictions where we have made, and intend to continue to make, substantial investments to support the ongoing development and growth of our global operations. As a result of the Tax Reform Act transition tax, we are currently analyzing our global working capital requirements and the potential tax liabilities that would be incurred if certain non-U.S. subsidiaries made distributions, which include local country withholding tax and potential U.S. state taxation. We are not yet able to reasonably estimate the effect of this provision of the Tax Reform Act and have not recorded any withholding or state tax liabilities or any deferred taxes attributable to our investment in our non-U.S. subsidiaries.

At December 31, 2017, we had cash and cash equivalents of \$466.2 million. Approximately 34% of our cash and cash equivalents were located outside the U.S.

#### Pension Plans

Our investment objective in managing defined benefit plan assets is to ensure that all present and future benefit obligations are met as they come due. We seek to achieve this goal while trying to mitigate volatility in plan funded status, contribution and expense by better matching the characteristics of the plan assets to that of the plan liabilities. Global asset allocation decisions are based on a dynamic approach whereby a plan's allocation to fixed income assets increases as the funded status increases. We monitor plan funded status and asset allocation regularly in addition to investment manager performance.

We monitor the impact of market conditions on our defined benefit plans on a regular basis. In January 2017, we made a discretionary \$50.0 million contribution to the U.S. qualified defined benefit pension plan. At December 31, 2017, the funded status of our qualified pension plan for U.S. employees increased to 93.3% from 73.6% at December 31, 2016, primarily as a result of this discretionary contribution. The funded status for our non-U.S. pension plans increased to 100.5% at December 31, 2017 from 92.9% at December 31, 2016. Funded status for all of our pension plans at December 31, 2017 increased to 95.5% from 83.3% at December 31, 2016. For further details on pension plan activity, see Note 11 to the Consolidated Financial Statements.

#### Contractual Obligations

The following table summarizes our contractual cash obligations by required payment periods, in millions:

	2018	2019-2020	2021-2022	Thereafter	Total
Long-term debt (including current maturities)	\$ 35.0	\$ 70.0	\$ 586.3	\$ 801.0	\$ 1,492.3

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Interest payments on long-term debt	46.7	90.5	82.5	89.9	309.6
Purchase obligations	169.5	—	—	—	169.5
Operating leases	20.5	30.9	12.0	13.3	76.7
Total contractual cash obligations	\$271.7	\$ 191.4	\$ 680.8	\$ 904.2	\$2,048.1

Future expected obligations under our pension and postretirement benefit plans, income taxes, environmental and product liability matters have not been included in the contractual cash obligations table above.

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### Pensions

At December 31, 2017, we had net pension liabilities of \$32.2 million, which consist of plan assets of \$681.6 million and benefit obligations of \$713.8 million. It is our objective to contribute to the pension plans to ensure adequate funds are available in the plans to make benefit payments to plan participants and beneficiaries when required. The funded status for all of our pension plans increased to 95.5% at December 31, 2017 from 83.3% at December 31, 2016. We currently project that an additional approximately \$13.5 million will be contributed to our plans worldwide in 2018. Because the timing and amounts of long-term funding requirements for pension obligations are uncertain, they have been excluded from the preceding table. See Note 11 to the Consolidated Financial Statements for additional information.

### Postretirement Benefits Other than Pensions

At December 31, 2017, we had postretirement benefit obligations of \$9.3 million. We fund postretirement benefit costs principally on a pay-as-you-go basis as medical costs are incurred by covered retiree populations. Benefit payments, which are net of expected plan participant contributions and Medicare Part D subsidy, are expected to be approximately \$0.9 million in 2018. Because the timing and amounts of long-term funding requirements for postretirement obligations are uncertain, they have been excluded from the preceding table. See Note 11 to the Consolidated Financial Statements for additional information.

### Income Taxes

At December 31, 2017, we have total unrecognized tax benefits for uncertain tax positions of \$29.0 million and \$4.9 million of related accrued interest and penalties, net of tax. The liability has been excluded from the preceding table as we are unable to reasonably estimate the amount and period in which these liabilities might be paid. See Note 17 to the Consolidated Financial Statements for additional information regarding matters relating to income taxes, including unrecognized tax benefits and tax authority disputes.

### Contingent Liabilities

We are involved in various litigations, claims and administrative proceedings, including those related to environmental, asbestos-related, and product liability matters. We believe that these liabilities are subject to the uncertainties inherent in estimating future costs for contingent liabilities, and will likely be resolved over an extended period of time. Because the timing and amounts of potential future cash flows are uncertain, they have been excluded from the preceding table. See Note 19 to the Consolidated Financial Statements for additional information.

### Critical Accounting Policies

Management's Discussion and Analysis of Financial Condition and Results of Operations are based upon our Consolidated Financial Statements, which have been prepared in accordance with GAAP. The preparation of financial statements in conformity with those accounting principles requires management to use judgment in making estimates and assumptions based on the relevant information available at the end of each period. These estimates and assumptions have a significant effect on reported amounts of assets and liabilities, revenue and expenses as well as the disclosure of contingent assets and liabilities because they result primarily from the need to make estimates and assumptions on matters that are inherently uncertain. Actual results may differ from estimates. If updated information or actual amounts are different from previous estimates, the revisions are included in our results for the period in which they become known.

The following is a summary of certain accounting estimates and assumptions made by management that we consider critical:

Allowance for doubtful accounts – We have provided an allowance for doubtful accounts receivable, which represents our best estimate of probable loss inherent in our accounts receivable portfolio. This estimate is based upon our policy, derived from our knowledge of our end markets, customer base and products.

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Goodwill and indefinite-lived intangible assets – We have significant goodwill and indefinite-lived intangible assets on our balance sheet related to acquisitions. Our goodwill and other indefinite-lived intangible assets are tested annually during the fourth quarter for impairment or when there is a significant change in events or circumstances that indicate that the fair value of an asset is more likely than not less than the carrying amount of the asset.

Recoverability of goodwill is measured at the reporting unit level and starts with a comparison of the carrying amount of the reporting unit to its estimated fair value. If the estimated fair value of a reporting unit exceeds its carrying amount, goodwill of the reporting unit is not impaired. To the extent that the carrying value of the reporting unit exceeds its estimated fair value, a goodwill impairment charge will be recognized for the amount by which the carrying value of the reporting unit exceeds its fair value, not to exceed the carrying amount of goodwill.

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As quoted market prices are not available for our reporting units, the calculation of their estimated fair value is based on two valuation techniques, a discounted cash flow model (income approach) and a market adjusted multiple of earnings and revenues (market approach), with each method being weighted in the calculation. The income approach relies on the Company's estimates of future cash flows and explicitly addresses factors such as timing, growth and margins, with due consideration given to forecasting risk. The market approach reflects the market's expectations for future growth and risk, with adjustments to account for differences between the guideline publicly-traded companies and the subject reporting units.

The estimated fair values for each of our reporting units exceeded their carrying values by more than 15% for the 2017 goodwill impairment test. Additionally, a 1% increase in the discount rate used or a 1% decrease in the terminal growth rate would not result in the carrying value of any reporting unit exceeding its estimated fair value.

Assessing the fair value of our reporting units includes, among other things, making key assumptions for estimating future cash flows and appropriate market multiples. These assumptions are subject to a high degree of judgment and complexity. We make every effort to estimate future cash flows as accurately as possible with the information available at the time the forecast is developed. However, changes in assumptions and estimates may affect the estimated fair value of the reporting unit, and could result in impairment charges in future periods. Factors that have the potential to create variances in the estimated fair value of the reporting unit include but are not limited to the following:

- Decreases in estimated market sizes or market growth rates due to greater-than-expected declines in volumes, pricing pressures or disruptive technology;

- Declines in our market share and penetration assumptions due to increased competition or an inability to develop or launch new products;

- The impacts of the market volatility, including greater-than-expected declines in pricing, reductions in volumes, or fluctuations in foreign exchange rates;

- The level of success of on-going and future research and development efforts, including those related to recent acquisitions, and increases in the research and development costs necessary to obtain regulatory approvals and launch new products;

- Increase in the price or decrease in the availability of key commodities and the impact of higher energy prices; and

- Increases in our market-participant risk-adjusted weighted-average cost of capital.

Other Indefinite-lived intangible assets - We performed our annual indefinite-lived intangible asset impairment testing in 2017 and determined our indefinite-lived intangible assets were not impaired. Recoverability of intangible assets with indefinite useful lives is determined on a relief from royalty methodology (income approach), which is based on the implied royalty paid, at an appropriate discount rate, to license the use of an asset rather than owning the asset.

The present value of the after-tax cost savings (i.e. royalty relief) indicates the estimated fair value of the asset. Any excess of the carrying value over the estimated fair value is recognized as an impairment loss equal to that excess.

A significant increase in the discount rate, decrease in the long-term growth rate, decrease in the royalty rate or substantial reductions in our end markets and volume assumptions could have a negative impact on the estimated fair values of any of our trade names. The estimates of fair value are based on the best information available as of the date of the assessment, which primarily incorporates management assumptions about expected future cash flows.

Long-lived assets and finite-lived intangibles – Long-lived assets and finite-lived intangibles are reviewed for impairment whenever events or changes in business circumstances indicate that the carrying amount of an asset may not be fully recoverable. Assets are grouped with other assets and liabilities at the lowest level for which identifiable cash flows can be generated. Impairment in the carrying value of an asset could be recognized whenever anticipated future undiscounted cash flows from an asset are less than its carrying value. The impairment is measured as the amount by which the carrying value exceeds the fair value of the asset as determined by an estimate of discounted cash flows. We believe that our use of estimates and assumptions are reasonable and comply with generally accepted accounting principles. Changes in business conditions could potentially require future adjustments to these valuations.

Loss contingencies – Liabilities are recorded for various contingencies arising in the normal course of business, including litigation and administrative proceedings, environmental and asbestos matters and product liability, product warranty, worker's compensation and other claims. We have recorded reserves in the consolidated financial statements

related to these matters, which are developed using input derived from actuarial estimates and historical and anticipated experience

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data depending on the nature of the reserve, and in certain instances with consultation of legal counsel, internal and external consultants and engineers. Subject to the uncertainties inherent in estimating future costs for these types of liabilities, we believe our estimated reserves are reasonable and do not believe the final determination of the liabilities with respect to these matters would have a material effect on our financial condition, results of operations, liquidity or cash flows for any year.

Revenue recognition – Revenue is recognized and earned when all of the following criteria are satisfied: (a) persuasive evidence of a sales arrangement exists; (b) the price is fixed or determinable; (c) collectability is reasonably assured; and (d) delivery has occurred or service has been rendered. Delivery generally occurs when the title and the risks and rewards of ownership have transferred to the customer. Both the persuasive evidence of a sales arrangement and fixed or determinable price criteria are deemed to be satisfied upon receipt of an executed and legally binding sales agreement or contract that clearly defines the terms and conditions of the transaction including the respective obligations of the parties. If the defined terms and conditions allow variability in all or a component of the price, revenue is not recognized until such time that the price becomes fixed or determinable. At the point of sale, we validate that existence of an enforceable claim that requires payment within a reasonable amount of time and assesses the collectability of that claim. If collectability is not deemed to be reasonably assured, then revenue recognition is deferred until such time that collectability becomes probable or cash is received. Delivery is not considered to have occurred until the customer has taken title and assumed the risks and rewards of ownership. Service and installation revenue are recognized when earned. In some instances, customer acceptance provisions are included in sales arrangements to give the buyer the ability to ensure the delivered product or service meets the criteria established in the order. In these instances, revenue recognition is deferred until the acceptance terms specified in the arrangement are fulfilled through customer acceptance or a demonstration that established criteria have been satisfied. If uncertainty exists about customer acceptance, revenue is not recognized until acceptance has occurred.

We offer various sales incentive programs to our customers, dealers, and distributors. Sales incentive programs do not preclude revenue recognition, but do require an accrual for our best estimate of expected activity. Examples of the sales incentives that are accrued for as a contra receivable and sales deduction at the point of sale include, but are not limited to, discounts (i.e. net 30 type), coupons, and rebates where the customer does not have to provide any additional requirements to receive the discount. Sales returns and customer disputes involving a question of quantity or price are also accounted for as a reduction in revenue and a contra receivable. At December 31, 2017 and 2016, we had a customer claim accrual (contra receivable) of \$32.5 million and \$29.0 million, respectively. All other incentives or incentive programs where the customer is required to reach a certain sales level, remain a customer for a certain period, provide a rebate form or is subject to additional requirements are accounted for as a reduction of revenue and establishment of a liability. At December 31, 2017 and 2016, we had a sales incentive accrual of \$31.8 million and \$29.6 million, respectively. Each of these accruals represents our best estimate we expect to pay related to previously sold units based on historical claim experience. These estimates are reviewed regularly for accuracy. If updated information or actual amounts are different from previous estimates, the revisions are included in our results for the period in which they become known. Historically, the aggregate differences, if any, between our estimates and actual amounts in any year have not had a material impact on our consolidated financial statements.

Income taxes – We account for income taxes in accordance with ASC Topic 740. Deferred tax assets and liabilities are determined based on temporary differences between financial reporting and tax bases of assets and liabilities, applying enacted tax rates expected to be in effect for the year in which the differences are expected to reverse. We recognize future tax benefits, such as net operating losses and non-U.S. tax credits, to the extent that realizing these benefits is considered in our judgment to be more likely than not. We regularly review the recoverability of our deferred tax assets considering our historic profitability, projected future taxable income, timing of the reversals of existing temporary differences and the feasibility of our tax planning strategies. Where appropriate, we record a valuation allowance with respect to a future tax benefit.

The provision for income taxes involves a significant amount of management judgment regarding interpretation of relevant facts and laws in the jurisdictions in which we operate. Future changes in applicable laws, projected levels of taxable income, and tax planning could change the effective tax rate and tax balances recorded by us. In addition, tax authorities periodically review income tax returns filed by us and can raise issues regarding our filing positions,



timing and amount of income or deductions, and the allocation of income among the jurisdictions in which we operate. A significant period of time may elapse between the filing of an income tax return and the ultimate resolution of an issue raised by a revenue authority with respect to that return. We believe that we have adequately provided for any reasonably foreseeable resolution of these matters. We will adjust our estimate if significant events so dictate. To the extent that the ultimate results differ from our original or adjusted estimates, the effect will be recorded in the provision for income taxes in the period that the matter is finally resolved.

The Tax Reform Act constitutes a major change to the U.S. tax system. The estimated impact of the Tax Reform Act is based on current interpretations and related assumptions. As discussed further in Note 17 to the Consolidated Financial

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Statements, where applicable, we included provisional estimates in our consolidated financial statements for impacts of the new Tax Reform Act. The actual impact to us may be materially different from current estimates based on regulatory developments and our further analysis of the impacts of the Tax Reform Act. In future periods, our effective tax rate could be subject to additional uncertainty as a result of regulatory developments.

Employee benefit plans – We provide a range of benefits to eligible employees and retirees, including pensions, postretirement and postemployment benefits. Determining the cost associated with such benefits is dependent on various actuarial assumptions including discount rates, expected return on plan assets, compensation increases, employee mortality, turnover rates and healthcare cost trend rates. Actuarial valuations are performed to determine expense in accordance with GAAP. Actual results may differ from the actuarial assumptions and are generally accumulated and amortized into earnings over future periods.

We review our actuarial assumptions at each measurement date and make modifications to the assumptions based on current rates and trends, if appropriate. The discount rate, the rate of compensation increase and the expected long-term rates of return on plan assets are determined as of each measurement date. Discount rates for all plans are established using hypothetical yield curves based on the yields of corporate bonds rated AA quality. Spot rates are developed from the yield curve and used to discount future benefit payments. The rate of compensation increase is dependent on expected future compensation levels. The expected long-term rate of return on plan assets reflects the average rate of returns expected on the funds invested or to be invested to provide for the benefits included in the projected benefit obligation. The expected long-term rate of return on plan assets is based on what is achievable given the plan's investment policy, the types of assets held and the target asset allocation. The expected long-term rate of return is determined as of each measurement date.

We believe that the assumptions utilized in recording our obligations under our plans are reasonable based on input from our actuaries, outside investment advisors and information as to assumptions used by plan sponsors.

Changes in any of the assumptions can have an impact on the net periodic pension cost or postretirement benefit cost. Estimated sensitivities to the expected 2017 net periodic pension cost of a 0.25% rate decline in the two basic assumptions are as follows: the decline in the discount rate would increase expense by approximately \$0.8 million and the decline in the estimated return on assets would increase expense by approximately \$0.7 million. A 1.0% increase in the healthcare cost trend rate would have no impact on expense as we have capped the annual maximum amount we will pay for retiree healthcare costs, therefore any additional costs would be assumed by the retiree.

Business combinations – The fair value of the consideration paid in a business combination is allocated to tangible assets and identifiable intangible assets, liabilities assumed and goodwill. The accounting for acquisitions involves a considerable amount of judgment and estimate, including the fair value of acquired intangible assets involving projections of future revenues and cash flows that are either discounted at an estimated discount rate or measured at an estimated royalty rate; fair value of other acquired assets and assumed liabilities, including potential contingencies; and the useful lives of the acquired assets. The assumptions used are determined at the time of the acquisition in accordance with accepted valuation models. Projections are developed using internal forecasts, available industry and market data and estimates of long-term growth rates. The impact of prior or future acquisitions on our financial condition or results of operations may be materially impacted by the change in or initial selection of assumptions and estimates.

## Recent Accounting Pronouncements

See Note 2 to our consolidated financial statements included in Item 15 herein for a discussion of recently issued and adopted accounting pronouncements.

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Item 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURE ABOUT MARKET RISK

We are exposed to fluctuations in currency exchange rates, interest rates and commodity prices which could impact our results of operations and financial condition.

Foreign Currency Exposures

We have operations throughout the world that manufacture and sell products in various international markets. As a result, we are exposed to movements in exchange rates of various currencies against the U.S. dollar as well as against other currencies throughout the world. We actively manage material currency exposures that are associated with purchases and sales and other assets and liabilities at the legal entity level, however we do not hedge currency translation risk. We attempt to hedge exposures that cannot be naturally offset to an insignificant amount with foreign currency derivatives. Derivative instruments utilized by us in our hedging activities are viewed as risk management tools, involve little complexity and are not used for trading or speculative purposes. To minimize the risk of counterparty non-performance, derivative instrument agreements are made only through major financial institutions with significant experience in such derivative instruments.

We evaluate our exposure to changes in currency exchange rates on our foreign currency derivatives using a sensitivity analysis. The sensitivity analysis is a measurement of the potential loss in fair value based on a percentage change in exchange rates. Based on the firmly committed currency derivative instruments in place at December 31, 2017, a hypothetical change in fair value of those derivative instruments assuming a 10% adverse change in exchange rates would result in an additional unrealized loss of approximately \$7.4 million. This amount, when realized, would be partially offset by changes in the fair value of the underlying transactions.

Commodity Price Exposures

We are exposed to volatility in the prices of commodities used in some of our products and we use fixed price contracts to manage this exposure. We do not have committed commodity derivative instruments in place at December 31, 2017.

Interest Rate Exposure

Outstanding borrowings under our unsecured Credit Facilities accrue interest, at the option of the Company, at a per annum rate of (i) a LIBOR rate plus the applicable margin or (ii) a base rate plus the applicable margin. The applicable margin for borrowings under the Credit Facilities is subject to a ratings-based pricing grid with the margin ranging from 1.125% to 1.500% depending on the Company's credit ratings. Outstanding borrowings under the Term Facility as of December 31, 2017, accrue interest at LIBOR plus an applicable margin and expose us to interest rate risks.

The Company has entered into interest rate swaps to fix the interest rate paid during the contract period for \$250 million of the Company's variable rate Term Facility. These swaps expire in September 2020. A 100 basis point increase in LIBOR would have resulted in incremental 2017 interest expense of approximately \$5.6 million. If the base interest rate in our credit facilities increases in the future, our floating-rate debt could have a material effect on our interest expense.

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## Item 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

The following Consolidated Financial Statements and Financial Statement Schedule and the report thereon of (a) PricewaterhouseCoopers LLP dated February 20, 2018, are presented following Item 15 of this Annual Report on Form 10-K.

## Consolidated Financial Statements:

Report of independent registered public accounting firm

Consolidated statements of comprehensive income for the years ended December 31, 2017, 2016 and 2015

Consolidated balance sheets at December 31, 2017 and 2016

For the years ended December 31, 2017, 2016 and 2015:

Consolidated statements of equity

Consolidated statements of cash flows

Notes to Consolidated Financial Statements

## Financial Statement Schedule:

Schedule II – Valuation and Qualifying Accounts for the years ended December 31, 2017, 2016 and 2015

(b) The unaudited selected quarterly financial data for the two years ended December 31, is as follows:

In millions, except per share amounts

	2017			
	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
Net revenues	\$548.8	\$627.0	\$609.4	\$623.0
Cost of goods sold	308.0	346.0	335.5	348.0
Operating income	98.8	134.1	126.1	129.2
Net earnings	68.7	105.8	90.1	12.1
Net earnings attributable to Allegion plc	68.4	105.5	89.8	9.6
Earnings per share attributable to Allegion plc ordinary shareholders:				
Basic	\$0.72	\$1.11	\$0.95	\$0.10
Diluted	\$0.71	\$1.10	\$0.94	\$0.10

In millions, except per share amounts

	2016			
	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
Net revenues	\$502.3	\$584.9	\$581.1	\$569.7
Cost of goods sold	286.0	317.5	317.6	331.6
Operating income	82.5	124.3	121.5	97.2
Net earnings	58.8	95.4	2.0	75.0
Net earnings attributable to Allegion plc	57.7	95.0	1.6	74.8
Earnings per share attributable to Allegion plc ordinary shareholders:				
Basic	\$0.60	\$0.99	\$0.02	\$0.78
Diluted	\$0.60	\$0.98	\$0.02	\$0.77

Net earnings from the fourth quarter of 2017 includes a \$41.3 million charge related to the refinancing of our senior notes and a net tax charge of \$53.5 million related to the U.S. Tax Reform Act.

Net earnings from the third quarter of 2016 includes an after tax \$84.4 million loss on divestiture related to the write-down of the carrying value of consideration receivable related to the 2015 divestiture of our systems integration

business in China.

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Item 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

Item 9A. CONTROLS AND PROCEDURES

(a) Evaluation of Disclosure Controls and Procedures

The Company's management, including its Chief Executive Officer and Chief Financial Officer, have conducted an evaluation of the effectiveness of the Company's disclosure controls and procedures (as such term is defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended (the Exchange Act)), as of the end of the period covered by this Annual Report on Form 10-K. Based on that evaluation, the Chief Executive Officer and Chief Financial Officer concluded as of December 31, 2017, that the Company's disclosure controls and procedures were effective in ensuring that information required to be disclosed by the Company in reports that it files or submits under the Exchange Act has been recorded, processed, summarized and reported, within the time periods specified in the Commission's rules and forms, and that such information has been accumulated and communicated to the Company's management including its Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure.

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

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as defined under Exchange Act Rules 13a-15(f) and 15d-15(f). Our 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. Internal control over financial reporting includes those policies and procedures that:

pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the Company's assets;

provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that the Company's receipts and expenditures are being made only in accordance with authorizations of the Company's management and directors; and

- 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.

Management assessed the effectiveness of our internal control over financial reporting as of December 31, 2017. In making this assessment, management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in Internal Control-Integrated Framework (2013). We concluded that our internal control over financial reporting was effective as of December 31, 2017.

The effectiveness of our internal control over financial reporting has been audited by PricewaterhouseCoopers LLP, the independent registered public accounting firm, as stated in their report herein.

(c) Changes in Internal Control Over Financial Reporting

There were no changes in the Company's internal control over financial reporting that occurred during the quarter ended December 31, 2017 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

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Item 9B. OTHER INFORMATION

None.

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**PART III**

**Item 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE**

The information regarding our executive officers is included in Part I under the caption "Executive Officers of Registrant."

The other information required by this item is incorporated herein by reference to the information contained under the headings "Item 1. Election of Directors", "Section 16(a) Beneficial Ownership Reporting Compliance" and "Corporate Governance" in Proxy Statement.

**Item 11. EXECUTIVE COMPENSATION**

The other information required by this item is incorporated herein by reference to the information contained under the headings "Compensation Discussion and Analysis", "Executive Compensation" and "Compensation Committee Report" in our Proxy Statement.

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

The other information required by this item is incorporated herein by reference to the information contained under the headings "Security Ownership of Certain Beneficial Owners and Management" and "Equity Compensation Plan Information" of our Proxy Statement.

**Item 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE**

The other information required by this item is incorporated herein by reference to the information contained under the headings "Corporate Governance" and "Certain Relationships and Related Person Transactions" of our Proxy Statement.

**Item 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES**

The information required by this item is incorporated herein by reference to the information contained under the caption "Fees of the Independent Auditors" in our Proxy Statement.

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PART IV

Item 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

(a) 1. and 2. Financial statements and financial statement schedule  
See Item 8.

3. Exhibits  
The exhibits listed on the accompanying index to exhibits are filed as part of this Annual Report on Form 10-K.

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INDEX TO EXHIBITS

(Item 15(a))

## Description

Pursuant to the rules and regulations of the SEC, we have filed certain agreements as exhibits to this Annual Report on Form 10-K. These agreements may contain representations and warranties by the parties. These representations and warranties have been made solely for the benefit of the other party or parties to such agreements and (i) may have been qualified by disclosures made to such other party or parties, (ii) were made only as of the date of such agreements or such other date(s) as may be specified in such agreements and are subject to more recent developments, which may not be fully reflected in our public disclosure, (iii) may reflect the allocation of risk among the parties to such agreements and (iv) may apply materiality standards different from what may be viewed as material to investors. Accordingly, these representations and warranties may not describe our actual state of affairs at the date hereof and should not be relied upon.

## (a) Exhibits

Exhibit Number	Exhibit Description	Method of Filing
<u>2.1</u>	Separation and Distribution Agreement between Ingersoll-Rand plc and Allegion plc, dated November 29, 2013.	Incorporated by reference to Exhibit 2.1 to the Company's Form 8-K filed with the SEC on December 2, 2013 (File No. 001-35971).
<u>4.1</u>	Amended and Restated Memorandum and Articles of Association of Allegion plc	Incorporated by reference to Exhibit 3.1 to the Company's Form 8-K filed with the SEC on June 13, 2016 (File No. 001-35971).
<u>4.2</u>	Certificate of Incorporation of Allegion plc	Incorporated by reference to Exhibit 3.2 to the Company's Registration Statement on Form 10 filed with the SEC on June 17, 2013, as amended (File No. 001-35971).
<u>4.1</u>	Indenture, dated as of October 2, 2017, among Allegion US Holding Company Inc., Allegion plc and Wells Fargo Bank, National Association.	Incorporated by reference to Exhibit 4.1 of Allegion plc's Current Report on Form 8-K filed October 2, 2017.
<u>4.2</u>	First Supplemental Indenture, dated as of October 2, 2017, among Allegion US Holding Company Inc., Allegion plc and Wells Fargo Bank, National Association.	Incorporated by reference to Exhibit 4.2 of Allegion plc's Current Report on Form 8-K filed October 2, 2017.
<u>4.3</u>	Form of Global Note representing the 3.200% Senior Notes due 2024.	Incorporated by reference to Exhibit 4.3 of Allegion plc's Current Report on Form 8-K filed October 2, 2017 (included in Exhibit 4.2).
<u>4.4</u>	Second Supplemental Indenture, dated as of October 2, 2017, among Allegion US Holding Company Inc., Allegion plc and Wells Fargo Bank, National Association.	Incorporated by reference to Exhibit 4.4 of Allegion plc's Current Report on Form 8-K filed October 2, 2017.

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|-------------|--|--|
| <u>4.5</u>  | Form of Global Note representing the 3.550% Senior Notes due 2027. | Incorporated by reference to Exhibit 4.5 of Allegion plc's Current Report on Form 8-K filed October 2, 2017 (included in Exhibit 4.4). |
| <u>10.1</u> | Tax Matters Agreement between Ingersoll-Rand plc and Allegion plc  | Incorporated by reference to Exhibit 10.1 to the Company's Form 8-K filed with the SEC on December 2, 2013 (File No. 001-35971).       |
| <u>10.1</u> | Credit Agreement, dated as of September 12, 2017.                  | Incorporated by reference to Exhibit 10.1 of Allegion plc's Current Report on Form 8-K filed September 15, 2017.                       |

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<u>10.2</u>	Employee Matters Agreement between Ingersoll-Rand plc and Allegion plc	Incorporated by reference to Exhibit 10.2 to the Company's Form 8-K filed with the SEC on December 2, 2013 (File No. 001-35971).
<u>10.4</u>	2013 Incentive Stock Plan	Incorporated by reference to Exhibit 10.5 to the Company's Registration Statement on Form 10 filed with the SEC on June 17, 2013, as amended (File No. 001-35971).
<u>10.5</u>	Executive Deferred Compensation Plan	Incorporated by reference to Exhibit 10.6 to the Company's Registration Statement on Form 10 filed with the SEC on June 17, 2013, as amended (File No. 001-35971).
<u>10.6</u>	Supplemental Employee Savings Plan	Incorporated by reference to Exhibit 10.7 to the Company's Registration Statement on Form 10 filed with the SEC on June 17, 2013, as amended (File No. 001-35971).
<u>10.7</u>	Elected Officer Supplemental Program	Incorporated by reference to Exhibit 10.8 to the Company's Registration Statement on Form 10 filed with the SEC on June 17, 2013, as amended (File No. 001-35971).
<u>10.8</u>	Key Management Supplemental Program	Incorporated by reference to Exhibit 10.9 to the Company's Registration Statement on Form 10 filed with the SEC on June 17, 2013, as amended (File No. 001-35971).
<u>10.9</u>	Supplemental Pension Plan	Incorporated by reference to Exhibit 10.10 to the Company's Registration Statement on Form 10 filed with the SEC on June 17, 2013, as amended (File No. 001-35971).
<u>10.10</u>	Senior Executive Performance Plan	Incorporated by reference to Exhibit 10.11 to the Company's Registration Statement on Form 10 filed with the SEC on June 17, 2013, as amended (File No. 001-35971).
<u>10.11</u>	David D. Petratis Offer Letter, dated June 19, 2013	Incorporated by reference to Exhibit 10.14 to the Company's Registration Statement on Form 10 filed with the SEC on June 17, 2013, as amended (File No. 001-35971).
<u>10.12</u>	Patrick S. Shannon Offer Letter, dated April 9, 2013	Incorporated by reference to Exhibit 10.15 to the Company's Registration Statement on Form 10 filed with the SEC on June 17, 2013, as amended (File No. 001-35971).
<u>10.13</u>	Timothy P. Eckersley Offer Letter, dated October 3, 2013	Incorporated by reference to Exhibit 10.16 to the Company's Registration Statement on Form 10 filed with the SEC on June 17, 2013, as amended (File No. 001-35971).
<u>10.14</u>	Lucia V. Moretti, Offer Letter, dated February 19, 2014	Incorporated by reference to Exhibit 10.1 to the Company's Form 10-K filed with the SEC on February 26, 2016 (File No. 001-35971).
<u>10.15</u>		

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Jeffrey N. Braun Offer Letter, dated June 13, 2014      Incorporated by reference to Exhibit 10.15 to the Company's Form 10-K filed with the SEC on February 17, 2017 (File No. 001-35971).

10.16 Form of Allegion plc Deed Poll Indemnity      Incorporated by reference to Exhibit 10.21 to the Company's Registration Statement on Form 10 filed with the SEC on June 17, 2013, as amended (File No. 001-35971).

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<u>10.17</u>	Form of Allegion US Holding Company, Inc. Deed Poll Indemnity	Incorporated by reference to Exhibit 10.22 to the Company's Registration Statement on Form 10 filed with the SEC on June 17, 2013, as amended (File No. 001-35971).
<u>10.18</u>	Form of Allegion Irish Holding Company Limited Deed Poll Indemnity	Incorporated by reference to Exhibit 10.23 to the Company's Registration Statement on Form 10 filed with the SEC on June 17, 2013, as amended (File No. 001-35971).
<u>10.19</u>	Annual Incentive Plan	Incorporated by reference to Exhibit 10.1 to the Company's Form 10-K filed with the SEC on March 10, 2014 (File No. 001-35971).
<u>10.20</u>	Change in Control Severance Plan	Incorporated by reference to Exhibit 10.2 to the Company's Form 10-K filed with the SEC on March 10, 2014 (File No. 001-35971).
<u>10.22</u>	Form of Restricted Stock Unit Award Agreement	Filed herewith
<u>10.23</u>	Form of Stock Option Award Agreement	Filed herewith
<u>10.24</u>	Form of Performance Share Unit Award Agreement	Filed herewith
<u>10.25</u>	Form of Special Restricted Stock Unit Award Agreement	Incorporated by reference to Exhibit 10.4 to the Company's Form 8-K filed with the SEC on February 9, 2016 (File No. 001-35971).
<u>10.26</u>	Form of Non-Employee Director Restricted Stock Unit Award Agreement	Incorporated by reference to Exhibit 10.1 to the Company's Form 10-Q filed with the SEC on April 30, 2015 (File No. 001-35971).
<u>10.27</u>	Share Purchase Agreement dated June 26, 2015 between SimonsVoss Luxco S.à r.l., SimonsVoss Co-Invest GmbH & Co. KG, Mr Frank Rövekamp and Allegion Luxembourg Holding & Financing S.à r.l.	Incorporated by reference to Exhibit 10.1 to the Company's Form 10-Q filed with the SEC on July 30, 2015 (File No. 001-35971).
<u>12.1</u>	Ratio of Earnings to Fixed Charges	Filed herewith
<u>21.1</u>	List of subsidiaries of Allegion plc	Filed herewith
<u>23.1</u>	Consent of Independent Registered Public Accounting Firm	Filed herewith
<u>31.1</u>	Certification of Chief Executive Officer Pursuant to Rule 13a-14(a) or Rule 15d-14(a), as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.	Filed herewith
<u>31.2</u>	Certification of Chief Financial Officer Pursuant to Rule 13a-14(a) or Rule 15d-14(a), as Adopted Pursuant to Section	Filed herewith

302 of the Sarbanes-Oxley Act of 2002.

32.1 Certifications of Chief Executive Officer and Chief Financial Officer Pursuant to Rule 13a-14(b) or Rule 15d-14(b) and 18U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.      Furnished herewith

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	The following materials from the Company's Annual Report on Form 10-K for the year ended December 31, 2017, formatted in XBRL (Extensible Business Reporting Language): (i) the	
101	Consolidated Statements of Comprehensive Income, (ii) the Consolidated Balance Sheets, (iii) the Consolidated Statement of Cash Flows, (iv) the Consolidated Statements of Equity and (v) Notes to Consolidated Financial Statements.	Filed herewith

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Item 16. FORM 10-K SUMMARY

Not applicable.

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SIGNATURES

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

ALLEGION PLC

(Registrant)

By: /s/ David D. Petratis  
David D. Petratis  
Chief Executive Officer

Date: February 20, 2018

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Pursuant to the requirement of the Securities Exchange Act of 1934, this report has been signed by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

Signature	Title	Date
/s/ David D. Petratis (David D. Petratis)	Chairman of the Board, President and Chief Executive Officer (Principal Executive Officer)	February 20, 2018
/s/ Patrick S. Shannon (Patrick S. Shannon)	Senior Vice President and Chief Financial Officer (Principal Financial Officer)	February 20, 2018
/s/ Douglas P. Ranck (Douglas P. Ranck)	Vice President, Controller and Chief Accounting Officer (Principal Accounting Officer)	February 20, 2018
/s/ Carla Cico (Carla Cico)	Director	February 20, 2018
/s/ Kirk S. Hachigian (Kirk S. Hachigian)	Director	February 20, 2018
/s/ Nicole Parent Haughey (Nicole Parent Haughey)	Director	February 20, 2018
/s/ Dean Schaffer (Dean Schaffer)	Director	February 20, 2018
/s/ Martin E. Welch III (Martin E. Welch III)	Director	February 20, 2018

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ALLEGION PLC

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Report of Independent Registered Public Accounting Firm

To the Shareholders and Board of Directors of Allegion plc:

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated balance sheets of Allegion plc and its subsidiaries as of December 31, 2017 and 2016, and the related consolidated statements of comprehensive income, of equity and of cash flows for each of the three years in the period ended December 31, 2017, including the related notes and financial statement schedule listed in the accompanying index (collectively referred to as the “consolidated financial statements”). We also have audited the Company's internal control over financial reporting as of December 31, 2017, based on criteria established in Internal Control - Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

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

Basis for Opinions

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

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

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

Definition and Limitations of Internal Control over Financial Reporting

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

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

/s/ PricewaterhouseCoopers LLP

Indianapolis, Indiana

February 20, 2018

We have served as the Company's auditor since 2013.

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Allegion plc  
Consolidated Statements of Comprehensive Income  
In millions, except per share amounts

For the years ended December 31,	2017	2016	2015
Net revenues	\$2,408.2	\$2,238.0	\$2,068.1
Cost of goods sold	1,337.5	1,252.7	1,199.0
Selling and administrative expenses	582.5	559.8	510.5
Operating income	488.2	425.5	358.6
Interest expense	105.7	64.3	52.9
Loss on divestitures	—	84.4	104.2
Other income, net	(13.2 )	(18.2 )	(7.8 )
Earnings before income taxes	395.7	295.0	209.3
Provision for income taxes	119.0	63.8	54.6
Earnings from continuing operations	276.7	231.2	154.7
Discontinued operations, net of tax	—	—	(0.4 )
Net earnings	276.7	231.2	154.3
Less: Net earnings attributable to noncontrolling interests	3.4	2.1	0.4
Net earnings attributable to Allegion plc	\$273.3	\$229.1	\$153.9
Amounts attributable to Allegion plc ordinary shareholders:			
Continuing operations	\$273.3	\$229.1	\$154.3
Discontinued operations	—	—	(0.4 )
Net earnings	\$273.3	\$229.1	\$153.9
Earnings per share attributable to Allegion plc ordinary shareholders:			
Basic:			
Continuing operations	\$2.87	\$2.39	\$1.61
Discontinued operations	—	—	(0.01 )
Net earnings	\$2.87	\$2.39	\$1.60
Diluted:			
Continuing operations	\$2.85	\$2.36	\$1.59
Discontinued operations	—	—	—
Net earnings	\$2.85	\$2.36	\$1.59
Dividends declared per ordinary share	\$0.64	\$0.48	\$0.40

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Allegion plc  
 Consolidated Statements of Comprehensive Income (continued)  
 In millions, except per share amounts

For the years ended December 31,	2017	2016	2015
Net earnings	\$276.7	\$231.2	\$154.3
Other comprehensive income, net of tax			
Currency translation	97.5	(40.7 )	(60.5 )
Cash flow hedges and marketable securities:			
Unrealized net gains arising during period	5.2	9.7	15.8
Net gains reclassified into earnings	(4.7 )	(19.0 )	(17.5 )
Tax expense	(0.1 )	(1.3 )	—
Total cash flow hedges and marketable securities, net of tax	0.4	(10.6 )	(1.7 )
Pension and OPEB adjustments:			
Prior service costs for the period	—	—	(0.1 )
Net actuarial gains (losses) for the period	25.5	3.1	(37.6 )
Amortization reclassified into earnings	5.2	6.0	5.4
Settlements/curtailments reclassified to earnings	0.1	0.3	1.1
Currency translation and other	0.7	14.4	5.0
Tax (expense) benefit	(12.2 )	(5.0 )	3.0
Total pension and OPEB adjustments, net of tax	19.3	18.8	(23.2 )
Other comprehensive income (loss), net of tax	117.2	(32.5 )	(85.4 )
Total comprehensive income, net of tax	393.9	198.7	68.9
Less: Total comprehensive income (loss) attributable to noncontrolling interests	2.8	1.7	(0.9 )
Total comprehensive income attributable to Allegion plc	\$391.1	\$197.0	\$69.8

See accompanying notes to consolidated financial statements.

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Allegion plc

Consolidated Balance Sheets

In millions, except share amounts

As of December 31,	2017	2016
<b>ASSETS</b>		
Current assets:		
Cash and cash equivalents	\$466.2	\$312.4
Accounts and notes receivable, net	296.6	260.0
Inventories	239.8	220.6
Current tax receivable	12.2	11.9
Other current assets	17.0	22.2
Assets held for sale	0.9	2.2
Total current assets	1,032.7	829.3
Property, plant and equipment, net	252.2	226.6
Goodwill	761.2	716.8
Intangible assets, net	394.3	357.4
Deferred and noncurrent income taxes	35.4	72.3
Other noncurrent assets	66.2	45.0
Total assets	\$2,542.0	\$2,247.4
<b>LIABILITIES AND EQUITY</b>		
Current liabilities:		
Accounts payable	\$188.3	\$179.9
Accrued compensation and benefits	84.7	81.0
Accrued expenses and other current liabilities	134.6	117.8
Current tax payable	18.2	2.7
Short-term borrowings and current maturities of long-term debt	35.0	48.2
Total current liabilities	460.8	429.6
Long-term debt	1,442.3	1,415.6
Postemployment and other benefit liabilities	85.9	134.5
Deferred and noncurrent income taxes	123.6	118.7
Other noncurrent liabilities	23.9	32.6
Total liabilities	2,136.5	2,131.0
Equity:		
Allegion plc shareholders' equity		
Ordinary shares, \$0.01 par value (95,062,385 and 95,273,927 shares issued and outstanding at December 31, 2017 and 2016, respectively)	1.0	1.0
Capital in excess of par value	9.1	—
Retained earnings	544.4	376.6
Accumulated other comprehensive loss	(152.9 )	(264.3 )
Total Allegion plc shareholders' equity	401.6	113.3
Noncontrolling interest	3.9	3.1
Total equity	405.5	116.4
Total liabilities and equity	\$2,542.0	\$2,247.4

See accompanying notes to consolidated financial statements.

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Consolidated Statements of Equity

In millions	Total equity	Allegion plc Shareholders' equity					
		Ordinary Shares Amount	Shares	Capital in excess of par value	Retained earnings	Accumulated other comprehensive income (loss)	Non-controlling Interest
Balance at December 31, 2014	\$18.5	\$1.0	95.8	\$—	\$142.4	\$(148.2)	\$23.3
Net earnings	154.3	—	—	—	153.9	—	0.4
Other comprehensive loss	(85.4)	—	—	—	(0.1)	(84.0)	(1.3)
Shares issued under incentive stock plans	14.3	—	—	14.3	—	—	—
Repurchase of ordinary shares	(30.0)	—	(0.5)	(4.5)	(25.5)	—	—
Share-based compensation	14.6	—	0.7	14.6	—	—	—
Acquisition/divestiture of noncontrolling interest	1.7	—	—	—	—	—	1.7
Dividends declared to noncontrolling interest	(20.0)	—	—	—	—	—	(20.0)
Cash dividends declared (\$0.40 per share)	(38.3)	—	—	—	(38.3)	—	—
Balance at December 31, 2015	29.7	1.0	96.0	24.4	232.4	(232.2)	4.1
Net earnings	231.2	—	—	—	229.1	—	2.1
Other comprehensive loss	(32.5)	—	—	—	—	(32.1)	(0.4)
Shares issued under incentive stock plans	5.8	—	—	5.8	—	—	—
Repurchase of ordinary shares	(85.1)	—	(1.3)	(46.4)	(38.7)	—	—
Share-based compensation	16.6	—	0.6	16.6	—	—	—
Acquisition/divestiture of noncontrolling interest	(0.4)	—	—	(0.4)	—	—	—
Dividends declared to noncontrolling interest	(2.7)	—	—	—	—	—	(2.7)
Cash dividends declared (\$0.48 per share)	(46.0)	—	—	—	(46.0)	—	—
Other	(0.2)	—	—	—	(0.2)	—	—
Balance at December 31, 2016	116.4	1.0	95.3	—	376.6	(264.3)	3.1
Cumulative effect of change in accounting principle	(5.0)	—	—	—	(5.0)	—	—
Net earnings	276.7	—	—	—	273.3	—	3.4
Other comprehensive income (loss)	117.2	—	—	—	—	117.8	(0.6)
Shares issued under incentive stock plans	7.2	—	—	7.2	—	—	—
Repurchase of ordinary shares	(60.0)	—	(0.8)	(13.9)	(46.1)	—	—
Share-based compensation	15.8	—	0.6	15.8	—	—	—
Dividends declared to noncontrolling interest	(1.8)	—	—	—	—	—	(1.8)
Cash dividends declared (\$0.64 per share)	(60.9)	—	—	—	(60.9)	—	—
Other (see Note 13)	(0.1)	—	—	—	6.5	(6.4)	(0.2)
Balance at December 31, 2017	\$405.5	\$1.0	95.1	\$9.1	\$544.4	\$(152.9)	\$3.9

See accompanying notes to consolidated financial statements.

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Allegion plc  
Consolidated Statements of Cash Flows  
In millions

For the years ended December 31,	2017	2016	2015
Cash flows from operating activities:			
Net earnings	\$276.7	\$231.2	\$154.3
Loss from discontinued operations, net of tax	—	—	0.4
Adjustments to arrive at net cash provided by operating activities:			
Debt extinguishment costs	43.1	—	—
Depreciation and amortization	66.9	66.9	53.2
Share based compensation	16.2	16.6	14.6
Loss on divestitures	—	84.4	102.8
Gain on sale of marketable securities	—	(12.4 )	(11.0 )
(Gain) loss on sale of property, plant and equipment	(0.1 )	1.3	0.9
Equity earnings, net of dividends	(5.3 )	(3.2 )	0.3
Discretionary pension plan contribution	(50.0 )	—	—
Deferred income taxes	24.9	6.3	(2.0 )
Other items	3.0	(7.7 )	(14.6 )
Changes in other assets and liabilities			
(Increase) decrease in:			
Accounts and notes receivable	(22.7 )	(19.8 )	(13.5 )
Inventories	(4.4 )	(15.6 )	(5.8 )
Other current and noncurrent assets	3.5	62.0	(5.0 )
Accounts payable	0.4	3.4	(14.7 )
Other current and noncurrent liabilities	(5.0 )	(35.9 )	(2.5 )
Net cash provided by continuing operating activities	347.2	377.5	257.4
Net cash used in discontinued operating activities	—	—	(0.4 )
Net cash provided by operating activities	347.2	377.5	257.0
Cash flows from investing activities:			
Capital expenditures	(49.3 )	(42.5 )	(35.2 )
Acquisition of businesses, net of cash acquired	(20.8 )	(31.4 )	(511.3 )
Proceeds from sale of property, plant and equipment	3.1	0.1	0.3
Proceeds from sale of equity investment	15.6	—	—
Proceeds (payments) related to business dispositions	1.2	(4.3 )	0.1
Proceeds from sale of marketable securities	—	14.1	12.3
Net cash used in investing activities	\$(50.2 )	\$(64.0 )	\$(533.8)

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Allegion plc  
Consolidated Statements of Cash Flows - (Continued)  
In millions

For the years ended December 31,	2017	2016	2015
Cash flows from financing activities:			
Short-term borrowings, net	\$(1.3 )	\$(17.4 )	\$18.8
Proceeds from revolving credit facility	165.0	—	400.0
Proceeds from term facility	700.0	—	—
Repayment of second amended credit facility	(856.3 )	—	—
Proceeds from issuance of senior notes	800.0	—	300.0
Redemption of senior notes	(600.0 )	—	—
Payments of long-term debt	(197.3 )	(47.0 )	(440.5 )
Net proceeds from (repayments of) debt	10.1	(64.4 )	278.3
Debt issuance costs	(9.5 )	(0.3 )	(9.0 )
Redemption premium	(33.2 )	—	—
Dividends paid to ordinary shareholders	(60.9 )	(46.0 )	(38.3 )
Dividends paid to noncontrolling interests	(1.8 )	(2.7 )	(20.0 )
Repurchase of ordinary shares	(60.0 )	(85.1 )	(30.0 )
Proceeds from shares issued under incentive plans	7.2	5.8	11.0
Other, net	(2.8 )	(3.3 )	3.0
Net cash (used in) provided by financing activities	(150.9 )	(196.0 )	195.0
Effect of exchange rate changes on cash and cash equivalents	7.7	(4.8 )	(9.0 )
Net increase (decrease) in cash and cash equivalents	153.8	112.7	(90.8 )
Cash and cash equivalents – beginning of period	312.4	199.7	290.5
Cash and cash equivalents – end of period	\$466.2	\$312.4	\$199.7
See accompanying notes to consolidated financial statements.			

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

NOTE 1 – DESCRIPTION OF COMPANY AND BASIS OF PRESENTATION

Allegion plc, an Irish public limited company, and its consolidated subsidiaries ("Allegion" or "the Company") are a leading global company that creates peace of mind by pioneering safety and security. The Company offers an extensive and versatile portfolio of mechanical and electronic security products across a range of market-leading brands including CISA®, Interflex®, LCN®, Schlage®, SimonsVoss® and Von Duprin®.

Basis of presentation: The Consolidated Financial Statements were prepared in accordance with generally accepted accounting principles in the United States of America ("GAAP") as defined by the Financial Accounting Standards Board ("FASB") within the FASB Accounting Standards Codification ("ASC").

NOTE 2 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

A summary of significant accounting policies used in the preparation of the accompanying Consolidated Financial Statements follows:

**Principles of Consolidation:** The Consolidated Financial Statements include all majority-owned subsidiaries of the Company. A noncontrolling interest in a subsidiary is considered an ownership interest in a majority-owned subsidiary that is not attributable to the parent. The Company includes noncontrolling interest as a component of Total equity in the Consolidated Balance Sheet and the Net earnings attributable to noncontrolling interests are presented as an adjustment from Net earnings used to arrive at Net earnings attributable to Allegion in the Consolidated Statement of Comprehensive Income.

Partially-owned equity affiliates generally represent 20-50% ownership interests in investments and where we demonstrate significant influence in investments, but do not have a controlling financial interest. Partially-owned equity affiliates are accounted for under the equity method. The Company is also required to consolidate variable interest entities in which it bears a majority of the risk to the entities' potential losses or stands to gain from a majority of the entities' expected returns. Transactions between the Company and Ingersoll Rand and its affiliates are herein referred to as "related party" or "affiliated" transactions. The results of operations and cash flows of all discontinued operations have been separately reported as discontinued operations.

**Use of Estimates:** 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 and the disclosures of contingent assets and liabilities at the date of the financial statements as well as the reported amounts of revenues and expenses during the reporting period. Estimates are based on several factors including the facts and circumstances available at the time the estimates are made, historical experience, risk of loss, general economic conditions and trends, and the assessment of the probable future outcome. Some of the more significant estimates include accounting for doubtful accounts, useful lives of property, plant and equipment and intangible assets, purchase price allocations of acquired businesses, valuation of assets including goodwill and other intangible assets, product warranties, sales allowances, pension plans, postretirement benefits other than pensions, taxes, environmental costs, product liability and other contingencies. Actual results could differ from those estimates. Estimates and assumptions are reviewed periodically, and the effects of changes, if any, are reflected in the Consolidated Statement of Comprehensive Income in the period that they are determined.

**Currency Translation:** Assets and liabilities where the functional currency is not the U.S. dollar, have been translated at year-end exchange rates, and income and expense accounts have been translated using average exchange rates throughout the year. Adjustments resulting from the process of translating an entity's financial statements into the U.S. dollar have been recorded in the Equity section of the Consolidated Balance Sheet within Accumulated other comprehensive loss.

**Cash and Cash Equivalents:** Cash and cash equivalents include cash on hand, demand deposits and all highly liquid investments with original maturities at the time of purchase of three months or less.

**Inventories:** Inventories are stated at the lower of cost and net realizable value using the first-in first-out (FIFO) method.

**Allowance for Doubtful Accounts:** The Company has provided an allowance for doubtful accounts reserve, which represents the best estimate of probable loss inherent in the Company's accounts receivable portfolio. Changes in the financial condition of customers or other unanticipated events, which may affect their ability to make payments, could result in charges for additional allowances exceeding the Company's estimates. The Company's estimates are influenced by the following considerations: a continuing credit evaluation of our customers' financial condition; trade accounts receivable aging; and historical loss experience. The Company reserved \$2.8 million and \$2.7 million for doubtful accounts as of December 31, 2017 and 2016, respectively.

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Property, Plant and Equipment: Property, plant and equipment are stated at cost, less accumulated depreciation. Assets placed in service are recorded at cost and depreciated using the straight-line method over the estimated useful life of the asset except for leasehold improvements, which are depreciated over the shorter of their economic useful life or their lease term. The range of useful lives used to depreciate property, plant and equipment is as follows:

Buildings	10 to 50 years
Machinery and equipment	2 to 12 years
Software	2 to 7 years

Repair and maintenance costs that do not extend the useful life of the asset are charged against earnings as incurred. Major replacements and significant improvements that increase asset values and extend useful lives are capitalized.

The Company assesses the recoverability of the carrying value of its property, plant and equipment whenever events or changes in circumstances indicate that the carrying amount of the asset may not be recoverable. Recoverability is measured by a comparison of the carrying amount of an asset to the future net undiscounted cash flows expected to be generated by the asset. If the undiscounted cash flows are less than the carrying amount of the asset, an impairment loss is recognized for the amount by which the carrying value of the asset exceeds the fair value of the assets.

Goodwill and Intangible Assets: The Company records as goodwill the excess of the purchase price of an acquired business over the fair value of the net assets acquired.

In accordance with GAAP, goodwill and other indefinite-lived intangible assets are tested and reviewed annually for impairment during the fourth quarter or whenever there is a significant change in events or circumstances that indicate that the fair value of the reporting unit or indefinite-lived intangible asset is more likely than not less than the carrying amount of the reporting unit or indefinite-lived intangible asset.

Recoverability of goodwill is measured at the reporting unit level. The carrying amount of the reporting unit is compared to its estimated fair value. If the estimated fair value of a reporting unit exceeds its carrying amount, goodwill of the reporting unit is not impaired. To the extent that the carrying value of the reporting unit exceeds its estimated fair value, a goodwill impairment charge will be recognized for the amount by which the carrying value of the reporting unit exceeds its fair value, not to exceed the carrying amount of goodwill. Estimated fair value of the Company's reporting units is based on two valuation techniques, a discounted cash flow model (income approach) and a market adjusted multiple of earnings and revenues (market approach), with each method being weighted in the calculation.

Recoverability of other intangible assets with indefinite useful lives (i.e. Trademarks) is determined on a relief from royalty methodology (income approach), which is based on the implied royalty paid, at an appropriate discount rate, to license the use of an asset rather than owning the asset. The present value of the after-tax cost savings (i.e. royalty relief) indicates the estimated fair value of the asset. Any excess of the carrying value over the estimated fair value is recognized as an impairment loss equal to that excess.

Intangible assets such as patents, customer-related intangible assets and other intangible assets with finite useful lives are amortized on a straight-line basis over their estimated economic lives. The weighted-average useful lives approximate the following:

Customer relationships	25 years
Trademarks	25 years
Completed technology/patents	10 years
Other	25 years

Recoverability of intangible assets with finite useful lives is assessed in the same manner as property, plant and equipment as described above.

Income Taxes: The calculation of the Company's income taxes involves considerable judgment and the use of both estimates and allocations. Deferred tax assets and liabilities are determined based on temporary differences between financial reporting and tax bases of assets and liabilities, applying enacted tax rates expected to be in effect for the year in which the differences are expected to reverse. The Company recognizes future tax benefits, such as net operating losses and tax credits, to the extent that

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realizing these benefits is considered in its judgment to be more likely than not. The Company regularly reviews the recoverability of its deferred tax assets considering its historic profitability, projected future taxable income, timing of the reversals of existing temporary differences and the feasibility of its tax planning strategies. Where appropriate, the Company records a valuation allowance with respect to a future tax benefit.

Cash paid for income taxes, net of refunds for the twelve months ended December 31, 2017 and 2016 was \$86.7 million and \$10.4 million, respectively. The 2016 net cash income taxes paid includes a refund of \$46.2 million received from the Canadian Tax Authorities.

On December 22, 2017, the President of the United States signed comprehensive tax legislation commonly referred to as the Tax Cuts and Jobs Act (the "Tax Reform Act"), which is discussed in greater detail in Note 17. The Tax Reform Act includes a provision termed the global intangible low-taxed income ("GILTI"). The GILTI provisions will require the Company to include in its U.S. income tax return foreign subsidiary earnings in excess of an allowable return on the non-U.S. subsidiary's tangible assets. Although it is uncertain whether we will incur a GILTI liability, to the extent a GILTI tax is incurred, the Company has elected to account for GILTI tax in the period in which it is incurred.

**Product Warranties:** Standard product warranty accruals are recorded at the time of sale and are estimated based upon product warranty terms and historical experience. The Company assesses the adequacy of its liabilities and will make adjustments as necessary based on known or anticipated warranty claims, or as new information becomes available. Refer to Note 19 for further details of product warranties.

**Revenue Recognition:** Revenue is recognized and earned when all of the following criteria are satisfied: (a) persuasive evidence of a sales arrangement exists; (b) the price is fixed or determinable; (c) collectability is reasonably assured; and (d) delivery has occurred or service has been rendered. Delivery generally occurs when the title and the risks and rewards of ownership have transferred to the customer. Both the persuasive evidence of a sales arrangement and fixed or determinable price criteria are deemed to be satisfied upon receipt of an executed and legally binding sales agreement or contract that clearly defines the terms and conditions of the transaction including the respective obligations of the parties. If the defined terms and conditions allow variability in all or a component of the price, revenue is not recognized until such time that the price becomes fixed or determinable. At the point of sale, the Company validates the existence of an enforceable claim that requires payment within a reasonable amount of time and assesses the collectability of that claim. If collectability is not deemed to be reasonably assured, then revenue recognition is deferred until such time that collectability becomes probable or cash is received. Delivery is not considered to have occurred until the customer has taken title and assumed the risks and rewards of ownership. Service and installation revenue are recognized when earned. In some instances, customer acceptance provisions are included in sales arrangements to give the buyer the ability to ensure the delivered product or service meets the criteria established in the order. In these instances, revenue recognition is deferred until the acceptance terms specified in the arrangement are fulfilled through customer acceptance or a demonstration that established criteria have been satisfied. If uncertainty exists about customer acceptance, revenue is not recognized until acceptance has occurred.

The Company offers various sales incentive programs to our customers, dealers, and distributors. Sales incentive programs do not preclude revenue recognition, but do require an accrual for the Company's best estimate of expected activity. Examples of the sales incentives that are accrued for as a contra receivable and sales deduction at the point of sale include, but are not limited to, discounts (i.e. net 30 type), coupons, and rebates where the customer does not have to provide any additional requirements to receive the discount. Sales returns and customer disputes involving a question of quantity or price are also accounted for as a reduction in revenue and a contra receivable. At December 31, 2017 and 2016, the Company had a customer claim accrual (contra receivable) of \$32.5 million and \$29.0 million, respectively. All other incentives or incentive programs where the customer is required to reach a certain level of purchases, remain a customer for a certain period, provide a rebate form or is subject to additional requirements are accounted for as a reduction of revenue and establishment of a liability. At December 31, 2017 and 2016, the

Company had a sales incentive accrual of \$31.8 million and \$29.6 million, respectively. Each of these accruals represents the Company's best estimate it expects to pay related to previously sold units based on historical claim experience. These estimates are reviewed regularly for accuracy. If updated information or actual amounts are different from previous estimates, the revisions are included in the Company's results for the period in which they become known. Historically, the aggregate differences, if any, between the Company's estimates and actual amounts in any year have not had a material impact on the Consolidated Financial Statements.

**Environmental Costs:** The Company is subject to laws and regulations relating to protecting the environment. Environmental expenditures relating to current operations are expensed or capitalized as appropriate. Expenditures relating to existing conditions caused by past operations, which do not contribute to current or future revenues, are expensed. Liabilities for remediation costs are recorded when they are probable and can be reasonably estimated, generally no later than the completion of feasibility studies or the Company's commitment to a plan of action. The assessment of this liability, which is calculated based on existing technology,

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does not reflect any offset for possible recoveries from insurance companies, and is not discounted. Refer to Note 19 for further details of environmental matters.

**Research and Development Costs:** The Company conducts research and development activities for the purpose of developing and improving new products and services. These expenditures are expensed when incurred. For the years ended December 31, 2017, 2016 and 2015, these expenditures amounted to approximately \$48.3 million, \$47.3 million and \$45.2 million, respectively and consist of salaries, wages, benefits, building costs and other overhead expenses.

**Software Costs:** The Company capitalizes certain qualified internal-use software costs during the application development stage and subsequently amortizes those costs over the software's useful life, which ranges from 2 to 7 years.

**Employee Benefit Plans:** The Company provides a range of benefits, including pensions, postretirement and postemployment benefits to eligible current and former employees. Determining the cost associated with such benefits is dependent on various actuarial assumptions, including discount rates, expected return on plan assets, compensation increases, employee mortality, turnover rates, and healthcare cost trend rates. Actuaries perform the required calculations to determine expense in accordance with GAAP. Actual results may differ from the actuarial assumptions and are generally accumulated into Accumulated other comprehensive loss and amortized into Net earnings over future periods. The Company reviews its actuarial assumptions at each measurement date and makes modifications to the assumptions based on current rates and trends, if appropriate. Refer to Note 11 for further details on employee benefit plans.

**Loss Contingencies:** Liabilities are recorded for various contingencies arising in the normal course of business, including litigation and administrative proceedings, environmental matters, product liability, product warranty, worker's compensation and other claims. The Company has recorded reserves in the financial statements related to these matters, which are developed using inputs derived from actuarial estimates and historical and anticipated experience data depending on the nature of the reserve and, in certain instances, with consultation of legal counsel, internal and external consultants and engineers. Subject to the uncertainties inherent in estimating future costs for these types of liabilities, the Company believes its estimated reserves are reasonable and does not believe the final determination of the liabilities with respect to these matters would have a material effect on the financial condition, results of operations, liquidity or cash flows of the Company for any year. Refer to Note 19 for further details on loss contingencies.

**Derivative Instruments:** The Company periodically enters into cash flow and other derivative transactions to specifically hedge exposure to various risks related to currency and interest rates. The Company recognizes all derivatives on the Consolidated Balance Sheets at their fair value as either assets or liabilities. For designated cash flow hedges, the effective portion of the changes in fair value of the derivative contract is recorded in Other comprehensive income (loss), net of tax, and in Net earnings at the time earnings are affected by the hedged transaction. For other derivative transactions, the changes in the fair value of the derivative contract are immediately recognized in Net earnings. Refer to Note 10 for further details on derivative instruments.

## Recent Accounting Pronouncements

### Recently Adopted Accounting Pronouncements:

In July 2015, the FASB issued ASU 2015-11, "Inventory (Topic 330): Simplifying the Measurement of Inventory." ASU 2015-11 changes the measurement principle for inventory from the lower of cost or market to the lower of cost and net realizable value. The standard defines net realizable value as estimated selling prices in the ordinary course of

business less reasonably predictable costs of completion, disposal and transportation. The Company adopted the provisions of ASU 2015-11 on January 1, 2017. The adoption of ASU 2015-11 did not have a material impact on the consolidated financial statements.

In October 2016, the FASB issued ASU 2016-16, "Income Taxes (Topic 740): Intra-Entity Transfers of Assets Other Than Inventory." This update addresses the income tax consequences of intra-entity transfers of assets other than inventory. Previously, GAAP prohibited the recognition of current and deferred income taxes for an intra-entity asset transfer until the asset has been sold to an outside party. In addition, interpretations of this guidance have developed in practice over the years for transfers of certain intangible and tangible assets. The amendments in the update will require recognition of current and deferred income taxes resulting from an intra-entity transfer of an asset other than inventory when the transfer occurs. The Company elected to early adopt on January 1, 2017. As a result, during the first quarter of 2017, the Company recognized a cumulative effect within retained earnings of \$5.0 million with an offset to other current assets and other noncurrent assets.

In January 2017, the FASB issued ASU 2017-04, "Intangibles— Goodwill and Other (Topic 350): Simplifying the Accounting for Goodwill Impairment." The amended guidance simplifies the accounting for goodwill impairment for all entities by eliminating the requirement to perform a hypothetical purchase price allocation. A goodwill impairment charge will now be recognized for

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the amount by which the carrying value of a reporting unit exceeds its fair value, not to exceed the carrying amount of goodwill. The ASU will be effective for fiscal years beginning after December 15, 2019. Early adoption is permitted for any impairment tests after January 1, 2017. The Company elected to early adopt on October 1, 2017; however, this new standard did not impact our annual impairment test performed on goodwill as of October 1, 2017.

### Recently Issued Accounting Pronouncements:

In May 2014, the FASB issued ASU 2014-09, "Revenue from Contracts with Customers" (ASC 606). ASC 606 is a single, comprehensive revenue recognition model for all contracts with customers. The model is based on changes in contract assets (rights to receive consideration) and liabilities (obligations to provide a good or perform a service). Revenue is recognized based on the satisfaction of performance obligations, which occurs when control of a good or service transfers to a customer. ASC 606 contains expanded disclosure requirements relating to the nature, amount, timing, and uncertainty of revenue and cash flows arising from contracts with customers. Entities may use a full retrospective approach or report the cumulative effect as of the date of adoption ("modified retrospective method"). The FASB has also issued the following standards which clarify ASU 2014-09: ASU 2017-14, Revenue Recognition, Revenue from Contracts with Customers: Amendments to SEC Paragraphs Pursuant to Staff Accounting Bulletin No. 116 and SEC Release No. 33-10403, ASU 2017-13, Revenue Recognition, Revenue from Contracts with Customers: Amendments to SEC Paragraphs Pursuant to the Staff Announcement at the July 20, 2017 EITF Meeting and Rescission of Prior SEC Staff Announcements and Observer Comments, ASU 2016-20, Revenue from Contracts with Customers: Technical Corrections and Improvements, ASU 2016-12, Revenue from Contracts with Customers: Narrow-Scope Improvements and Practical Expedients and ASU 2016-10, Revenue from Contracts with Customers: Identifying Performance Obligations and Licensing. The Company adopted each of these standards on January 1, 2018 on a modified retrospective basis. The Company has completed an assessment of the new standard's impact and determined the new standards will not have a material impact on the Company's consolidated statements of comprehensive income, balance sheets or statements of cash flows. The Company will expand the consolidated financial statement disclosures in order to comply with ASU 2014-09 starting in our first quarter 10-Q of 2018. The expanded disclosure will present in a tabular format the split by business segment between 1) product and service revenue, and 2) products transferred at a point in time and services transferred over time.

In February 2016, the FASB issued ASU 2016-02, "Leases (Topic 842)." ASU 2016-02 requires the identification of arrangements that should be accounted for as leases by lessees. In general, for lease arrangements exceeding a twelve month term, these arrangements will be recognized as assets and liabilities on the balance sheet of the lessee. Under ASU 2016-02, a right-of-use asset and lease obligation will be recorded for all leases, whether operating or financing, while the income statement will reflect lease expense for operating leases and amortization/interest expense for financing leases. The ASU is effective for annual periods beginning after December 15, 2018, and interim periods within those annual periods. Early adoption is permitted. ASU 2016-02 is required to be applied with a modified retrospective approach to each prior reporting period presented with various optional practical expedients. The Company is continuing to assess what impact ASU 2016-02 will have on the consolidated financial statements; however, the Company anticipates that this adoption will result in a significant gross-up of assets and liabilities on its consolidated balance sheets and will require changes to its systems and processes.

In June 2016, the FASB issued ASU 2016-13, "Financial Instruments-Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments." The new guidance introduces an approach based on expected losses to estimate credit losses on certain types of financial instruments. The ASU will be effective for fiscal years beginning after December 15, 2019, including interim periods within those fiscal years. Early adoption is permitted. The Company is assessing what impact ASU 2016-13 will have on the consolidated financial statements.

In August 2016, the FASB issued ASU 2016-15, "Statement of Cash Flows (Topic 230): Clarification of Certain Cash Receipts and Cash Payments." ASU 2016-15 eliminates the diversity in practice related to the classification of certain cash receipts and payments in the statement of cash flows, by adding or clarifying guidance on eight specific cash flow issues. The ASU will be effective for annual and interim reporting periods beginning after December 15, 2017, and as such, the Company adopted ASU 2016-15 on January 1, 2018. The amendments in this update will be applied retrospectively to all periods presented, beginning in 2018, unless deemed impracticable, in which case, prospective application is permitted. The Company does not expect the adoption of this standard to have a material impact on the consolidated financial statements.

In January 2017, the FASB issued ASU No. 2017-01, "Business Combinations (Topic 805): Clarifying the Definition of a Business." This update provides guidance to assist companies in evaluating whether transactions should be accounted for as acquisitions (or disposals) of assets or businesses. The update provides a more robust framework to use in determining when a set of transferred assets and activities is a business. This ASU is effective for annual and interim reporting periods beginning after December 15, 2017, and requires prospective adoption. The Company adopted ASU 2017-01 on January 1, 2018. The Company does not expect the adoption of this standard to have a material impact on the consolidated financial statements.



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In March 2017, the FASB issued ASU 2017-07, "Compensation—Retirement Benefits (Topic 715): Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost." ASU 2017-07 requires that an employer report the service cost component in the same line item or items as other compensation costs arising from services rendered by the pertinent employees during the period. The other components of net benefit cost are required to be presented in the statement of comprehensive income separately from the service cost component and outside a subtotal of operating income. ASU 2017-07 also allows only the service cost component to be eligible for capitalization when applicable (for example, as a cost of internally manufactured inventory or a self-constructed asset). The ASU is effective for annual periods beginning after December 15, 2017, and as such, the Company adopted ASU 2017-07 on January 1, 2018. The ASU will be applied retrospectively for the presentation of the service cost component and the other components of net periodic pension cost and net periodic postretirement benefit cost in the consolidated statement of comprehensive income and prospectively, on and after the effective date, for the capitalization of the service cost component of net periodic pension cost and net periodic postretirement benefit in assets. The amendments allow a practical expedient that permits an employer to use the amounts disclosed in its pension and other postretirement benefit plan note for the prior comparative periods as the estimation basis for applying the retrospective presentation requirements. The Company intends to apply these practical expedients for prior period presentation. The Company does not believe the adoption of the new standard will have a material impact on the Company's consolidated financial statements.

In August 2017, the FASB issued ASU 2017-12, "Derivatives and Hedging (Topic 815): Targeted Improvements to Accounting for Hedging Activities." ASU 2017-12 addresses previous limitations on how an entity can designate the hedged risk in certain cash flow and fair value hedging relationships by expanding and refining hedge accounting for both nonfinancial and financial risk components and aligning the recognition and presentation of the effects of the hedging instrument and the hedged item in the financial statements. The ASU is effective for annual periods beginning after December 15, 2018, with early adoption permitted. The Company elected to early adopt the provisions of ASU 2017-12 on January 1, 2018. The amendments in this update will be applied to hedging relationships existing on the date of adoption. Presentation and disclosure amendments will be applied prospectively. The adoption of ASU 2017-12 is not expected to have a material impact on the Company's consolidated financial statements.

## NOTE 3 – INVENTORIES

At December 31, the major classes of inventory were as follows:

In millions	2017	2016
Raw materials	\$66.6	\$56.7
Work-in-process	29.8	23.6
Finished goods	143.4	140.3
Total	\$239.8	\$220.6

Inventories are stated at the lower of cost and net realizable value using the first-in, first-out (FIFO) method.

## NOTE 4 – PROPERTY, PLANT AND EQUIPMENT

At December 31, the major classes of property, plant and equipment were as follows:

In millions	2017	2016
Land	\$16.0	\$14.5
Buildings	142.2	127.6
Machinery and equipment	383.9	353.6
Software	141.4	126.5
Construction in progress	24.4	18.2

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	707.9	640.4
Accumulated depreciation	(455.7 )	(413.8 )
Total	\$252.2	\$226.6

Depreciation expense for the years ended December 31, 2017, 2016 and 2015 was \$40.0 million, \$40.9 million and \$36.4 million, which includes amounts for software amortization of \$14.3 million, \$16.6 million and \$14.4 million.

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## NOTE 5 – GOODWILL

The Company records as goodwill the excess of the purchase price over the fair value of the net assets acquired. Once the final valuation has been performed for each acquisition, adjustments may be recorded. The changes in the carrying amount of Goodwill are as follows:

In millions	Americas	EMEIA	Asia Pacific	Total
December 31, 2015 (gross)	\$ 372.8	\$733.4	\$93.4	\$1,199.6
Accumulated impairment *	—	(478.6)	(6.9)	(485.5)
December 31, 2015 (net)	372.8	254.8	86.5	714.1
Acquisitions	—	12.5	3.3	15.8
Currency translation	0.1	(9.8)	(3.4)	(13.1)
December 31, 2016 (net)	372.9	257.5	86.4	716.8
Acquisitions and settlements	2.3	(1.6)	1.3	2.0
Currency translation	—	35.3	7.1	42.4
December 31, 2017 (net)	\$ 375.2	\$291.2	\$94.8	\$761.2

\* Accumulated impairment consists of charges of \$137.6 million (EMEIA), \$341.0 million (EMEIA) and \$6.9 million (Asia Pacific).

As discussed in Note 8 - Divestitures, the Company sold a majority stake in its systems integration business in China within the Asia Pacific segment in the fourth quarter of 2015. In conjunction with this divestiture, the Company determined that the goodwill assigned to this business was impaired. As a result, approximately \$21.0 million of the \$78.1 million pre-tax charge related to the divestiture recorded in 2015 related to the write-off of goodwill.

## NOTE 6 – INTANGIBLE ASSETS

The following table sets forth the gross amount and related accumulated amortization of the Company's intangible assets at December 31:

In millions	2017			2016		
	Gross carrying amount	Accumulated amortization	Net carrying amount	Gross carrying amount	Accumulated amortization	Net carrying amount
Completed technologies/patents	\$32.6	\$ (10.0)	\$ 22.6	\$48.0	\$ (25.3)	\$ 22.7
Customer relationships	324.5	(74.1)	250.4	278.9	(51.6)	227.3
Trademarks (finite-lived)	89.0	(46.1)	42.9	78.5	(37.3)	41.2
Other	7.9	(4.9)	3.0	11.0	(9.4)	1.6
Total finite-lived intangible assets	454.0	\$ (135.1)	318.9	416.4	\$ (123.6)	292.8
Trademarks (indefinite-lived)	75.4		75.4	64.6		64.6
Total	\$529.4		\$ 394.3	\$481.0		\$ 357.4

The Company amortizes intangible assets with finite useful lives on a straight-line basis over their estimated economic lives in accordance with GAAP. Indefinite-lived intangible assets are not subject to amortization, but instead, are tested for impairment at least annually (more frequently if certain indicators are present).

Intangible asset amortization expense for 2017, 2016 and 2015 was \$22.1 million, \$20.5 million and \$11.9 million, respectively. Future estimated amortization expense on existing intangible assets in each of the next five years amounts to approximately \$22.7 million for 2018, \$21.8 million for 2019, \$21.8 million for 2020, \$21.7 million for

2021, and \$21.7 million for 2022.

In accordance with the Company's indefinite-lived intangible asset impairment testing policy outlined in Note 2, the Company performed its annual impairment test in the fourth quarter of each year. In each year, the Company determined the fair value of all indefinite-lived intangible assets exceeded their respective carrying values. Therefore, no impairment charges were recorded during 2017, 2016 or 2015.

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NOTE 7 - ACQUISITIONS

2017

In January 2017, the Company acquired Republic Doors & Frames, LLC ("Republic") through one of its subsidiaries. During the year ended December 31, 2017 the Company incurred \$4.7 million of acquisition related costs, which are included in Selling and administrative expenses in the Consolidated Statement of Comprehensive Income.

2016

In June 2016, the Company acquired 100% of Trelock GmbH, a portable safety and security provider, and certain affiliated companies. Acquisition related costs were not material to the 2016 Consolidated Statement of Comprehensive Income.

2015

In 2015, the Company completed one investment and five acquisitions:

Business	Date
iDevices (investment)	February 2015
Zero International Inc. ("Zero")	April 2015
Brio (Division of RMD Industries Pty Ltd) ("Brio")	May 2015
Milre Systek Co., Ltd ("Milre")	July 2015
SimonsVoss Technologies GmbH ("SimonsVoss")	September 2015
AXA Stenman Holding ("AXA")	September 2015

iDevices is a brand and development partner in the Internet of Things industry. The investment was accounted for using the equity method. As discussed further in Note 8, the Company's equity investment in iDevices LLC was acquired by a third party on April 5, 2017.

Zero manufactures door and window products for commercial spaces and products include sealing systems, such as sound control, fire and smoke protection, threshold applications, lites, door louvers, intumescent products, photo-luminescent and flood barrier for doors.

Brio is a designer and manufacturer of sliding and folding door hardware for commercial and residential spaces in Australia, New Zealand, the United Kingdom and the United States.

Milre is a leading security solutions manufacturer in South Korea, focused on producing high-quality and innovative electronic door locks.

SimonsVoss was acquired for approximately \$230.0 million. SimonsVoss, headquartered in Munich, Germany, is an electronic lock company in the European electronic market segment.

AXA was acquired for approximately \$208.0 million. AXA is a European residential and portable security provider headquartered in Veenendaal, the Netherlands, with production facilities in the Netherlands, France and Poland. AXA manufactures and sells a branded portfolio of portable locks and lights as well as a wide variety of window and door hardware. The products are sold throughout Europe to bicycle manufacturers, retail distributors and property builders.

Total consideration paid for the acquisitions in 2015 was \$511.3 million (net of cash acquired). The acquisitions in 2015 contributed revenues of \$74.5 million and earnings before tax of \$2.2 million to the Company from the

acquisition dates to December 31, 2015.

During the year ended December 31, 2015 the Company incurred \$17.9 million of acquisition related costs. These expenses are included in both Cost of goods sold and Selling and administrative expenses in the Consolidated Statement of Comprehensive Income.

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## NOTE 8 - DIVESTITURES

As previously disclosed, the Company sold its majority ownership in its Venezuelan operation to Venezuelan investors. As a result of the sale in the third quarter of 2015, the Company recorded a non-cash charge of \$26.1 million, which primarily represents cumulative currency translation adjustments that were previously deferred in equity and were reclassified to a loss in the Consolidated Statement of Comprehensive Income upon sale.

As previously disclosed, the Company sold a majority stake of Bocom Wincent Technologies Co., Ltd. ("Systems Integration") in the fourth quarter of 2015, retaining 15% of the shares. Under the terms of the transaction, the Company was to receive consideration of up to \$75.0 million based on the future cash collection performance of Systems Integration and additional payments of approximately \$8.3 million related to working capital transferred with the sale. During the twelve months ended December 31, 2015, and as a result of the sale, the Company recorded a non-cash, pre-tax charge of \$78.1 million (\$82.4 million after tax charges) to write the carrying value of Systems Integration's assets and liabilities down to their estimated fair value less costs to complete the transaction. The charge was recorded as a Loss on divestitures within the Consolidated Statement of Comprehensive Income.

During the third quarter of 2016 the receivable was considered impaired, as it was determined that certain unfavorable events occurred related to the Systems Integration business requiring an impairment of the original consideration and working capital transfer amounts that were recorded at the time of the sale. A charge of \$81.4 million (net of tax) was recorded, reducing the carrying value of the receivable to a fair value estimated by discounting the expected future cash flows. The assumptions used in this estimate are considered unobservable inputs. Fair value measurements that utilize significant unobservable inputs are categorized as Level 3 measurements under the accounting guidance. The total charge recorded as a Loss on divestitures within the Consolidated Statement of Comprehensive Income was \$84.4 million for the twelve months ended December 31, 2016.

The Company currently estimates the fair value of the consideration to be \$2.6 million as of December 31, 2017, which is classified within Other noncurrent assets within the Consolidated Balance Sheet. The Company does not expect to incur any material charges in future periods related to the Systems Integration business.

In April 2017, iDevices LLC, including the Company's equity investment, was acquired by a third party. The Company recorded a cumulative gain of \$5.4 million in 2017 related to this divestiture within Other income, net.

## NOTE 9 – DEBT AND CREDIT FACILITIES

At December 31, long-term debt and other borrowings consisted of the following:

In millions	2017	2016
Term Loan A Facility	\$—	\$879.8
Term Facility	691.3	—
Revolving Facility	—	—
5.750% Senior Notes due 2021	—	300.0
5.875% Senior Notes due 2023	—	300.0
3.200% Senior Notes due 2024	400.0	—
3.550% Senior Notes due 2027	400.0	—
Other debt	1.0	2.3
Total borrowings outstanding	1,492.3	1,482.1
Less discounts and debt issuance costs, net	(15.0)	(18.3)
Total debt	1,477.3	1,463.8

Less current portion of long term debt	35.0	48.2
Total long-term debt	\$1,442.3	\$1,415.6

Unsecured Credit Facilities

As of December 31, 2017, the Company has an unsecured Credit Agreement in place that provides for up to \$1,200.0 million in unsecured financing, consisting of a \$700.0 million term loan facility (the “Term Facility”) and a \$500.0 million revolving credit

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facility (the “Revolving Facility” and, together with the Term Facility, the “Credit Facilities”). The Credit Facilities mature on September 12, 2022 and are unconditionally guaranteed jointly and severally on an unsecured basis by the Company and Allegion US Holding Company Inc. (“Allegion US Hold Co”), the Company’s wholly-owned subsidiary.

The Term Facility amortizes in quarterly installments at the following rates: 1.25% per quarter starting December 31, 2017 through December 31, 2020, 2.5% per quarter from March, 31, 2021 through June 30, 2022, with the balance due on September 12, 2022. The Company may voluntarily prepay outstanding amounts under the Term Facility at any time without premium or penalty, subject to customary breakage costs. Amounts borrowed under the Term Facility that are repaid may not be reborrowed.

The Revolving Facility provides aggregate commitments of up to \$500.0 million, which includes up to \$100.0 million for the issuance of letters of credit. At December 31, 2017, there were no borrowings outstanding on the Revolving Facility, and the Company had \$17.4 million of letters of credit outstanding. Commitments under the Revolving Facility may be reduced at any time without premium or penalty, and amounts repaid may be reborrowed. The Company pays certain fees with respect to the Revolving Facility, including an unused commitment fee on the undrawn portion of the Revolving Facility of between 0.125% and 0.200% per year, depending on the Company’s credit rating, as well as certain other fees.

Outstanding borrowings under the Credit Facilities accrue interest, at the option of the Company of (i) a LIBOR rate plus the applicable margin or (ii) a base rate plus the applicable margin. The applicable margin ranges from 1.125% to 1.500% depending on the Company’s credit ratings. At December 31, 2017, the outstanding borrowings under the Term Facility accrue interest at LIBOR plus a margin of 1.250%. To manage the Company’s exposure to fluctuations in LIBOR rates, the Company has interest rate swaps to fix the interest rate for \$250.0 million of the outstanding borrowings (see Note 10).

The Credit Facilities contain negative and affirmative covenants and events of default that, among other things, limit or restrict the Company’s ability to enter into certain transactions. In addition, the Credit Facilities require the Company to comply with a maximum leverage ratio and a minimum interest expense coverage ratio, as defined within the agreement. As of December 31, 2017, the Company was in compliance with all covenants.

## Senior Notes

As of December 31, 2017, Allegion US Hold Co has \$400.0 million outstanding of its 3.200% Senior Notes due 2024 (the “3.200% Senior Notes”) and \$400.0 million outstanding of its 3.550% Senior Notes due 2027 (the “3.550% Senior Notes”) and, together with the 3.200% Senior Notes, the “Notes”), both of which were issued on October 2, 2017. The Notes require semi-annual interest payments on April 1 and October 1 of each year, and will mature on October 1, 2024 and October 1, 2027, respectively.

The Notes are senior unsecured obligations of Allegion US Hold Co and rank equally with all of Allegion US Hold Co’s existing and future senior unsecured and unsubordinated indebtedness. The guarantee of the Notes is the senior unsecured obligation of the Company and ranks equally with all of the Company’s existing and future senior unsecured and unsubordinated indebtedness.

## 2017 Refinancing

The Company entered into the Credit Agreement on September 12, 2017. The initial proceeds of \$700.0 million from the Term Facility, along with initial borrowings of \$165.0 million under the Revolving Facility, were used primarily to repay in full the outstanding borrowing under the Company’s previously outstanding secured credit facility, the

Second Amended and Restated Credit Agreement, dated as of September 30, 2015. All obligations under the Second Amended and Restated Credit Agreement were satisfied, all commitments thereunder were terminated, and all guarantees and security interests that had been granted in connection therewith were released.

On October 3, 2017, Allegion US Hold Co used the net proceeds from the Notes to redeem in full the \$300.0 million Senior Notes due 2021 and the \$300.0 million Senior Notes due 2023, as well as to repay in full the borrowings under the Revolving Facility and other costs associated with the refinancing.

Related to the 2017 refinancing activities, the Company recorded a \$33.2 million charge for the redemption premiums associated with the Senior Notes due 2021 and 2023, non-cash charges of \$9.9 million related to the write-off of previously deferred financing costs, and \$1.6 million of third party costs. These charges were all recorded within Interest expense on the Consolidated Statement of Comprehensive Income. The Company also incurred and deferred \$10.8 million of discounts and financing costs associated with the new debt, which will be amortized to interest expense over the terms of the respective debt.

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## Future Repayments

Our scheduled principal repayments on indebtedness as of December 31, 2017 are as follows:

In millions

2018	\$35.0
2019	35.0
2020	35.0
2021	70.0
2022	516.3
Thereafter	801.0
Total	\$1,492.3

At December 31, 2017, the weighted-average interest rate for borrowings was 2.82% under the Term Facility (including the effect of interest rate swaps), 3.200% under the 3.200% Senior Notes and 3.550% under the 3.550% Senior Notes. Cash paid for interest for the years ended December 31, 2017, 2016 and 2015 was \$58.4 million, \$56.0 million and \$39.0 million respectively.

## NOTE 10 – FINANCIAL INSTRUMENTS

In the normal course of business, the Company uses various financial instruments, including derivative instruments, to manage the risks associated with currency and variable interest rate exposures. These financial instruments are not used for trading or speculative purposes.

On the date a derivative contract is entered into, the Company designates the derivative instrument as a cash flow hedge of a forecasted transaction, a cash flow hedge of a recognized asset or liability, or as an undesignated derivative. The Company formally documents its hedge relationships, including identification of the derivative instruments and the hedged items, as well as its risk management objectives and strategies for undertaking the hedge transaction. This process includes linking derivative instruments that are designated as hedges to specific assets, liabilities or forecasted transactions.

The fair market value of derivative instruments is determined through market-based valuations and may not be representative of the actual gains or losses that will be recorded when these instruments mature due to future fluctuations in the markets in which they are traded.

The Company assesses at inception and at least quarterly thereafter, whether the derivatives used in cash flow hedging transactions are highly effective in offsetting the changes in the cash flows of the hedged item. To the extent the derivative is deemed to be a highly effective hedge, the fair market value changes of the instrument are recorded to Accumulated other comprehensive income (AOCI).

Any ineffective portion of a derivative instrument's change in fair value is recorded in Net earnings in the period of change. If the hedging relationship ceases to be highly effective, or it becomes probable that a forecasted transaction is no longer expected to occur, the hedging relationship will be undesignated and any future gains and losses on the derivative instrument will be recorded in Net earnings.

## Currency Hedging Instruments

The gross notional amount of the Company's currency derivatives were \$57.7 million and \$132.6 million at December 31, 2017 and 2016. At December 31, 2017 and 2016, gains of \$0.3 million and \$0.8 million, net of tax, were included

in Accumulated other comprehensive loss related to the fair value of the Company's currency derivatives designated as accounting hedges. The approximate amount expected to be reclassified into Net earnings over the next twelve months is a gain of \$0.3 million. The actual amounts that will be reclassified to Net earnings may vary from this amount as a result of changes in market conditions. Gains and losses associated with the Company's currency derivatives not designated as hedges are recorded in Net earnings as changes in fair value occur. At December 31, 2017, the maximum term of the Company's currency derivatives was less than one year.

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## Interest Rate Swaps

The Company has forward starting interest rate swaps to fix interest rate payments during the contract period for \$250.0 million of the Company's variable rate Term Facility. These swaps expire in September 2020. These interest rate swaps met the criteria to be accounted for as cash flow hedges of variable rate interest payments. Consequently, the changes in fair value of the interest rate swaps are recognized in Accumulated other comprehensive loss. At December 31, 2017 and 2016, \$3.5 million and \$2.6 million of gains, net of tax, were recorded in Accumulated other comprehensive loss related to these interest rate swaps. The approximate amount expected to be reclassified into Net earnings over the next twelve months is a gain of \$1 million. The actual amounts that will be reclassified to Net earnings may vary from this amount as a result of changes in market conditions.

The fair values of derivative instruments included within the Consolidated Balance Sheets as of December 31 were as follows:

In millions	Asset derivatives		Liability derivatives	
	2017	2016	2017	2016
Derivatives designated as hedges:				
Currency derivatives	\$0.2	\$0.7	\$0.3	\$0.1
Interest rate swaps	5.3	4.6	—	0.4
Derivatives not designated as hedges:				
Currency derivatives	—	0.3	0.4	0.2
Total derivatives	\$5.5	\$5.6	\$0.7	\$0.7

Asset and liability currency derivatives included in the table above are recorded within Other current assets and Accrued expenses and other current liabilities, respectively. Asset and liability interest rate swap derivatives included in the table above are recorded within Other noncurrent assets and Other noncurrent liabilities.

The amounts associated with derivatives designated as hedges affecting Net earnings and Accumulated other comprehensive loss for the years ended December 31 were as follows:

In millions	Amount of gain (loss) recognized in AOCI			Location of gain (loss) reclassified from AOCI and recognized into Net earnings	Amount of gain (loss) reclassified from AOCI and recognized into Net earnings		
	2017	2016	2015		2017	2016	2015
Currency derivatives	\$ 4.0	\$ 4.2	\$ 6.6	Cost of goods sold	\$ 4.7	\$ 5.4	\$ 6.5
Interest rate swaps	1.2	5.4	(0.3 )	Interest expense	(0.3 )	—	—
Total	\$ 5.2	\$ 9.6	\$ 6.3		\$ 4.4	\$ 5.4	\$ 6.5

The gains and losses associated with the Company's non-designated currency derivatives, which are offset by changes in the fair value of the underlying transactions, are included within Other income, net in the Consolidated Statements of Comprehensive Income.

## Concentration of Credit Risk

The counterparties to the Company's forward contracts and swaps consist of a number of investment grade major international financial institutions. The Company could be exposed to losses in the event of nonperformance by the counterparties. However, the credit ratings and the concentration of risk in these financial institutions are monitored on a continuous basis and present no significant credit risk to the Company.

NOTE 11 – PENSIONS AND POSTRETIREMENT BENEFITS OTHER THAN PENSIONS

The Company sponsors several U.S. defined benefit and defined contribution plans covering substantially all of our U.S. employees. Additionally, the Company has non-U.S. defined benefit and defined contribution plans covering eligible non-U.S. employees. Postretirement benefits, other than pensions, provide healthcare benefits, and in some instances, life insurance benefits for certain eligible employees.

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## Pension Plans

The noncontributory defined benefit pension plans covering non-collectively bargained U.S. employees provide benefits on an average pay formula while most plans for collectively bargained U.S. employees provide benefits on a flat dollar benefit formula. The non-U.S. pension plans generally provide benefits based on earnings and years of service. The Company also maintains additional other supplemental plans for officers and other key employees.

The following table details information regarding the Company's pension plans at December 31:

In millions	U.S.		NON-U.S.	
	2017	2016	2017	2016
Change in benefit obligations:				
Benefit obligation at beginning of year	\$286.9	\$280.7	\$380.5	\$371.7
Service cost	8.7	9.4	3.3	3.1
Interest cost	10.5	9.8	8.9	10.7
Employee contributions	—	—	0.3	0.3
Actuarial losses (gains)	17.5	1.6	(15.4 )	80.8
Benefits paid	(12.4 )	(12.6 )	(13.7 )	(18.7 )
Foreign exchange rate changes	—	—	34.3	(63.5 )
Curtailments and settlements	—	—	(0.9 )	(1.8 )
Acquisitions	7.3	—	—	—
Other, including expenses paid	(1.0 )	(2.0 )	(1.0 )	(2.1 )
Benefit obligation at end of year	\$317.5	\$286.9	\$396.3	\$380.5
Change in plan assets:				
Fair value at beginning of year	\$202.4	\$192.7	\$353.4	\$340.4
Actual return on plan assets	31.9	16.4	22.3	90.3
Company contributions	55.7	7.9	5.2	6.0
Employee contributions	—	—	0.3	0.3
Benefits paid	(12.4 )	(12.6 )	(13.7 )	(18.7 )
Foreign exchange rate changes	—	—	33.7	(61.0 )
Settlements	—	—	(0.9 )	(1.8 )
Acquisitions	6.5	—	—	—
Other, including expenses paid	(0.9 )	(2.0 )	(1.9 )	(2.1 )
Fair value of assets end of year	\$283.2	\$202.4	\$398.4	\$353.4
Funded status:				
Plan assets (less than) over benefit obligations	\$(34.3 )	\$(84.5 )	\$2.1	\$(27.1 )
Amounts included in the balance sheet:				
Other noncurrent assets	\$—	\$—	\$28.5	\$—
Accrued compensation and benefits	(0.2 )	(0.1 )	(1.3 )	(1.5 )
Postemployment and other benefit liabilities	(34.1 )	(84.4 )	(25.1 )	(25.6 )
Net amount recognized	\$(34.3 )	\$(84.5 )	\$2.1	\$(27.1 )

It is the Company's objective to contribute to the pension plans to ensure adequate funds are available in the plans to make benefit payments to plan participants and beneficiaries when required. However, certain plans are not funded due to either legal, accounting, or tax requirements in certain jurisdictions. As of December 31, 2017, approximately 5% of our projected benefit obligation relates to plans that are not funded of which the majority are non-U.S. plans.





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The pretax amounts recognized in Accumulated other comprehensive loss were as follows:

In millions	U.S.		
	Prior service cost	Net actuarial losses	Total
December 31, 2015	\$(2.8)	\$(88.9 )	\$(91.7)
Current year changes recorded to Accumulated other comprehensive loss	—	4.5	4.5
Amortization reclassified to earnings	0.7	4.7	5.4
December 31, 2016	\$(2.1)	\$(79.7 )	\$(81.8)
Current year changes recorded to Accumulated other comprehensive loss	—	2.4	2.4
Amortization reclassified to earnings	0.3	4.8	5.1
December 31, 2017	\$(1.8)	\$(72.5 )	\$(74.3)

In millions	NON-U.S.		
	Prior service cost	Net actuarial losses	Total
December 31, 2015	\$—	\$(92.2 )	\$(92.2)
Current year changes recorded to Accumulated other comprehensive loss	—	(4.3 )	(4.3 )
Amortization reclassified to earnings	—	2.2	2.2
Settlements/curtailments reclassified to earnings	—	0.3	0.3
Currency translation and other	—	14.4	14.4
December 31, 2016	\$—	\$(79.6 )	\$(79.6)
Current year changes recorded to Accumulated other comprehensive loss	—	23.3	23.3
Amortization reclassified to earnings	—	1.8	1.8
Settlements/curtailments reclassified to earnings	—	0.1	0.1
Currency translation and other	0.1	(6.2 )	(6.1 )
December 31, 2017	\$0.1	\$(60.6 )	\$(60.5)

Weighted-average assumptions used:

Benefit obligations at December 31, 2017 2016

Discount rate:

U.S. plans 3.6% 4.1%

Non-U.S. plans 2.5% 2.6%

Rate of compensation increase:

U.S. plans 3.0% 3.5%

Non-U.S. plans 3.2% 3.2%

The accumulated benefit obligation for all U.S. defined benefit pension plans was \$304.9 million and \$272.5 million at December 31, 2017 and 2016. The accumulated benefit obligation for all non-U.S. defined benefit pension plans was \$388.3 million and \$371.9 million at December 31, 2017 and 2016.

Beginning in 2016, the Company elected to change the method used to estimate the service and interest cost components of net periodic benefit cost to a full yield-curve approach. Historically, the Company estimated the service and interest cost components using a single weighted-average discount rate, rounded to the nearest 25th basis point, derived from the yield curve used to measure the benefit obligation at the beginning of the period. Under the new approach, the Company applied discounting using the applicable spot rates derived from the yield curve to discount the cash flows used to measure the benefit obligation. These spot rates align to each of the projected benefit

obligations and service cost cash flows. This change was made to better align the projected benefit cash flows and the corresponding yield curve spot rates to provide a better estimate of service and interest cost components of net periodic benefit costs. This change was considered a change in estimate and was accounted for on a prospective basis beginning January 1, 2016. This change did not have a material impact on 2016 pension expense.

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Information regarding pension plans with accumulated benefit obligations more than plan assets were:

In millions	U.S.		NON-U.S.	
	2017	2016	2017	2016
Projected benefit obligation	\$317.5	\$286.9	\$34.4	\$30.2
Accumulated benefit obligation	304.9	272.5	29.5	25.9
Fair value of plan assets	\$283.2	\$202.4	\$7.9	\$6.8

Future pension benefit payments are expected to be paid as follows:

In millions	U.S.	NON-U.S.
2018	\$16.3	\$ 16.0
2019	16.6	16.3
2020	23.6	17.0
2021	18.7	17.8
2022	19.1	18.3
2023 - 2027	\$111.7	\$ 102.3

The components of the Company's net periodic pension benefit costs for the years ended December 31 include the following:

In millions	U.S.		
	2017	2016	2015
Service cost	\$8.7	\$9.4	\$9.5
Interest cost	10.5	9.8	11.0
Expected return on plan assets	(12.0)	(10.2)	(11.2)
Net amortization of:			
Prior service costs	0.3	0.7	0.7
Plan net actuarial losses	4.8	4.7	4.9
Net periodic pension benefit cost	12.3	14.4	14.9
Net curtailment and settlement losses	—	—	0.9
Net periodic pension benefit cost after net curtailment and settlement losses	\$12.3	\$14.4	\$15.8
	NON-U.S.		
	2017	2016	2015
Service cost	\$3.3	\$3.1	\$3.3
Interest cost	8.9	10.7	13.7
Expected return on plan assets	(14.3)	(13.7)	(17.8)
Other adjustments	0.7	—	—
Net amortization of:			
Plan net actuarial losses	1.9	2.2	1.4
Net periodic pension benefit cost	0.5	2.3	0.6
Net curtailment and settlement losses	0.1	0.3	0.2
Net periodic pension benefit cost after net curtailment and settlement losses	\$0.6	\$2.6	\$0.8

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Pension expense for 2018 is projected to be approximately \$5.9 million, utilizing the assumptions for calculating the pension benefit obligations at the end of 2017. The amounts expected to be recognized in net periodic pension cost during the year ended December 31, 2018 for prior service cost and plan net actuarial losses are \$0.4 million and \$4.8 million, respectively.

Weighted-average assumptions used:

Net periodic pension cost for the year ended December 31,	2017	2016	2015
Discount rate:			
U.S. plans	4.1%	4.3%	4.0%
Non-U.S. plans	2.6%	3.7%	3.7%
Rate of compensation increase:			
U.S. plans	3.5%	3.5%	3.5%
Non-U.S. plans	3.2%	3.0%	2.9%
Expected return on plan assets:			
U.S. plans	4.8%	5.5%	5.5%
Non-U.S. plans	4.0%	4.5%	5.0%

The expected long-term rate of return on plan assets reflects the average rate of returns expected on the funds invested or to be invested to provide for the benefits included in the projected benefit obligation. The expected long-term rate of return on plan assets is based on what is achievable given the plan's investment policy, the types of assets held and target asset allocations. The expected long-term rate of return is determined as of the measurement date. Each plan is reviewed, along with its historical returns and target asset allocations, to determine the appropriate expected long-term rate of return on plan assets to be used.

The overall objective in managing defined benefit plan assets is to ensure that all present and future benefit obligations are met as they come due. The goal is to achieve this while trying to mitigate volatility in plan funded status, contribution, and expense by better matching the characteristics of the plan assets to that of the plan liabilities. Each plan's funded status and asset allocation is monitored regularly in addition to investment manager performance.

The fair values of the Company's U.S. pension plan assets at December 31, 2017 by asset category are as follows:

In millions	Fair value measurements			Total fair value
	Level 1	Level 2	Level 3	
			Assets measured at NAV	
Cash, cash equivalents, and short term investments	\$ 3.2	\$ —	\$ —	\$ 3.2
Equity mutual funds	—	—	70.9	70.9
Fixed income investments:				
U.S. government and agency obligations	—	83.6	—	83.6
Corporate and non-U.S. bonds <sup>(a)</sup>	—	111.3	—	124.1
	—	194.9	—	207.7
Total assets at fair value	\$ 198.1	\$ —	\$ 83.7	\$ 281.8
Receivables and payables, net				1.4
Net assets available for benefits				\$ 283.2

(a) Includes state and municipal bonds.

No material transfers in or out of Level 3 occurred during the year ended December 31, 2017.

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The fair values of the Company's U.S. pension plan assets at December 31, 2016 by asset category are as follows:

In millions	Fair value measurements			Assets measured at NAV	Total fair value
	Level 1	Level 2	Level 3		
Cash, cash equivalents, and short term investments	\$ —	\$ 5.6	\$ —	\$ —	\$ 5.6
Equity mutual funds	—	—	—	62.9	62.9
Fixed income investments:					
U.S. government and agency obligations	—	55.2	—	—	55.2
Corporate and non-U.S. bonds <sup>(a)</sup>	—	77.6	—	—	77.6
	—	132.8	—	—	132.8
Total assets at fair value	\$ —	\$ 138.4	\$ —	\$ 62.9	\$ 201.3
Receivables and payables, net					1.1
Net assets available for benefits					\$ 202.4

(a) Includes state and municipal bonds.

No material transfers in or out of Level 3 occurred during the year ended December 31, 2016.

The Company determines the fair value of its U.S. plan assets using the following methodologies:

Cash, cash equivalents and short term investments – Short term investments are valued at the closing price or amount held on deposit by the custodian bank or at fair value by discounting the related cash flows based on current yields of similar instruments with comparable durations considering the credit-worthiness of the issuer. As these investments are not traded on active markets, these investments are classified as Level 2.

Equity mutual funds – Equity mutual funds are valued at their daily net asset value (NAV) per share or the equivalent. NAV per share or the equivalent is used for fair value purposes as a practical expedient. NAVs are calculated by the investment manager or sponsor of the fund.

U.S. government and agency obligations – Quoted market prices are not available for these securities. Fair values are estimated using pricing models and/or quoted prices of securities with similar characteristics or discounted cash flows. Such securities are classified as Level 2.

Corporate and non-U.S. bonds – Quoted market prices are not available for these securities. Fair values are estimated by using pricing models and/or quoted prices of securities with similar characteristics or discounted cash flows. Such securities are classified as Level 2.

The fair values of the Company's non-U.S. pension plan assets at December 31, 2017 by asset category are as follows:

In millions	Fair value measurements			Assets measured at NAV	Total fair value
	Level 1	Level 2	Level 3		
Cash and cash equivalents	\$36.7	\$ —	\$ —	—	\$ 36.7
Equity mutual funds	—	2.0	—	103.1	105.1
Corporate and non-U.S. bonds	—	176.9	—	—	176.9

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Real estate	—	—	0.8	—	0.8
Other <sup>(a)</sup>	—	46.7	2.3	29.9	78.9
Total assets at fair value	\$36.7	\$225.6	\$ 3.1	\$ 133.0	\$ 398.4

(a) Primarily includes insurance contracts, mortgage-backed securities, and derivative contracts.

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No material transfers in or out of Level 3 occurred during the year ended December 31, 2017.

The fair values of the Company's non-U.S. pension plan assets at December 31, 2016 by asset category are as follows:

In millions	Fair value measurements			Total fair value
	Level 1	Level 2	Level 3	
Cash and cash equivalents	\$58.9	\$—	\$ —	\$ 58.9
Equity mutual funds	—	107.2	—	107.2
Corporate and non-U.S. bonds	—	110.8	—	110.8
Real estate <sup>(a)</sup>	—	9.7	0.7	10.4
Other <sup>(b)</sup>	—	64.1	2.0	66.1
Total assets at fair value	\$58.9	\$291.8	\$ 2.7	\$ 353.4

<sup>(a)</sup> Includes several private equity funds that invest in real estate. It includes both direct investment funds and funds-of-funds.

<sup>(b)</sup> Primarily includes insurance contracts.

No material transfers in or out of Level 3 occurred during the year ended December 31, 2016.

The Company determines the fair value of its non-U.S. plan assets using the following methodologies:

• Cash and cash equivalents - Cash equivalents are valued using a market approach with inputs including quoted market prices for either identical or similar instruments.

• Equity mutual funds - Equity mutual funds are valued at their daily net asset value (NAV) per share or the equivalent. NAV per share or the equivalent is used for fair value purposes as a practical expedient. NAVs are calculated by the investment manager or sponsor of the fund.

• Corporate and non-U.S. bonds - Corporate and non-U.S. bonds are valued through a market approach with inputs including, but not limited to, benchmark yields, reported trades, broker quotes and issuer spreads.

• Real estate - Private real estate fund values are reported by the fund manager and are based on valuation or appraisal of the underlying investments.

The Company made employer contributions of \$55.7 million to the U.S. pension plan in 2017, of which \$50.0 million was discretionary, and \$7.9 million in 2016. The Company did not make any required or discretionary contributions to the U.S. pension plans in 2015. The Company made required and discretionary contributions to its non-U.S. pension plans of \$5.2 million in 2017, \$6.0 million in 2016, and \$6.5 million in 2015.

The Company currently projects that an approximate \$13.5 million will be contributed to its U.S and non-U.S. plans in 2018. The Company's policy allows it to fund an amount, which could be in excess of or less than the pension cost expensed, subject to the limitations imposed by current tax regulations. The Company anticipates funding the plans in 2018 in accordance with contributions required by funding regulations or the laws of each jurisdiction.

Most of the Company's U.S. employees are covered by defined contribution plans. Employer contributions are determined based on criteria specific to the individual plans and amounted to approximately \$14.0 million, \$13.3 million, and \$12.1 million in 2017, 2016 and 2015. The Company's contributions relating to non-U.S. defined contribution plans and other non-U.S. benefit plans were \$7.0 million, \$5.6 million and \$6.2 million in 2017, 2016 and



2015.

#### Deferred Compensation Plan

The Company maintains an Executive Deferred Compensation Plan ("EDCP"), which is an unfunded, nonqualified plan that permits certain employees to defer receipt of up to 50% of their annual salary and up to 100% of their annual bonus awards, performance share plan awards, and restricted stock units received upon commencement of employment. As of December 31, 2017 the deferred compensation liability balance was \$20.9 million.

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## Postretirement Benefits Other Than Pensions

The Company sponsors a postretirement plan that provides for healthcare benefits, and in some instances, life insurance benefits that cover certain eligible employees. The Company funds postretirement benefit obligations principally on a pay-as-you-go basis. Generally, postretirement health benefits are contributory with contributions adjusted annually. Life insurance plans for retirees are primarily noncontributory.

The following table details information regarding the Company's postretirement plans at December 31:

In millions	2017	2016
Change in benefit obligations:		
Benefit obligation at beginning of year	\$9.7	\$12.9
Service cost	0.1	0.1
Interest cost	0.3	0.4
Actuarial gains	0.1	(2.9 )
Benefits paid, net of Medicare Part D subsidy	(0.9 )	(0.8 )
Benefit obligations at end of year	\$9.3	\$9.7
Funded status:		
Plan assets less than benefit obligations	\$(9.3)	\$(9.7)
Amounts included in the balance sheet:		
Accrued compensation and benefits	(0.9 )	(0.9 )
Postemployment and other benefit liabilities	(8.4 )	(8.8 )
Total	\$(9.3)	\$(9.7)

The pretax amounts recognized in Accumulated other comprehensive loss were as follows:

In millions	Prior service gains	Net actuarial losses	Total
December 31, 2015	\$ 3.9	\$ (1.2 )	\$2.7
Current year changes recorded to Accumulated other comprehensive loss	—	2.9	2.9
Amortization reclassified to earnings	(1.6 )	—	(1.6 )
Balance at December 31, 2016	\$ 2.3	\$ 1.7	\$4.0
Current year changes recorded to Accumulated other comprehensive loss	—	(0.2 )	(0.2 )
Amortization reclassified to earnings	(1.7 )	—	(1.7 )
Balance at December 31, 2017	\$ 0.6	\$ 1.5	\$2.1

The components of net periodic postretirement benefit cost (income) for the years ended December 31 were as follows:

In millions	2017	2016	2015
Service cost	\$0.1	\$0.1	\$0.1
Interest cost	0.3	0.4	0.5
Net amortization of:			
Prior service gains	(1.7 )	(1.6 )	(1.6 )
Net actuarial losses	(0.1 )	—	—
Net periodic postretirement benefit income	\$(1.4)	\$(1.1)	\$(1.0)

Postretirement income for 2018 is projected to be \$0.5 million. Amounts expected to be recognized in net periodic postretirement benefits cost in 2018 for prior service gains and plan net actuarial losses are \$0.7 million and \$0.1 million.

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Assumptions:	2017	2016	2015
Weighted-average discount rate assumption to determine:			
Benefit obligations at December 31	3.3%	3.5%	3.5%
Net periodic benefit cost	3.5%	3.5%	3.5%

The Company has capped the annual maximum amount it will pay for retiree healthcare costs. Accordingly, assumptions of health-care cost trend rates are no longer applicable.

A 1% change in the medical trend rate assumed for postretirement benefits would have no effect on the postretirement benefit obligation as the Company has capped the annual maximum amount it will pay for retiree healthcare costs, therefore any additional costs would be assumed by the retiree.

Benefit payments for postretirement benefits, which are net of expected plan participant contributions and Medicare Part D subsidy, are expected to be paid as follows:

In millions

2018	\$0.9
2019	1.0
2020	0.9
2021	0.9
2022	0.8
2023 - 2027	\$3.5

## NOTE 12 – FAIR VALUE MEASUREMENTS

Fair value is defined as the exchange price that would be received to sell an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. Fair value measurements are based on a framework that utilizes the inputs market participants use to determine the fair value of an asset or liability and establishes a fair value hierarchy to prioritize those inputs. The fair value hierarchy is comprised of three levels that are described below:

Level 1 – Inputs based on quoted prices in active markets for identical assets or liabilities.

Level 2 – Inputs other than Level 1 quoted prices, such as quoted prices for similar assets or liabilities; quoted prices in markets that are not active; or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the asset or liability.

Level 3 – Unobservable inputs based on little or no market activity and that are significant to the fair value of the assets and liabilities.

The fair value hierarchy requires an entity to maximize the use of observable inputs and minimize the use of unobservable inputs when measuring fair value. Observable inputs are obtained from independent sources and can be validated by a third party, whereas unobservable inputs reflect assumptions regarding what a third party would use in pricing an asset or liability based on the best information available under the circumstances. A financial instrument's categorization within the fair value hierarchy is based upon the lowest level of input that is significant to the fair value measurement.

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Assets and liabilities measured at fair value at December 31, 2017 are as follows:

In millions	Fair value measurements			
	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Total fair value
Recurring fair value measurements				
Assets:				
Interest rate swaps	\$—\$ 5.3	\$		—\$5.3
Foreign currency contracts	—0.2	—		0.2
Total asset recurring fair value measurements	\$—\$ 5.5	\$		—\$5.5
Liabilities:				
Foreign currency contracts	\$—\$ 0.7	\$		—\$0.7
Deferred compensation plans	—20.9	—		20.9
Total liability recurring fair value measurements	\$—\$ 21.6	\$		—\$21.6
Financial instruments not carried at fair value:				
Total debt	\$—\$ 1,485.2	\$		—\$1,485.2
Total financial instruments not carried at fair value	\$—\$ 1,485.2	\$		—\$1,485.2

Assets and liabilities measured at fair value at December 31, 2016 are as follows:

In millions	Fair value measurements			
	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Total fair value
Recurring fair value measurements				
Assets:				
Interest rate swaps	\$—\$ 4.6	\$		—\$4.6
Foreign currency contracts	—1.0	—		1.0
Total asset recurring fair value measurements	\$—\$ 5.6	\$		—\$5.6
Liabilities:				
Foreign currency contracts	\$—\$ 0.3	\$		—\$0.3
Interest rate swaps	—0.4	—		0.4
Deferred compensation plans	—16.8	—		16.8
Total liability recurring fair value measurements	\$—\$ 17.5	\$		—\$17.5

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Financial instruments not carried at fair value:

Total debt	\$—	\$ 1,510.6	\$	—	\$1,510.6
Total financial instruments not carried at fair value	\$—	\$ 1,510.6	\$	—	\$1,510.6

The Company determines the fair value of its financial assets and liabilities using the following methodologies:

Foreign currency contracts – These instruments include foreign currency contracts for non-functional currency balance sheet exposures. The fair value of the foreign currency contracts are determined based on a pricing model that uses spot rates and forward prices from actively quoted currency markets that are readily accessible and observable.

Interest rate swaps – These instruments include forward-starting interest rate swap contracts for \$250.0 million of the Company's variable rate debt. The fair value of the derivative instruments are determined based on quoted prices for the Company's swaps, which are not considered an active market.

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Deferred compensation plans - These include obligations related to deferred compensation adjusted for market performance. The fair value is obtained based on observable market prices quoted on public exchanges for similar instruments.

Debt – These securities are recorded at cost and include senior notes maturing through 2027. The fair value of the long-term debt instruments is obtained based on observable market prices quoted on public exchanges for similar instruments.

The carrying values of cash and cash equivalents, accounts receivable, accounts payable and short-term borrowings are a reasonable estimate of their fair value due to the short-term nature of these instruments.

The methodology used by the Company to determine the fair value of its financial assets and liabilities at December 31, 2017 are the same as those used at December 31, 2016. There have been no significant transfers between Level 1 and Level 2 categories.

## NOTE 13 – EQUITY

## Ordinary Shares

The reconciliation of Ordinary shares is as follows:

In millions	Total
December 31, 2016	95.3
Shares issued under incentive plans	0.6
Repurchase of ordinary shares	(0.8 )
December 31, 2017	95.1

Allegion had 400.0 million ordinary shares authorized and 10.0 million \$0.001 par value preferred shares authorized (with none outstanding) at December 31, 2017.

On February 2, 2017, the Company's Board of Directors approved a new stock repurchase authorization of up to \$500 million of the Company's ordinary shares. This new stock repurchase authorization replaced the authorization established in 2014. During the year ended December 31, 2017, the Company paid \$60.0 million to repurchase 0.8 million ordinary shares on the open market under this new repurchase authorization.

## Other Comprehensive Income (Loss)

The changes in Accumulated other comprehensive income (loss) are as follows:

In millions	Cash flow hedges and marketable securities	Pension and OPEB Items	Foreign Currency Items	Total
December 31, 2014	\$ 15.7	\$(116.1)	\$(47.8 )	\$(148.2)
Other comprehensive loss, net of tax	(1.7 )	(23.2 )	(59.1 )	(84.0 )
December 31, 2015	\$ 14.0	\$(139.3)	\$(106.9 )	\$(232.2)
Other comprehensive (loss) income, net of tax	(10.6 )	18.8	(40.3 )	(32.1 )
December 31, 2016	\$ 3.4	\$(120.5)	\$(147.2 )	\$(264.3)
Other comprehensive income (loss), net of tax	0.4	19.3	98.1	117.8
Other <sup>(a)</sup>	—	(6.4 )	—	(6.4 )
December 31, 2017	\$ 3.8	\$(107.6)	\$(49.1 )	\$(152.9)

(a) During 2017, the Company reclassified \$6.4 million between Accumulated other comprehensive loss and Retained earnings to correct a prior period classification error of Pension and OPEB items. The Company does not believe



this reclassification is material to 2017 or to any of its previously issued annual or interim financial statements.

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The amounts of Other comprehensive income (loss) attributable to noncontrolling interests are as follows:

In millions	2017	2016	2015
Foreign currency items	\$(0.6)	\$(0.4)	\$(1.4)
Total other comprehensive loss attributable to noncontrolling interests	\$(0.6)	\$(0.4)	\$(1.4)

## NOTE 14 – SHARE-BASED COMPENSATION

The Company records share-based compensation awards using a fair value method and recognizes compensation expense for an amount equal to the fair value of the share-based payment issued in its financial statements. The Company's share-based compensation plans include programs for stock options, restricted stock units ("RSUs"), performance stock units ("PSUs"), and deferred compensation.

Under the Company's incentive stock plan, the total number of ordinary shares authorized by the shareholders is 8.0 million, of which 3.4 million remain available as of December 31, 2017 for future incentive awards.

## Compensation Expense

Share-based compensation expense is included in Cost of goods sold and Selling and administrative expenses. The following table summarizes the expenses recognized for the years ended December 31:

In millions	2017	2016	2015
Stock options	\$3.3	\$4.1	\$3.7
RSUs	7.0	7.7	5.8
PSUs	5.8	4.8	5.0
Deferred compensation	2.8	0.8	0.3
Pre-tax expense	18.9	17.4	14.8
Tax benefit	(6.4 )	(5.6 )	(4.4 )
Total	\$12.5	\$11.8	\$10.4

## Stock Options / RSUs

Eligible participants may receive (i) stock options, (ii) RSUs or (iii) a combination of both stock options and RSUs. The fair value of each of the Company's stock option and RSU awards is expensed on a straight-line basis over the required service period, which is generally the 3-year vesting period. However, for stock options and RSUs granted to retirement eligible employees, the Company recognizes expense for the fair value at the grant date.

The average fair value of the stock options granted for the year ended December 31, 2017 and 2016 was estimated to be \$18.22 per share and \$15.86 per share, respectively, using the Black-Scholes option-pricing model. The weighted average assumptions used were the following:

	2017	2016	2015	
Dividend yield	0.89	% 0.83	% 0.69	%
Volatility	24.93	% 28.85	% 31.37	%
Risk-free rate of return	2.08	% 1.38	% 1.78	%
Expected life	6.0 years	6.0 years	6.0 years	

Expected volatility is based on the weighted average of the implied volatility of a group of the Company's peers. The risk-free rate of return is based on the yield curve of a zero-coupon U.S. Treasury bond on the date the award is

granted with a maturity equal to the expected term of the award. Historical peer data is used to estimate forfeitures within the Company's valuation model. The expected life of the Company's stock option awards granted post separation is derived from the simplified approach based

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on the weighted average time to vest and the remaining contractual term, and represents the period of time that awards are expected to be outstanding.

Changes in options outstanding under the plans for the years ended December 31, 2017, 2016 and 2015 are as follows:

	Shares subject to option	Weighted- average exercise price (a)	Aggregate intrinsic value (millions)	Weighted- average remaining life (years)
December 31, 2014	1,962,028	\$ 28.11		
Granted	220,679	57.85		
Exercised	(575,564 )	22.98		
Canceled	(14,976 )	47.28		
December 31, 2015	1,592,167	33.91		
Granted	231,521	57.91		
Exercised	(447,019 )	26.04		
Canceled	(63,599 )	53.40		
December 31, 2016	1,313,070	39.87		
Granted	165,113	71.84		
Exercised	(410,397 )	31.54		
Canceled	(15,906 )	60.84		
Outstanding December 31, 2017	1,051,880	\$ 47.80	\$ 33.4	6.0
Exercisable December 31, 2017	696,929	\$ 39.46	\$ 27.9	4.8

(a) The weighted average exercise price of awards represents the exercise price of the awards on the grant date converted to ordinary shares of the Company.

The following table summarizes information concerning currently outstanding and exercisable options:

Options outstanding	Options exercisable
Range of exercise price	Number exercisable at December 31, 2017
Weighted- average exercise price (years)	Weighted- average remaining life