

Allegion plc  
Form 10-K  
February 17, 2017  
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UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K

(Mark One)

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

For the fiscal year ended December 31, 2016

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
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Ordinary Shares,	New York Stock Exchange
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Par Value \$0.01 per Share

5.875% Senior Notes due 2023	New York Stock Exchange
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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. [

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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.:

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

(Do not check if a smaller reporting company)

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 nonaffiliates on June 30, 2016 was approximately \$6.7 billion based on the closing price of such stock on the New York Stock Exchange.

The number of ordinary shares outstanding as of February 13, 2017 was 95,471,511.

**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 7, 2017 (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, 2016

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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;
- 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 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 substantial leverage 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	Door and door frames (steel)
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. Most door openings are custom-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 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.

Based on third party sources, we estimate that the size of the global markets we serve was approximately \$30 billion in revenue in 2016 with compound annual growth of about 2 to 4% per year over the past four years. We believe that the security products industry will 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 improving institutional and growth in commercial industrial markets and continued recovery in residential markets in the United States and slight growth in Europe will offset unfavorable foreign currency exchange rates overseas. Additionally, we 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. Our acquisition of Simons Voss Technologies GmbH and Milre System Co, Ltd. in late 2015 were made to capitalize on this trend.

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

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Allegion Brands

(listed for each region)

Product Category

Americas EMEIA Asia Pacific

Locks/Locksets/Portable Locks/Key Systems

Door Closers and Controls/Exit Devices



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Electronic Products and Access Control Systems, including Time, Attendance and Workforce Productivity

Product Category

Americas EMEA Asia  
Pacific

Doors and Door Frames

Other Accessories

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 and Interflex hold the No.1 or No. 2 position in their primary product categories in certain European markets.

For the year ended December 31, 2016, we generated revenues of \$2,238.0 million and operating income of \$425.5 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 launch	Year	Innovation
Cast Aluminum Series	2015	Cast Aluminum Series closers were specially designed to deliver consistent, dependable, long-term performance while offering high-quality, effective solutions
Schlage NDE Series wireless commercial lock	2014	Designed to be easy to install, connect, manage and use with ENGAGE connectivity platform
Schlage Touch, Connect, Sense, Control	2014/2015/2016	New single and multi family residential electronic locking platforms that provide for keyless entry (Touch), connected locking (Connect), integration with the Apple HomeKit platform (Sense), and multi-family interconnect locking (Control)
Mobile Key Platform	2016	Highly secure, offering facility managers and those in charge of buildings sophisticated access control
Concealed Vertical Cable System	2016	Giving doors that require a vertical exit device the same strength and security in a system that is easy to install and maintain
AX Platform	2014	The first exit device that meets California's stringent maximum force requirements

## Industry and Competition

Based on third party sources, we estimate that the size of the global markets we serve was approximately \$30 billion in revenue in 2016 with compound annual growth of about 2 to 4% per year over the past four years. This growth rate primarily reflects cyclical challenges in the commercial, institutional and residential construction markets throughout North America and Europe as certain developing economies experienced higher growth rates during this period. Additionally, 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

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categories, we may also compete against smaller, 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 2016 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 22, "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,		
	2016	2015	2014
Americas	74%	75%	74%
EMEIA	21%	19%	18%
Asia Pacific	5%	6%	8%

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 frames, electronic product and access control 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 Schlage, Von Duprin and LCN.

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 time and attendance and workforce productivity solutions. This segment's primary brands are AXA, Bricard, CISA, Interflex and SimonsVoss. This segment also resells North American Schlage, Von Duprin and LCN 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 Milre, Schlage, CISA, Von Duprin and LCN.

### 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.

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 Frames: A portfolio of hollow metal doors and door frames. In select geographies, we also provide installation and maintenance services.

Other Accessories: A variety of additional security and product components, including hinges, door levers, door

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stops, lites, louvers, weather stripping, thresholds, and other accessories, as well as certain bathroom fittings products.

### 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, we provide products and solutions directly to end-users.

Our 10 largest customers represented approximately 24% of our total revenues in 2016. No single customer represented 10% or more of our total revenues in 2016.

### 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 26 production facilities, including ten in the Americas region, eleven in EMEIA and five in Asia Pacific. We own 15 of these facilities and lease the others. Our 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 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.



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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. We do not believe the loss of any particular supplier would be material to our business.

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, CISA 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, 26 production facilities and several distribution centers throughout the world. Our active properties represent approximately 5.7 million square feet, of which approximately 44% 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	Durchhausen, Germany	Bucheon, South Korea
Chino, California	Duzce, Turkey	Jinshan, China
Ensenada, Mexico	Faenza, Italy	Melbourne, Australia
Indianapolis, Indiana	Feuquieres, France	Sydney, Australia
Princeton, Illinois	Monsampolo, Italy	
Security, Colorado	Muenster, Germany	
Tecate, Mexico	Osterfeld, Germany	
Tijuana, Mexico	Renchen, Germany	
McKenzie, Tennessee	Siewierz, Poland	
	Veenendaal, Netherlands	

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 \$47.3 million, \$45.2 million and \$43.3 million for the years ended December 31, 2016, 2015 and 2014, 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.

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## 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, 2016, 2015 and 2014 are as follows:

	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
2016	22%	26%	26%	26%
2015	22%	25%	26%	27%
2014	22%	25%	26%	27%

## Employees

As of December 31, 2016, we had more than 9,400 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 \$23.3 million, \$4.4 million, and \$2.9 million of expenses during the years ended December 31, 2016, 2015, and 2014, respectively, for environmental remediation at sites presently or formerly owned or leased by us. As of December 31, 2016 and 2015, we have recorded reserves for environmental matters of \$30.6 million and \$15.2 million. Of these amounts \$9.6 million and \$2.8 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.

## 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;
- 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.

We operate in highly competitive markets.

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 and electronic products. This may lead to increased competition, including with companies with greater financial and other resources than we have, and may lead to changes in customers' tastes and preferences. 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 2016 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.

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



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• 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 operational 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.

Impact of United Kingdom exit from European Union.

In 2016, the United Kingdom ("UK") held a referendum in which voters approved an exit from the European Union ("EU"), commonly referred to as "Brexit". There is substantial uncertainty surrounding the Brexit vote and any impact

of Brexit depends on the terms of the UK's withdrawal from the EU, which still need to be determined and could take several years to accomplish. The UK's withdrawal from the EU could result in a global economic downturn, which could depress the demand for our products and services. The UK also could lose access to the single EU market and to the global trade and tax deals negotiated by the EU on behalf of its members, depressing trade between the UK and other countries, which would negatively impact our international operations. Additionally, we may face new regulations regarding trade, security and employees, among others in the UK. Compliance with such regulations could be costly, negatively impacting our business, results of operations and financial condition.

Our EMEIA restructuring plans may not be successful.

We have substantially completed a plan to restructure our EMEIA segment to improve efficiencies and regional cost structure. If we are unable to successfully maintain our restructuring plan, we may not be able to improve profitability or effectively compete in the region. In addition, the previously disclosed plan or any new restructuring plans could result in significant restructuring charges and impairment charges.

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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 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.

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.

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.

Man-made problems such as cybersecurity attacks, computer viruses or terrorism may disrupt our operations and harm our business, reputation and operating results

Despite our implementation of network security measures, our network and products may be vulnerable to cybersecurity attacks, computer viruses, break-ins and similar disruptions. Cybersecurity attacks, in particular, are evolving and include, but are not limited to, malicious software, attempts to gain unauthorized access to data, and other electronic security breaches that could lead

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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.

Our daily business operations 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 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 and price increases 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.

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

At December 31, 2016, the net carrying value of our goodwill and other indefinite-lived intangible assets totaled approximately \$716.8 million and \$64.6 million. 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 reviews 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 of the goodwill or other intangible assets and the implied 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 EMEIA 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 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.

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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.

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.



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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.

## Risks Related to Our Indebtedness

Our substantial leverage could harm our business by limiting our available cash and our access to additional capital and, to the extent of our variable rate indebtedness, exposing us to interest rate risk.

We have approximately \$1.5 billion of outstanding indebtedness at December 31, 2016. In addition, we have a senior secured 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. In addition, 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. We may be more vulnerable than a less leveraged company to a downturn in the general economic conditions or in our business, or we may be unable to carry out capital spending that is important to our growth. We may be vulnerable to interest rate increases, as certain of our borrowings, including those under our senior secured credit facilities, are at variable rates.

We may not be able to generate sufficient cash to service all of our indebtedness and may be forced to take other actions to satisfy our obligations under our indebtedness, which actions may not be successful.

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. We may not be able to maintain a level of cash flow from operating activities sufficient to permit us to pay the principal and interest on our indebtedness. For more information see "Management's Discussion and Analysis of Financial Condition and Results of Operations - Liquidity and Capital Resources."

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. The terms of the credit agreement governing our senior secured credit facilities and the indentures governing our senior notes contain customary financial covenants that may restrict our ability to use the proceeds from asset sales and therefore may not be adequate to meet any debt service obligations then due.

Despite our levels of indebtedness, we may still be able to incur substantially more debt, which could further exacerbate the risks associated with our substantial leverage.

We may be able to incur substantial additional indebtedness in the future. Although the terms of the credit agreement governing our senior secured credit facilities and the indentures governing our senior notes contain customary restrictions on the incurrence of additional indebtedness, these restrictions are subject to a number of qualifications and exceptions, and the indebtedness incurred in compliance with these restrictions could be substantial. In addition, our senior secured revolving credit facility permits borrowings of up to \$500 million. If we incur additional debt above the levels we currently have, the risks associated with our leverage, including those described above, would increase.

The terms of our debt covenants could limit how we conduct our business and our ability to raise additional funds.

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The terms of the credit agreement governing our senior secured credit facilities and the indentures governing our senior notes may restrict us from taking certain actions that we may think are in the best interests of our shareholders. A breach of the covenants or restrictions could result in a default under the applicable indebtedness. As a result of these restrictions, we may be:

- limited in how we conduct our business;
- limited in our ability to pay dividends or make other distributions to our shareholders;
- unable to raise additional debt or equity financing to operate during general economic or business downturns; or
- unable to compete effectively or to take advantage of new business opportunities.

These restrictions may affect our ability to grow in accordance with our plans.

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

Our variable rate indebtedness may expose us to interest rate risk, which could cause our debt costs to increase significantly.

A portion of our borrowings at December 31, 2016 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 or variable-rate borrowings. At December 31, 2016, we have approximately \$1.5 billion of aggregate debt outstanding, and this amount includes \$880 million of floating-rate term loans and \$600 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 secured revolving credit facility. We entered into forward starting interest rate swaps for \$275.0 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 2016 interest expense of approximately \$6.2 million. If the LIBOR or other applicable base rates under our senior secured credit facilities increase in the future then the 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

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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.

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.

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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.

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 resident 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;

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• 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.

### Item 1B. UNRESOLVED STAFF COMMENTS

None.

### Item 2. PROPERTIES

We operate through a broad network of sales offices, 26 production facilities and several distribution centers throughout the world. Our active properties represent about 5.7 million square feet, of which approximately 44% 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 17, 2017.

David D. Petratis, age 59, 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.

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Patrick S. Shannon, age 54, 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. Mr. Shannon previously served as Ingersoll Rand's Vice President, Audit Services from 2010 to 2012.

Jeffrey N. Braun, age 57, 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.

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Timothy P. Eckersley, age 55, 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 50, 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. He also served as Vice President of ClearEdge Power (a fuel cell manufacturer) from 2011 to 2012.

Tracy L. Kemp, age 48, 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 45, 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. from 2011 to 2013.

Lucia Veiga Moretti, age 52, is our Senior Vice President - EMEIA. 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 59, 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.

Douglas P. Ranck, age 58, is our Vice President and Controller. 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 46, 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 (a 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 13, 2017, the number of record holders of ordinary shares was 3,247. 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
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
2015			
First quarter	\$61.91	\$52.79	\$ 0.10
Second quarter	63.18	59.10	0.10
Third quarter	64.68	56.07	0.10
Fourth quarter	\$68.03	\$58.08	\$ 0.10

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 \$0.12 per ordinary share on February 4, 2016, April 7, 2016, August 31, 2016 and November 30, 2016. On February 2, 2017 our Board of Directors declared a dividend of \$0.16 per ordinary share payable on March 31, 2017. We paid a total of \$46.0 million in cash for dividends to ordinary shareholders during the year ended December 31, 2016. 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 2014, our Board of Directors authorized the repurchase of up to \$200 million of our ordinary shares. We paid a total of \$85.1 million to repurchase 1.3 million ordinary shares during the year ended December 31, 2016 and \$30.0 million to repurchase 0.5 million ordinary shares during the year ended December 31, 2015. At December 31, 2016, we have approximately \$34.9 million available under the authorized share repurchase plan.

On February 2, 2017, our 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 replaces the program established in 2014.



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## Performance Graph

The annual changes for the period shown November 18, 2013 (when our ordinary shares began trading in the "when-issued" market) to December 31, 2016 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 November 18, 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, 2016.

	November 18, 2013	December 31, 2013	December 31, 2014	December 31, 2015	December 31, 2016
Allegion plc	100.00	91.16	115.11	137.71	134.67
S&P 500	100.00	103.44	117.59	119.22	133.48
S&P 400 Capital Goods	100.00	105.46	105.72	99.90	131.80

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## Item 6. SELECTED FINANCIAL DATA (1)

In millions, except per share amounts:

At and for the years ended December 31,	2016	2015	2014	2013	2012
Net revenues	\$2,238.0	\$2,068.1	\$2,118.3	\$2,069.6	\$2,023.3
Net earnings (loss) attributable to Allegion plc ordinary shareholders:					
Continuing operations (e)	229.1	(a) 154.3	(b) 186.3	(c) 35.9	(d) 224.3
Discontinued operations	—	(0.4 )	(11.1 )	(3.6 )	(4.2 )
Total assets	2,247.4	2,263.0	2,015.9	2,000.6	2,003.2
Total debt	1,463.8	1,523.1	1,264.6	1,343.9	5.0
Total Allegion plc shareholders' equity (deficit)	113.3	25.6	(4.8 )	(66.1 )	1,362.6
Earnings (loss) per share attributable to Allegion plc ordinary shareholders:					
Basic:					
Continuing operations	\$2.39	\$1.61	\$1.94	\$0.37	\$2.34
Discontinued operations	—	(0.01 )	(0.12 )	(0.03 )	(0.04 )
Diluted:					
Continuing operations	\$2.36	\$1.59	\$1.92	\$0.37	\$2.34
Discontinued operations	—	—	(0.12 )	(0.03 )	(0.04 )
Dividends declared per ordinary share	\$0.48	\$0.40	\$0.32	\$—	\$—

(a) 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.

(b) 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.

(c) 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.

(d) 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.

(e) Net earnings from continuing operations includes \$174.5 million and \$176.7 million of centrally managed service costs and corporate allocations from Ingersoll Rand for the years ended December 31, 2013 and 2012.

(1) The Company has not restated 2015, 2014, 2013, or 2012 for the impact of the adoption of ASU 2016-09 in the fourth quarter of 2016. The Company has not restated 2014, 2013, and 2012 for the impact of the adoption of ASU 2015-17 as of December 31, 2015. The Company has not restated 2014, 2013, and 2012 for the impact of the adoption of 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, Interflex and SimonsVoss.

Trends and Economic Events

Current market conditions, including challenges in international markets, continue to impact our financial results. Uneven global commercial new construction activity is negatively impacting our results, however U.S. residential and consumer markets have begun to improve, and we are seeing improvements in the U.S. new builder and replacement markets.

Based on third party sources, we estimate that the size of the global markets we serve was approximately \$30 billion in revenue in 2016 with compound annual growth of about 2 to 4% per year over the past four years. We believe that the security products industry will benefit from several global macroeconomic and long-term demographic trends, which include heightened awareness of security requirements, increased global urbanization and the shift to a digital, interconnected environment.

We believe improving institutional and growth in commercial industrial markets and continued recovery in residential markets in the United States and slight growth in Europe will offset unfavorable foreign currency exchange rates overseas. Additionally, we 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. Our acquisitions of Simons Voss Technologies GmbH and Milre Systek Co, Ltd. in late 2015 were 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."

2016 and 2015 Significant Events

Acquisitions and Divestitures

In 2016, we completed one business acquisition. In 2015, we completed six acquisitions of, or investments in, businesses and two divestitures:

Acquisitions / Investments      Divestitures

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Business	Month	Business	Month
iDevices	February 2015	Venezuela	August 2015
Zero	April 2015	Systems integration	November 2015
Brio	May 2015		
Milre	July 2015		
SimonsVoss	September 2015		
AXA	September 2015		
Trelock	June 2016		

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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. The incremental impact of the acquisitions and divestitures for the twelve months ended December 31, 2015 was a net decrease in revenues of approximately \$20.7 million and a net decrease in operating income of approximately \$12.1 million compared to the same period in the prior year.

Total consideration paid for the 2015 acquisitions was \$511.3 million (net of cash acquired), paid through cash on hand and borrowings under our Senior Secured Revolving Credit Facility ("Revolver").

For the year ended December 31, 2015, we incurred \$17.9 million of costs related to these acquisitions.

### 2016 Dividends

We paid quarterly dividends of \$0.12 per ordinary share to shareholders on March 31, 2016, June 30, 2016, September 30, 2016, and December 30, 2016. We paid a total of \$46.0 million in cash for dividends to ordinary shareholders during the year ended December 31, 2016.

### Restructuring charges

In the second quarter of 2015, management committed to a restructuring plan in Italy to improve our competitive position, ensure long-term viability and enhance customer experience. In conjunction with this plan, we incurred severance and other restructuring charges of \$0.9 million and other charges of \$0.5 million for the year ended December 31, 2016.

As part of other restructuring plans, the Company incurred \$2.2 million of restructuring charges related to workforce reductions and actions related to manufacturing foot print optimization primarily in the Americas segment.

### Financing activities

In September 2015, we issued \$300.0 million of Senior Notes due 2023 (the "2023 Senior Notes"). We used the net proceeds of the offering to repay a portion of the borrowings under our Revolver that were used to fund the acquisitions of SimonsVoss and AXA. The 2023 Senior Notes accrue interest at the rate of 5.875% per annum, payable semi-annually on March 15 and September 15 of each year, beginning March 15, 2016. The 2023 Senior Notes mature on September 15, 2023.

In September 2015, we completed the Second Amendment and Restatement Agreement to our Credit Agreement. The Second Amendment and Restatement, among other things, reduced the applicable margin for LIBOR rate borrowings to range from 1.375% to 1.875% (from 1.50% to 2.00%) and the applicable margin for base rate borrowings to range from 0.375% to 0.875% (from 0.50% to 1.00%) and extended the maturity date of the Revolver and the Term Loan Facility due in 2020 (the "Term Loan A Facility") from October 15, 2019 to October 15, 2020.

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

Dollar amounts in millions, except per share data	2016	% of Revenues	2015	% of Revenues	2014	% of Revenues
Net revenues	\$2,238.0		\$2,068.1		\$2,118.3	
Cost of goods sold	1,252.7	56.0 %	1,199.0	58.0 %	1,264.6	59.7 %
Selling and administrative expenses	559.8	25.0 %	510.5	24.7 %	527.4	24.9 %
Operating income	425.5	19.0 %	358.6	17.3 %	326.3	15.4 %
Interest expense	64.3		52.9		53.8	
Loss on divestitures	84.4		104.2		—	
Other expense (income), net	(18.2 )		(7.8 )		4.6	
Earnings before income taxes	295.0		209.3		267.9	
Provision for income taxes	63.8		54.6		84.2	
Earnings from continuing operations	231.2		154.7		183.7	
Discontinued operations, net of tax	—		(0.4 )		(11.1 )	
Net earnings	231.2		154.3		172.6	
Less: Net earnings (loss) attributable to noncontrolling interests	2.1		0.4		(2.6 )	
Net earnings attributable to Allegion plc	\$229.1		\$153.9		\$175.2	
Diluted net earnings per ordinary share attributable to Allegion plc ordinary shareholders:						
Continuing operations	\$2.36		\$1.59		\$1.92	
Discontinued operations	—		—		(0.12 )	
Net earnings	\$2.36		\$1.59		\$1.80	

## Net Revenues

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 %

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

Net revenues for the year ended December 31, 2015 decreased by 2.4% (or \$50.2 million) compared to the same period in 2014 due to the following:

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Pricing	0.6 %
Volume	4.8 %
Acquisitions / divestitures	(1.0)%
Currency exchange rates	(6.8)%
Total	(2.4)%

The decrease in net revenues was primarily driven by unfavorable foreign currency exchange rate movements due to the strengthening of the US dollar against currencies in Canada, EMEIA and Asia-Pacific, the devaluation of the Venezuelan bolivar and the divestitures of our Venezuelan operations and our systems integration business in China. These decreases were partially offset by higher volumes and improved pricing in our Americas and EMEIA segments and revenue from the acquisitions discussed above.

## Cost of Goods Sold

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.

For the year ended December 31, 2015, cost of goods sold as a percentage of revenue decreased to 58.0% from 59.7% due to the following:

Pricing and productivity in excess of inflation	(1.1)%
Acquisitions / divestitures	(0.6)%
Investment spending	0.3 %
Currency exchange rates	0.2 %
Non-cash inventory impairment	(1.4)%
Restructuring / spin costs / acquisition costs	0.9 %
Total	(1.7)%

Costs of goods sold as a percentage of revenue for the year ended December 31, 2015 decreased primarily due to a \$4.2 million non-cash inventory impairment charge related to the devaluation of the Venezuelan bolivar in 2015 compared to a \$33.3 million charge in 2014, productivity benefits in excess of inflation and the divestitures of our Venezuelan operations and our systems integration business in China. These decreases were offset by increased restructuring costs primarily in our EMEIA segment, increased investment spending, the impact of the acquisitions discussed above and unfavorable foreign currency exchange rate movements.



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## Selling and Administrative Expenses

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.

For the year ended December 31, 2015, selling and administrative expenses as a percentage of revenue decreased to 24.7% from 24.9% due to the following:

Other inflation in excess of productivity	0.1 %
Volume leverage	(1.2)%
Acquisitions / divestitures	1.0 %
Investment spending	0.7 %
Currency exchange rates	0.2 %
Restructuring / spin costs / acquisition costs	(1.0)%
Total	(0.2)%

Selling and administrative expenses as a percentage of revenue for the year ended December 31, 2015 improved primarily due to favorable leverage due to increased volume, lower restructuring costs compared to the prior year and spin-related costs in the prior year that did not recur in the current year. These decreases were offset by increased costs related to the acquisitions in the current year, increased investment spending, unfavorable foreign currency exchange rate movements and other inflation in excess of productivity.

## Operating Income/Margin

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

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 and other items	(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 %





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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.

Operating income for the year ended December 31, 2015 increased \$32.3 million and operating margin increased to 17.3% from 15.4% for the same period in 2014 due to the following:

in millions	Operating Income	Operating Margin	
December 31, 2014	\$ 326.3	15.4	%
Pricing and productivity in excess of inflation	22.2	1.0	%
Volume/product mix	40.1	1.1	%
Non-cash inventory impairment	29.1	1.4	%
Currency exchange rates	(29.8 )	(0.4 )	%
Investment spending and other items	(19.7 )	(0.9 )	%
Acquisitions / divestitures	(12.1 )	(0.4 )	%
Restructuring / spin costs / acquisition costs	2.5	0.1	%
December 31, 2015	\$ 358.6	17.3	%

Operating income and operating margin increased primarily due to favorable volume/product mix primarily in our Americas segment, lower inventory impairment charges in Venezuela in 2015, pricing improvements and productivity in excess of inflation, the impact of acquisitions in 2015 and Spin-off related costs in 2014 that did not recur in 2015. These increases were partially offset by unfavorable foreign currency exchange rate movements, the divestitures of our Venezuelan operations and our systems integration business in China, increased investment spending primarily for new product development and channel development, higher restructuring costs compared to 2014 and costs incurred related to acquisitions in 2015.

## Interest Expense

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

Interest expense for the year ended December 31, 2015 decreased \$0.9 million compared with the same period of 2014. Interest expense in 2014 included a non-cash charge of approximately \$4.5 million for the write-off of unamortized Term Loan B Facility debt issuance costs. Excluding this charge, interest expense increased primarily due to issuing the 2023 Senior Notes, partially offset by the impact of refinancing the Senior Secured Credit Facilities in the fourth quarter of 2014 and third quarter of 2015.

## Loss on Divestitures

During the year ended December 31, 2016 we recorded an after tax charge of \$84.4 million primarily due to the write-down of the carrying value of consideration receivable related to the 2015 divestiture of our systems integration business in China.

During the year ended December 31, 2015 we entered into an agreement to sell a majority stake in our systems integration business 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. Also during the year ended December 31, 2015 we sold our majority ownership in our Venezuelan operation to Venezuelan investors. As a result of the sale we recorded a non-cash charge of \$26.1 million, which primarily represents cumulative currency translation adjustments.

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## Other (income) expense, net

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

In millions	2016	2015	2014
Interest income	\$(1.9 )	\$(1.5)	\$(1.1)
Exchange loss	2.0	4.9	7.6
Loss (earnings) from equity investments	(3.6 )	0.3	(0.5 )
Other	(14.7 )	(11.5)	(1.4 )
Other (income) expense, net	\$(18.2)	\$(7.8)	\$4.6

For the year ended December 31, 2016, Other (income) expense, net increased by \$10.4 million compared to 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.

For the year ended December 31, 2015, Other (income) expense, net decreased by \$12.4 million compared with the same period in 2014. During the year ended December 31, 2015 we recorded gains from the sale of marketable securities of \$11.0 million, which is included within Other in the table above. These gains were partially offset by a \$2.8 million loss related to the write down of our Venezuelan bolivar-denominated net monetary assets to reflect the SIMADI rate recorded in the first quarter of 2015. This loss is within Exchange loss in the table above. The remaining decrease in Other (income) expense, net was primarily due to unfavorable currency impacts. These losses are within Exchange loss in the table above.

## Provision for Income Taxes

For the year ended December 31, 2016, our effective tax rate decreased to 21.6% from 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 year ended December 31, 2015 was negatively impacted by \$111.3 million (\$115.0 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.

For the year ended December 31, 2015, our effective tax rate was 26.1% compared to 31.4% for the year ended December 31, 2014. The effective income tax rate for the year 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, 2015 decreased primarily due to favorable changes in the mix of income earned in lower rate jurisdictions, the favorable resolution of uncertain tax positions in 2015 and the continued execution of our tax strategies.

## Discontinued Operations

Discontinued operations recognized a loss of \$0.4 million and \$11.1 million for the years ended December 31, 2015 and 2014, respectively. These losses were mainly related to the sale of the United Kingdom (UK) Door Business in the third quarter of 2014 in addition to non-cancelable lease expense and other miscellaneous expenses from

previously sold businesses.

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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	2016	2015	% Change	2015	2014	% Change
Net revenues						
Americas	\$1,645.7	\$1,558.4	5.6 %	\$1,558.4	\$1,560.0	(0.1 )%
EMEIA	485.9	386.3	25.8 %	386.3	393.4	(1.8 )%
Asia Pacific	106.4	123.4	(13.8 )%	123.4	164.9	(25.2 )%
Total	\$2,238.0	\$2,068.1		\$2,068.1	\$2,118.3	
Segment operating income (loss)						
Americas	\$448.1	\$418.0	7.2 %	\$418.0	\$387.3	7.9 %
EMEIA	35.9	8.6	317.4 %	8.6	4.9	75.5 %
Asia Pacific	6.1	(3.4 )	279.4 %	(3.4 )	2.3	(247.8)%
Total	\$490.1	\$423.2		\$423.2	\$394.5	
Segment operating margin						
Americas	27.2	% 26.8	%	26.8	% 24.8	%
EMEIA	7.4	% 2.2	%	2.2	% 1.2	%
Asia Pacific	5.7	% (2.8 )%		(2.8 )%	1.4	%

## 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 frames, 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.

## 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:



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Pricing	0.9 %
Volume	5.6 %
Acquisitions / divestitures	(0.6)%
Currency exchange rates	(0.3)%
Total	5.6 %

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 prior year 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	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 increase was 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.

## 2015 vs 2014

## Net revenues

Net revenues for the year ended December 31, 2015 decreased by (0.1)% (or \$(1.6) million) compared to the same period in 2014 due to the following:

Pricing	0.5 %
Volume	6.6 %
Acquisitions / divestitures	(2.2)%
Currency exchange rates	(5.0)%
Total	(0.1)%

The decrease in revenues was primarily due to unfavorable foreign currency exchange rate movements and the divestiture of our Venezuelan operation, partially offset by higher volumes, improved pricing and revenue from acquisitions in the current year. Net revenues from non-residential products for the year ended December 31, 2015

increased mid-single digits compared to the same period in the prior year due to new market growth, product launches and channel initiatives. Net revenues from residential products

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for the year ended December 31, 2015 increased upper 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, 2015 increased \$30.7 million and segment operating margin increased to 26.8% from 24.8% compared to the same period in 2014 due to the following:

in millions	Operating Income	Operating Margin	
December 31, 2014	\$ 387.3	24.8	%
Pricing and productivity in excess of inflation	9.1	0.4	%
Volume/product mix	40.8	0.9	%
Non-cash inventory impairment	29.1	1.9	%
Currency exchange rates	(21.4 )	(0.1 )	%
Investment spending	(13.0 )	(0.8 )	%
Acquisitions / divestitures	(13.8 )	(0.3 )	%
Restructuring / spin costs / acquisition costs	(0.1 )	—	%
December 31, 2015	\$ 418.0	26.8	%

The increase was primarily due to favorable volume/product mix, decreased inventory impairment charges in Venezuela in 2015 and pricing improvements and productivity in excess of inflation. These increases were partially offset by unfavorable foreign currency exchange rate movements, the divestiture of our Venezuelan operations and increased investment spending primarily for new product development and channel development.

## 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 frames, 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.

Effective September 1, 2014 we sold our United Kingdom (UK) Door businesses to an unrelated third party. Historical results of the component have been reclassified to discontinued operations for all periods presented. 2016 vs 2015

## Net revenues

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 the following:

Pricing	1.2	%
Volume	1.0	%
Acquisitions	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



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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	Operating 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	9.0	1.4	%
Restructuring / acquisition costs	12.8	3.3	%
December 31, 2016	\$ 35.9	7.4	%

The increase was 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.

## 2015 vs 2014

## Net revenue

Net revenues for the year ended December 31, 2015 decreased by 1.8% (or \$7.1 million) compared to the same period in 2014 due to following:

Pricing	1.1	%
Volume	0.3	%
Acquisitions / divestitures	11.8	%
Currency exchange rates	(15.0)	%
Total	(1.8)	%

The decrease in revenues was primarily due to unfavorable foreign currency exchange rate movements, partially offset by revenue from acquisitions in the current year, improved pricing and slightly higher volumes.

## Operating income/margin

Segment operating income for the year ended December 31, 2015 increased \$3.7 million and operating margin increased to 2.2% from 1.2% compared to the same period in 2014 due to the following:

in millions	Operating Income	Operating Margin	
December 31, 2014	\$ 4.9	1.2	%
Pricing and productivity in excess of inflation	16.3	4.5	%
Volume/product mix	(0.7 )	(0.2 )	%
Currency exchange rates	(6.2 )	(1.6 )	%
Investment spending and other items	(2.2 )	(0.5 )	%
Acquisitions / divestitures	7.1	1.5	%
Restructuring / spin costs / acquisition costs	(10.6 )	(2.7 )	%
December 31, 2015	\$ 8.6	2.2	%

The increase was primarily due to pricing improvements and productivity in excess of inflation and the impact of acquisitions in the current year. These increases were partially offset by unfavorable foreign currency exchange rate movements, increased



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investment spending, unfavorable volume/product mix and the year-over-year change in restructuring charges, acquisition expenses and separation costs incurred in connection with the Spin-off.

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## Asia Pacific

Our Asia Pacific segment provides security products and solutions in approximately 14 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, CISA, Von Duprin and LCN. We divested our systems integration business in China in the fourth quarter of 2015.

## 2016 vs 2015

## Net revenues

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

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

The decrease in revenues was primarily due to the divestiture of our systems integration business in China in 2015 and 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 increase was primarily related to improved volume/product mix, the divestiture of our systems integration business in China in 2015, acquisitions discussed above 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.

## 2015 vs 2014

## Net revenues

Net revenues for the year ended December 31, 2015 decreased by 25.2%, (\$41.5 million) compared with the same period of 2014, which primarily resulted from the following:

Pricing	0.2	%
Volume	(1.5)	%
Acquisitions / divestitures	(19.6)	%

Currency exchange rates	(4.3 )%
Total	(25.2)%

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The decrease in revenues was primarily due to the divestiture of our system integration business in China, unfavorable foreign currency exchange rate movements, and lower volume partially offset by improved pricing and revenue from acquisitions. The systems integration business in China historically generated the majority of its revenue in the fourth quarter and, as a result of the sale in November 2015, revenue was lower by approximately \$51.3 million compared to 2014. This decrease is reflected in the Acquisitions / divestitures line above. The systems integration business in China also experienced a decline in revenue prior to the sale compared to the prior year, which is reflected in the Volume line above. The decline in volume due to our systems integration business in China was partially offset by increased volume in our remaining business.

## Operating income/margin

Segment operating income for the year ended December 31, 2015 decreased \$5.7 million and segment operating margin decreased to (2.8)% from 1.4% compared with the same period in 2014 due to the following:

in millions	Operating Income	Operating Margin
December 31, 2014	\$ 2.3	1.4 %
Pricing and productivity in excess of inflation	2.4	1.2 %
Adjustment to allowance for doubtful accounts	1.2	0.7 %
Currency exchange rates	(2.2 )	(1.3 )%
Investment spending and other items	(0.2 )	(0.1 )%
Acquisitions / divestitures	(5.5 )	(3.8 )%
Restructuring / spin costs / acquisition costs	(1.4 )	(0.9 )%
December 31, 2015	\$ (3.4 )	(2.8 )%

The decrease was primarily related to the divestiture of our systems integration business in China, unfavorable foreign currency exchange rate movements and the year-over-year change in restructuring charges, acquisition expenses and separation costs incurred in connection with the Spin-off . These decreases were partially offset by the impact of the acquisitions discussed above, pricing improvements and productivity in excess of inflation. Additionally, operating income in 2014 included a \$2.5 million charge to increase the allowance for doubtful accounts compared to a \$1.3 million charge in 2015.

## 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 Revolver) and capital markets. We believe that our future cash provided by operating activities, availability under our Revolver 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	2016	2015	2014
Cash provided by continuing operating activities	\$377.5	\$257.4	\$259.0
Cash used in investing activities	(64.0 )	(533.8 )	(34.8 )



Cash provided by (used in) financing activities    \$(196.0) \$195.0 \$(150.0)

Operating activities

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 earnings from continuing operations compared to the same period in the prior year.

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Net cash provided by continuing operating activities for the year ended December 31, 2015 decreased \$1.6 million compared to the same period in 2014. Operating cash flows for 2015 reflect lower earnings from continuing operations compared to the same period in 2014 as well as increased use of working capital.

Investing activities

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 the acquisitions described above decreased \$479.9 million compared to the same period in 2015. This was offset by an increase in capital expenditures of \$7.3 million compared to the same period in 2015.

Net cash used in investing activities for the year ended December 31, 2015 increased \$499.0 million compared to the same period in the prior year. During the year ended December 31, 2015, we paid \$511.3 million of cash for the acquisitions described above. This was offset by a decrease in capital expenditures and cash received from the sale of marketable securities.

Financing activities

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 of our 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 same period in 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.

Net cash provided by financing activities for the year ended December 31, 2015 increased \$345.0 million compared to the same period in the prior year. We borrowed \$400.0 million under the Revolver to partially finance the purchases of Simons Voss and AXA in the third quarter of 2015. Proceeds from the issuance of our \$300.0 million 2023 Senior Notes were used to repay a portion of the borrowings under the Revolver and the remaining borrowings were repaid with cash on-hand by December 31, 2015. Net repayments of other debt totaled \$21.7 million for the year ended December 31, 2015 primarily associated with required amortization payments of our Term Loan A facility. Cash used in other financing activities increased \$11.3 million for the year ended December 31, 2015 compared to the same period in the prior year primarily due to higher dividend payments and higher debt issuance costs partially offset by lower repurchases of our ordinary shares.

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## Capitalization

Borrowings at December 31 consisted of the following:

In millions	2016	2015
Term Loan A Facility	\$ 879.8	\$ 926.7
5.75% Senior Notes due 2021	300.0	300.0
5.875% Senior Notes due 2023	300.0	300.0
Other debt, including capital leases, maturing in various amounts through 2024	2.3	18.7
Unamortized debt issuance costs, net	(18.3 )	(22.3 )
Total debt	1,463.8	1,523.1
Less current portion of long term debt	48.2	65.6
Total long-term debt \$	1,415.6	\$ 1,457.5

The Term Loan A Facility amortizes in quarterly installments, at the following rates per year: 5% in 2017, 5% in 2018, and 10% in each year thereafter, with the final installment due on October 15, 2020. We repaid \$46.9 million of principal on the Term Loan A Facility for the year ended December 31, 2016. The 2021 Senior Notes are due in full on October 1, 2021 and the 2023 Senior Notes are due in full on September 15, 2023.

We have a 5-year, \$500.0 million revolving credit facility maturing on October 15, 2020. During August 2015, we borrowed \$400.0 million under the Revolver and repaid the borrowed amount in full as of the year ended December 31, 2015. At December 31, 2016 and 2015, we did not have any borrowings outstanding under the Revolver. We had \$21.7 million and \$26.6 million of letters of credit outstanding at December 31, 2016 and 2015, respectively, which reduce availability under the Revolver.

We are required to comply with certain covenants under our Senior Secured Credit Facility. We are required to comply with a maximum leverage ratio of 4.00 to 1.00 based on a ratio of total consolidated indebtedness, net of unrestricted cash up to \$150 million, to consolidated EBITDA. Additionally, we are required to have a minimum interest expense coverage ratio of 4.00 to 1.00 based on a ratio of consolidated EBITDA to consolidated interest expense, net of interest income. As of December 31, 2016, we were in compliance with these covenants. The indentures to our senior notes and the senior secured credit facilities contain affirmative and negative covenants that, among other things, limit or restrict our ability to enter into certain transactions. For further details on these covenants, see Note 10 to the Consolidated Financial Statements.

The majority of our earnings are 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. Accordingly, applicable income taxes have not been accrued on the portion of our earnings that is considered to be permanently reinvested. At December 31, 2016, we had cash and cash equivalents of \$312.4 million. Approximately 48% 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 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. At December 31, 2016, the funded status of our qualified pension plan for U.S. employees increased to 73.6% from 70.9% at December 31, 2015 primarily due to contributions made to the plan in the current year. In January 2017, subsequent to the Consolidated Balance Sheet date, we made a discretionary \$50.0 million contribution to the U.S. qualified defined benefit pension plan using cash on hand increasing the funded status to 91.7% . The funded status for our non-U.S. pension plans increased to 92.9% at December 31, 2016 from 91.6% at December 31, 2015. Funded status for all of our pension plans at December 31, 2016 increased to 83.3% from 81.7% at December 31, 2015. After the discretionary \$50.0 million contribution to the U.S. qualified defined benefit pension plan in January 2017, the funded status for all of our pension plans increased to approximately 90%. For further details on pension plan activity, see Note 12 to the Consolidated Financial Statements.

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## Contractual Obligations

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

	2017	2018-2019	2020-2021	Thereafter	Total
Long-term debt (including current maturities)	\$48.2	\$ 140.8	\$ 992.1	\$ 301.0	\$1,482.1
Interest payments on long-term debt	56.9	109.9	78.4	30.8	276.0
Purchase obligations	106.8	—	—	—	106.8
Operating leases	19.8	22.1	8.7	2.2	52.8
Total contractual cash obligations	\$231.7	\$ 272.8	\$ 1,079.2	\$ 334.0	\$1,917.7

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.

## Pensions

At December 31, 2016, we had net pension liabilities of \$111.6 million, which consist of pension plan assets of \$555.8 million and pension plan obligations of \$667.4 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. In January 2017, subsequent to the Consolidated Balance Sheet date, we made a discretionary \$50.0 million contribution to the U.S. qualified defined benefit pension plan using cash on hand. After the discretionary \$50.0 million contribution to the U.S. qualified defined benefit pension plan in January 2017, the funded status for all of our pension plans increased to approximately 90% from 83.3% at December 31, 2016. We currently project that an additional approximately \$9.4 million will be contributed to our plans worldwide in 2017. 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 12 to the Consolidated Financial Statements for additional information.

## Postretirement Benefits Other than Pensions

At December 31, 2016, we had postretirement benefit obligations of \$9.7 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 2017. 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 12 to the Consolidated Financial Statements for additional information.

## Income Taxes

At December 31, 2016, we have total unrecognized tax benefits for uncertain tax positions of \$32.0 million and \$5.4 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 18 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 21 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

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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.

**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 and reviewed 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 begins with a qualitative assessment to determine if it is more likely than not that the fair value of each reporting unit is less than its carrying amount as a basis for determining whether it is necessary to perform the two-step goodwill impairment test prescribed by GAAP. For those reporting units where it is required, the first step compares 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 and the second step of the impairment test is not necessary. To the extent that the carrying value of the reporting unit exceeds its estimated fair value, a second step is performed, wherein the reporting unit's carrying value of goodwill is compared to the implied fair value of goodwill. To the extent that the carrying value exceeds the implied fair value, impairment exists and must be recognized.

As quoted market prices are not available for our reporting units, the calculation of their estimated fair value in step one 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.

In step 2, the implied fair value of goodwill is determined in the same manner as the amount of goodwill recognized in a business combination. The estimated fair value of the reporting unit is allocated to all of the assets and liabilities of the reporting unit (including any unrecognized intangible assets) as if the reporting unit had been acquired in a business combination and the fair value of the reporting unit, as determined in the first step of the goodwill impairment test, was the price paid to acquire that reporting unit.

Recoverability of other 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.

The determination of the estimated fair value and the implied fair value of goodwill and other indefinite-lived intangible assets requires us to make assumptions about estimated cash flows including profit margins, long-term forecasts, discount rates and terminal growth rates. We developed these assumptions based on the market and geographic risks unique to each reporting unit.

The estimated fair values for each of our reporting units exceeded their carrying values by more than 20% for the 2016 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 any reporting unit failing step 1.

Assessing the fair value of goodwill 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:

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- 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 impairment testing in 2016 and determined our indefinite-lived intangible assets were not impaired.

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 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.

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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, 2016 and 2015, we had a customer claim accrual (contra receivable) of \$29.0 million and \$24.5 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, 2016 and 2015, we had a sales incentive accrual of \$29.6 million and \$26.6 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 – 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.

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. A discount rate reflects a rate at which pension benefits could be effectively settled. 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 2016 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 \$0.6 million. A 1.0% increase in the healthcare

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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.

### 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 counter party 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, 2016, 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 \$12.1 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, 2016.

#### Interest Rate Exposure

Outstanding borrowings under our Senior Secured Credit Facilities accrue interest at variable rates and expose us to interest rate risks. A 100 basis point increase in LIBOR would have resulted in incremental 2016 interest expense of approximately \$6.2 million.

The Company has forward starting interest rate swaps to fix interest rate paid during the contract period for \$525.0 million of the Company's variable rate Term Loan Facility. Swaps with notional amounts totaling \$275.0 million expire in September 2017 and swaps with notional amounts totaling \$250.0 million expire in December 2020. If the base interest rate in our credit facilities increases in the future then the 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 Schedules and the report thereon of (a) PricewaterhouseCoopers LLP dated February 17, 2017, 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, 2016, 2015 and 2014

Consolidated balance sheets at December 31, 2016 and 2015

For the years ended December 31, 2016, 2015 and 2014:

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, 2016, 2015 and 2014

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

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

In millions, except per share amounts

	2015			
	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
Net revenues	\$458.7	\$519.5	\$544.5	\$545.4
Cost of goods sold	271.6	297.7	304.5	325.2
Operating income	71.0	95.7	110.4	81.5
Net earnings (loss)	43.7	65.0	(26.4 )	72.0
Net earnings (loss) attributable to Allegion plc	45.4	63.9	(27.3 )	71.9
Earnings (loss) per share attributable to Allegion plc ordinary shareholders:				
Basic	\$0.47	\$0.67	\$(0.28 )	\$0.75
Diluted	\$0.47	\$0.66	\$(0.28 )	\$0.74

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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, 2016, 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, 2016. 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, 2016.

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, 2016 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
1.1	Underwriting Agreement, dated as of September 11, 2015, among Allegion plc, the guarantors party thereto and J.P. Morgan Securities LLC.	Incorporated by reference to Exhibit 1.1 to the Company's Form 8-K filed with the SEC on September 16, 2015 (File No. 001-35971).
2.1	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).
4.1	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).
4.2	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).
4.1	Indenture, dated as of October 4, 2013, among Allegion plc, Allegion US Holding Company Inc., the subsidiary guarantors party thereto and Wells Fargo Bank, National Association	Incorporated by reference to Exhibit 4.1 to the Company's Registration Statement on Form 10 filed with the SEC on June 17, 2013, as amended (File No. 001-35971).
4.2	Exchange and Registration Rights Agreement, dated as of October 4, 2013, among Allegion plc, Allegion US Holding Company Inc., the subsidiary guarantors party thereto and the Representatives of the Initial Purchasers named therein	Incorporated by reference to Exhibit 4.2 to the Company's Registration Statement on Form 10 filed with the SEC on June 17, 2013, as amended (File No. 001-35971).
4.3	Indenture, dated as of September 16, 2015, among Allegion plc, the guarantors party thereto and Wells Fargo Bank, National Association.	Incorporated by reference to Exhibit 4.1 to the Company's Form 8-K filed with the SEC on September 16, 2015 (File No. 001-35971).
4.4	Form of Global Note representing the Notes (included in Exhibit 4.1).	Incorporated by reference to Exhibit 4.2 to the Company's Form 8-K filed with the SEC on September 16, 2015 (File No. 001-35971).
10.1		

Edgar Filing: Allegion plc - Form 10-K

	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).
10.2	Employee 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).
10.3	Guarantee and Collateral Agreement, among Allegion plc, Allegion US Holding Company Inc., the restricted subsidiaries from time to time party thereto and JPMorgan Chase Bank, N.A., as administrative agent and collateral agent	Incorporated by reference to Exhibit 10.4 to the Company's Form 8-K/A filed with the SEC on December 3, 2013 (File No. 001-35971).

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10.4	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).
10.5	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).
10.6	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).
10.7	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).
10.8	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).
10.9	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).
10.10	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).
10.11	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).
10.12	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).
10.13	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).
10.14	Lucia V. Moretti, Offer Letter, dated February 19, 2014	Incorporated by reference to Exhibit 10.14 to the Company's Form 10-K filed with the SEC on February 26, 2016 (File No. 001-35971).
10.15	Jeffrey N. Braun Offer Letter, dated June 13, 2014	Filed herewith
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).

10.17 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).



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10.18	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).
10.19	Annual Incentive Plan	Incorporated by reference to Exhibit 10.33 to the Company's Form 10-K filed with the SEC on March 10, 2014 (File No. 001-35971).
10.20	Change in Control Severance Plan	Incorporated by reference to Exhibit 10.34 to the Company's Form 10-K filed with the SEC on March 10, 2014 (File No. 001-35971).
10.21	Second Amendment and Restated Agreement by and among Allegion plc, as the Borrower, Allegion US Holding Company, Inc., as the Co-Borrower, the Lenders and Issuing Banks party thereto, and JPMorgan Chase Bank, N.A., as Administrative Agent, dated September 30, 2015	Incorporated by reference to Exhibit 10.1 to the Company's Form 8-K filed with the SEC on September 30, 2015 (File No. 001-35971).
10.22	Form of Restricted Stock Unit Award Agreement	Filed herewith
10.23	Form of Stock Option Award Agreement	Filed herewith
10.24	Form of Performance Share Unit Award Agreement	Filed herewith
10.25	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).
10.26	Form of Non-Employee Director Restricted Stock Unit Award Agreement	Incorporated by reference to Exhibit 10.1 to the Company's Form 8-K filed with the SEC on February 9, 2016 (File No. 001-35971).
10.27	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).
12.1	Ratio of Earnings to Fixed Charges	Filed herewith
21.1	List of subsidiaries of Allegion plc	Filed herewith
23.1	Consent of Independent Registered Public Accounting Firm	Filed herewith
31.1	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

31.2 Certification of Chief Financial 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

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, 2016, 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 17, 2017

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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 17, 2017
/s/ Patrick S. Shannon (Patrick S. Shannon)	Senior Vice President and Chief Financial Officer (Principal Financial Officer)	February 17, 2017
/s/ Douglas P. Ranck (Douglas P. Ranck)	Vice President and Controller (Principal Accounting Officer)	February 17, 2017
/s/ Michael J. Chesser (Michael J. Chesser)	Director	February 17, 2017
/s/ Carla Cico (Carla Cico)	Director	February 17, 2017
/s/ Kirk S. Hachigian (Kirk S. Hachigian)	Director	February 17, 2017
/s/ Dean Schaffer (Dean Schaffer)	Director	February 17, 2017
/s/ Martin E. Welch III (Martin E. Welch III)	Director	February 17, 2017

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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:

In our opinion, the accompanying consolidated balance sheets and the related consolidated statements of comprehensive income, of equity and of cash flows present fairly, in all material respects, the financial position of Allegion plc and its subsidiaries at December 31, 2016 and 2015, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2016 in conformity with accounting principles generally accepted in the United States of America. In addition, in our opinion, the financial statement schedule listed in the accompanying index presents fairly, in all material respects, the information set forth therein when read in conjunction with the related consolidated financial statements. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2016, based on criteria established in Internal Control - Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). The Company's management is responsible for these financial statements and financial statement schedule, 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 these financial statements, on the financial statement schedule, and on the Company's internal control over financial reporting based on our integrated audits. We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement and whether effective internal control over financial reporting was maintained in all material respects. Our audits of the financial statements included examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. 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.

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

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

/s/ PricewaterhouseCoopers LLP



Indianapolis, Indiana  
February 17, 2017

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

For the years ended December 31,	2016	2015	2014
Net revenues	\$2,238.0	\$2,068.1	\$2,118.3
Cost of goods sold	1,252.7	1,199.0	1,264.6
Selling and administrative expenses	559.8	510.5	527.4
Operating income	425.5	358.6	326.3
Interest expense	64.3	52.9	53.8
Loss on divestitures	84.4	104.2	—
Other (income) expense, net	(18.2)	(7.8)	4.6
Earnings before income taxes	295.0	209.3	267.9
Provision for income taxes	63.8	54.6	84.2
Earnings from continuing operations	231.2	154.7	183.7
Discontinued operations, net of tax	—	(0.4)	(11.1)
Net earnings	231.2	154.3	172.6
Less: Net earnings (loss) attributable to noncontrolling interests	2.1	0.4	(2.6)
Net earnings attributable to Allegion plc	\$229.1	\$153.9	\$175.2
Amounts attributable to Allegion plc ordinary shareholders:			
Continuing operations	\$229.1	\$154.3	\$186.3
Discontinued operations	—	(0.4)	(11.1)
Net earnings	\$229.1	\$153.9	\$175.2
Earnings (loss) per share attributable to Allegion plc ordinary shareholders:			
Basic:			
Continuing operations	\$2.39	\$1.61	\$1.94
Discontinued operations	—	(0.01)	(0.12)
Net earnings	\$2.39	\$1.60	\$1.82
Diluted:			
Continuing operations	\$2.36	\$1.59	\$1.92
Discontinued operations	—	—	(0.12)
Net earnings	\$2.36	\$1.59	\$1.80
Dividends declared per ordinary share	\$0.48	\$0.40	\$0.32

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

For the years ended December 31,	2016	2015	2014
Net earnings	\$231.2	\$154.3	\$172.6
Other comprehensive income, net of tax			
Currency translation	(40.7 )	(60.5 )	(66.4 )
Cash flow hedges and marketable securities:			
Unrealized net gains arising during period	9.7	15.8	2.0
Net gains reclassified into earnings	(19.0 )	(17.5 )	(2.5 )
Tax expense	(1.3 )	—	(0.5 )
Total cash flow hedges and marketable securities, net of tax	(10.6 )	(1.7 )	(1.0 )
Pension and OPEB adjustments:			
Prior service gains (costs) for the period	—	(0.1 )	0.3
Net actuarial gains (losses) for the period	3.1	(37.6 )	(9.9 )
Amortization reclassified into earnings	6.0	5.4	4.3
Settlements/curtailments reclassified to earnings	0.3	1.1	—
Currency translation and other	14.4	5.0	4.8
Tax benefit (expense)	(5.0 )	3.0	15.7
Total pension and OPEB adjustments, net of tax	18.8	(23.2 )	15.2
Other comprehensive loss, net of tax	(32.5 )	(85.4 )	(52.2 )
Total comprehensive income, net of tax	198.7	68.9	120.4
Less: Total comprehensive income (loss) attributable to noncontrolling interests	1.7	(0.9 )	(3.3 )
Total comprehensive income attributable to Allegion plc	\$197.0	\$69.8	\$123.7

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,	2016	2015
<b>ASSETS</b>		
Current assets:		
Cash and cash equivalents	\$312.4	\$199.7
Accounts and notes receivable, net	260.0	303.4
Inventories	220.6	204.1
Current tax receivable	11.9	10.5
Other current assets	22.2	17.4
Assets held for sale	2.2	—
Total current assets	829.3	735.1
Property, plant and equipment, net	226.6	224.8
Goodwill	716.8	714.1
Intangible assets, net	357.4	372.4
Deferred and noncurrent income taxes	72.3	91.9
Other noncurrent assets	45.0	124.7
Total assets	\$2,247.4	\$2,263.0
<b>LIABILITIES AND EQUITY</b>		
Current liabilities:		
Accounts payable	\$179.9	\$175.1
Accrued compensation and benefits	81.0	72.4
Accrued expenses and other current liabilities	117.8	124.9
Current tax payable	2.7	9.1
Short-term borrowings and current maturities of long-term debt	48.2	65.6
Total current liabilities	429.6	447.1
Long-term debt	1,415.6	1,457.5
Postemployment and other benefit liabilities	134.5	145.4
Deferred and noncurrent income taxes	118.7	120.0
Other noncurrent liabilities	32.6	63.3
Total liabilities	2,131.0	2,233.3
Equity:		
Allegion plc shareholders' equity		
Ordinary shares, \$0.01 par value (95,273,927 and 95,991,259 shares issued and outstanding at December 31, 2016 and 2015, respectively)	1.0	1.0
Capital in excess of par value	—	24.4
Retained earnings	376.6	232.4
Accumulated other comprehensive loss	(264.3 )	(232.2 )
Total Allegion plc shareholders' equity	113.3	25.6
Noncontrolling interest	3.1	4.1
Total equity	116.4	29.7
Total liabilities and equity	\$2,247.4	\$2,263.0

See accompanying notes to consolidated financial statements.

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Consolidated Statements of Equity

In millions	Allegion plc Shareholders' equity						
	Total equity (deficit)	Ordinary Shares Amount	Shares	Capital in excess of par value	Retained earnings	Accumulated other comprehensive income (loss)	Non-controlling Interest
Balance at December 31, 2013	\$(35.0 )	\$1.0	96.0	\$28.5	\$ 1.1	\$ (96.7 )	\$ 31.1
Net earnings	172.6	—	—	—	175.2	—	(2.6 )
Other comprehensive loss	(52.2 )	—	—	—	—	(51.5 )	(0.7 )
Shares issued under incentive stock plans	18.5	—	—	18.5	—	—	—
Repurchase of ordinary shares	(50.3 )	—	(1.0 )	(48.8 )	(1.5 )	—	—
Share-based compensation	13.1	—	0.8	13.1	—	—	—
Dividends declared to noncontrolling interest	(4.5 )	—	—	—	—	—	(4.5 )
Cash dividends declared (\$0.32 per share)	(30.7 )	—	—	—	(30.7 )	—	—
Other	(13.0 )	—	—	(11.3 )	(1.7 )	—	—
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

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,	2016	2015	2014
Cash flows from operating activities:			
Net earnings	\$231.2	\$154.3	\$172.6
Loss from discontinued operations, net of tax	—	0.4	11.1
Adjustments to arrive at net cash provided by operating activities:			
Write-off of debt issuance costs	—	—	4.5
Depreciation and amortization	66.9	53.2	48.8
Share based compensation	16.6	14.6	13.1
Excess tax benefit from share based awards	—	(3.3 )	(4.5 )
Loss on sale of business	84.4	102.8	—
Gain on sale of marketable securities	(12.4 )	(11.0 )	—
Loss on sale of property, plant and equipment	1.3	0.9	0.1
Equity earnings, net of dividends	(3.2 )	0.3	(0.5 )
Deferred income taxes	6.3	(2.0 )	17.2
Other items	(7.7 )	(11.3 )	10.9
Changes in other assets and liabilities			
(Increase) decrease in:			
Accounts and notes receivable	(19.8 )	(13.5 )	(8.0 )
Inventories	(15.6 )	(5.8 )	3.4
Other current and noncurrent assets	62.0	(5.0 )	(24.2 )
Increase (decrease) in:			
Accounts payable	3.4	(14.7 )	43.4
Other current and noncurrent liabilities	(35.9 )	(2.5 )	(28.9 )
Net cash provided by continuing operating activities	377.5	257.4	259.0
Net cash used in discontinued operating activities	—	(0.4 )	(3.1 )
Net cash provided by operating activities	377.5	257.0	255.9
Cash flows from investing activities:			
Capital expenditures	(42.5 )	(35.2 )	(51.5 )
Restricted cash	—	—	40.2
Acquisition of businesses, net of cash acquired	(31.4 )	(511.3 )	(25.2 )
Proceeds from sale of property, plant and equipment	0.1	0.3	0.5
Proceeds (payments) related to business dispositions	(4.3 )	0.1	1.2
Proceeds from sale of marketable securities	14.1	12.3	—
Net cash used in investing activities	\$(64.0 )	\$(533.8 )	\$(34.8 )

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

For the years ended December 31,	2016	2015	2014
Cash flows from financing activities:			
Short-term borrowings, net	\$(17.4 )	\$18.8	\$(22.0 )
Proceeds from revolving credit facility	—	400.0	—
Proceeds from long-term debt	—	300.0	956.3
Payments of long-term debt	(47.0 )	(440.5 )	(1,012.3 )
Net proceeds (repayments) of debt	(64.4 )	278.3	(78.0 )
Debt issuance costs	(0.3 )	(9.0 )	(5.8 )
Excess tax benefit from share-based compensation	—	3.3	4.5
Dividends paid to ordinary shareholders	(46.0 )	(38.3 )	(30.0 )
Dividends paid to noncontrolling interests	(2.7 )	(20.0 )	(4.5 )
Repurchase of ordinary shares	(85.1 )	(30.0 )	(50.3 )
Proceeds from shares issued under incentive plans	5.8	11.0	14.1
Other, net	(3.3 )	(0.3 )	—
Net cash provided by (used in) financing activities	(196.0 )	195.0	(150.0 )
Effect of exchange rate changes on cash and cash equivalents	(4.8 )	(9.0 )	(8.0 )
Net increase (decrease) in cash and cash equivalents	112.7	(90.8 )	63.1
Cash and cash equivalents – beginning of period	199.7	290.5	227.4
Cash and cash equivalents – end of period	\$312.4	\$199.7	\$290.5
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® 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 assets, liabilities, 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 income (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.

**Marketable Securities:** The Company has classified its marketable securities as available-for-sale in accordance with GAAP. Available-for-sale marketable securities are accounted for at fair value, with the unrealized gain or loss, less applicable deferred income taxes, recorded within Accumulated other comprehensive income (loss). If any of the Company's marketable securities experience other than temporary declines in value as defined by GAAP, a loss is recorded in the Consolidated Statement of Comprehensive Income in the period determined.

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

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**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 account receivables 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 \$2.7 million and \$3.8 million for doubtful accounts as of December 31, 2016 and 2015, respectively.

**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 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 is more likely than not less than the carrying amount of the reporting unit.

Recoverability of goodwill is measured at the reporting unit level and begins with a qualitative assessment to determine if it is more likely than not that the fair value of each reporting unit is less than its carrying amount as a basis for determining whether it is necessary to perform the two-step goodwill impairment test prescribed by GAAP. For those reporting units where it is required, the first step compares 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 and the second step of the impairment test is not necessary. To the extent that the carrying value of the reporting unit exceeds its estimated fair value, a second step is performed, wherein the reporting unit's carrying value of goodwill is compared to the implied fair value of goodwill. To the extent that the carrying value exceeds the implied fair value, impairment exists and must be recognized.

The calculation of 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 implied fair value of goodwill is determined in the same manner as the amount of goodwill recognized in a business combination. The estimated fair value of the reporting unit is allocated to all of the assets and liabilities of the reporting unit (including any unrecognized intangible assets) as if the reporting unit had

been acquired in a business combination and the fair value of the reporting unit, as determined in the first step of the goodwill impairment test, was the price paid to acquire that reporting unit.

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:

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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:** For purposes of the Company's Consolidated Financial Statements for periods prior to the Spin-off, income tax expense has been recorded as if the Company filed tax returns on a stand-alone basis separate from Ingersoll Rand. This separate return methodology applies the accounting guidance for income taxes to the stand-alone financial statements as if the Company was a stand-alone enterprise for the periods prior to the Spin-off. Therefore, cash tax payments and items of current and deferred taxes may not be reflective of the Company's actual tax balances prior to or subsequent to the Spin-off. Cash paid for income taxes, net of refunds for the twelve months ended December 31, 2016 and 2015 was \$10.4 million and \$80.6 million, respectively. The 2016 net cash income taxes paid includes a refund of \$46.2 million received from the Canadian Tax Authorities.

The income tax accounts reflected in the Consolidated Balance Sheet as of December 31, 2016 and 2015 include income taxes payable and deferred taxes allocated to the Company at the time of the Spin-off. 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 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.

**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.

**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, 2016 and 2015, the Company had a customer claim accrual (contra receivable) of \$29.0 million and \$24.5 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

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requirements are accounted for as a reduction of revenue and establishment of a liability. At December 31, 2016 and 2015, the Company had a sales incentive accrual of \$29.6 million and \$26.6 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, does not reflect any offset for possible recoveries from insurance companies, and is not discounted. Refer to Note 21 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, 2016, 2015 and 2014, these expenditures amounted to approximately \$47.3 million, \$45.2 million and \$43.3 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 income (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 12 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 21 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 Sheet at their fair value as either assets or liabilities. For cash flow designated hedges, the effective portion of the changes in fair value of the derivative contract are recorded in Accumulated other comprehensive income (loss), net of taxes, and are recognized 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 11 for further details on derivative instruments.

#### Recent Accounting Pronouncements

##### Recently Adopted Accounting Pronouncements:

In August 2014, the FASB issued ASU 2014-15, "Disclosure of Uncertainties about an Entity's Ability to Continue as a Going Concern." ASU 2014-15 provides guidance on management's responsibility in evaluating whether there is substantial doubt about a company's ability to continue as a going concern and to provide related footnote disclosures. The Company adopted the provisions

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of ASU 2014-15 in the fourth quarter of 2016. The adoption of ASU 2014-15 did not have a material impact on the Company's financial condition, results of operations or cash flows.

In April 2015, the FASB issued ASU 2015-03, "Interest - Imputation of Interest (Subtopic 835-30): Simplifying the Presentation of Debt Issuance Costs." ASU 2015-03 amends existing guidance to require the presentation of debt issuance costs in the balance sheet as a deduction from the carrying amount of the related debt liability instead of as an asset. The ASU is effective for annual reporting periods beginning after December 15, 2015. As further reflected in Note 10 to the Consolidated Financial Statements, we retrospectively adopted ASU 2015-03 in the first quarter of 2016. As a result of the adoption of ASU 2015-03, the Company reclassified \$22.3 million of unamortized debt issuance costs from Other noncurrent assets to Long term debt within its previously reported consolidated balance sheet as of December 31, 2015.

In May 2015, the FASB issued ASU 2015-07, "Disclosures for Investments in Certain Entities That Calculate Net Asset Value per Share (or Its Equivalent)." ASU 2015-07 removes the requirement to categorize within the fair value hierarchy all investments for which fair value is measured using the net asset value per share practical expedient and removes the requirement to make certain disclosures for these investments. The ASU was effective for annual reporting periods beginning after December 15, 2015, however, early adoption was permitted. The Company adopted the provisions of ASU 2015-07 on a retrospective basis at December 31, 2015.

In September 2015, the FASB issued ASU 2015-16, "Business Combinations (Topic 802): Simplifying the Accounting for Measurement-Period Adjustments." ASU 2015-16 requires that an acquirer recognize adjustments to provisional amounts that are identified during the measurement period in the reporting period in which the adjustment amounts are determined. Prior to the issuance of the standard, entities were required to retrospectively apply adjustments made to provisional amounts recognized in a business combination. The ASU was effective for fiscal years, and interim periods within those years, beginning after December 15, 2015. During 2016, the Company made immaterial measurement-period adjustments related to business combinations from 2015 and 2016. The impact of ASU 2015-16 on these adjustments did not have a material impact on the consolidated financial statements.

In November 2015, the FASB issued ASU 2015-17, "Income Taxes (Topic 740): Balance Sheet Classification of Deferred Taxes." ASU 2015-17 requires that deferred tax liabilities and assets be classified as noncurrent in a classified statement of financial position. Prior to the issuance of the standard, entities were required to separate deferred income tax liabilities and assets into current and noncurrent amounts in a classified statement of financial position. The ASU is effective for financial statements issued for annual periods beginning after December 15, 2017, and interim periods within annual periods beginning after December 15, 2018, however early adoption was permitted. The Company adopted the provisions of ASU 2015-17 on a prospective basis at December 31, 2015.

In March 2016, the FASB issued ASU 2016-09, "Compensation-Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting." ASU 2016-09 changes how companies account for certain aspects of share-based payment awards to employees, including the accounting for income taxes, forfeitures, and statutory tax withholding requirements, as well as classification in the statement of cash flows. The ASU is effective for annual periods beginning after December 15, 2016, and interim periods within those annual periods. The Company adopted ASU 2016-09 in the fourth quarter of 2016. As a result, during the fourth quarter, the Company recognized a year-to-date 2016 excess tax benefit of \$3.5 million against income tax expense rather than additional paid-in capital.

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. Current GAAP prohibits 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. This update is effective for annual and interim periods beginning after December 15, 2017. Early adoption is permitted in 2017 if adoption takes place during the first interim reporting period. The Company elected to adopt early on January 1, 2017. The Company does not expect the adoption of this guidance to have a material impact on our consolidated financial statements.

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

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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"). This guidance will be effective for the Company January 1, 2018. The FASB has also issued the following standards which clarify ASU 2014-09 and have the same effective date as the original standard: ASU No. 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 has completed a high-level assessment of the new standard's impact and is currently performing a technical assessment of all customer contracts. The Company will choose the modified retrospective method upon adoption in 2018. The adoption of the new standard will not have a material impact on the consolidated financial statements.

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 ASU is effective for annual and interim reporting periods beginning after December 15, 2016, including interim periods within that reporting period. Early adoption is permitted. The requirements of ASU 2015-11 are not expected to have a significant impact on the consolidated financial statements.

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 must now 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 2016-05 is required to be applied with a modified retrospective approach to each prior reporting period presented with various optional practical expedients. The Company is assessing what impact ASU 2016-02 will have on the consolidated financial statements.

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, 2020, 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." The objective of ASU 2016-15 is to eliminate 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, with early adoption permitted. The amendments in this update will be applied retrospectively to all periods presented, unless deemed impracticable, in which case, prospective application is permitted. The Company is assessing what impact ASU 2016-15 will have on the consolidated financial statements.

In January 2017, the FASB issued ASU 2017-04, "Intangibles— Goodwill and Other (Topic 350): Simplifying the Accounting for Goodwill Impairment". ASU 2017-04 removes Step 2 from the goodwill impairment test. 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 is assessing what impact ASU 2017-04 will have on the consolidated financial statements.

NOTE 3 – MARKETABLE SECURITIES

At December 31, marketable securities included within Other noncurrent assets in the Consolidated Balance Sheets were as follows:

In millions	2016			2015		
	Amortized cost or gains cost	Unrealized Fair value	Fair value	Amortized cost or gains cost	Unrealized Fair value	Fair value
Equity securities	\$ —	\$ —	\$ —	\$ 1.2	\$ 13.0	\$ 14.2

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## NOTE 4 – INVENTORIES

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

In millions	2016	2015
Raw materials	\$56.7	\$58.9
Work-in-process	23.6	30.0
Finished goods	140.3	115.2
Total	\$220.6	\$204.1

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

## NOTE 5 – PROPERTY, PLANT AND EQUIPMENT

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

In millions	2016	2015
Land	\$14.5	\$14.5
Buildings	127.6	125.9
Machinery and equipment	353.6	340.1
Software	126.5	101.9
Construction in progress	18.2	34.1
	640.4	616.5
Accumulated depreciation	(413.8 )	(391.7 )
Total	\$226.6	\$224.8

Depreciation expense for the years ended December 31, 2016, 2015 and 2014 was \$40.9 million, \$36.4 million and \$34.5 million, which includes amounts for software amortization of \$16.6 million, \$14.4 million and \$12.7 million.

## NOTE 6 – 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, 2014 (gross)	\$ 364.8	\$533.0	\$72.1	\$969.9
Accumulated impairment *	—	(478.6 )	(6.9 )	(485.5 )
December 31, 2014 (net)	364.8	54.4	65.2	484.4
Acquisitions	9.2	219.3	27.9	256.4
Write-off	(0.8 )	—	—	(0.8 )
Currency translation	(0.4 )	(18.9 )	(6.6 )	(25.9 )
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

\* Accumulated impairment consists of charges of \$137.6 million (EMEIA), \$341.0 million (EMEIA) and \$6.9 million (Asia Pacific) recorded in 2013, 2008 and 2007, respectively, as a result of the Company's impairment testing.



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As discussed in Note 9 - Divestitures in 2015 the assets of our systems integration business in China within the Asia Pacific segment were reclassified to assets held for sale within the December 31, 2014 Consolidated Balance Sheet. Goodwill allocated to this business was \$21.6 million at December 31, 2014. In conjunction with determining the fair value of the assets held for sale, 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 7 – 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	2016			2015		
	Gross carrying amount	Accumulated amortization	Net carrying amount	Gross carrying amount	Accumulated amortization	Net carrying amount
Completed technologies/patents	\$48.0	\$ (25.3 )	\$ 22.7	\$49.0	\$ (23.1 )	\$ 25.9
Customer relationships	278.9	(51.6 )	227.3	278.7	(40.2 )	238.5
Trademarks (finite-lived)	78.5	(37.3 )	41.2	81.2	(35.3 )	45.9
Other	11.0	(9.4 )	1.6	9.0	(9.0 )	—
Total finite-lived intangible assets	416.4	\$ (123.6 )	292.8	417.9	\$ (107.6 )	310.3
Trademarks (indefinite-lived)	64.6		64.6	62.1		62.1
Total	\$481.0		\$ 357.4	\$480.0		\$ 372.4

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 2016, 2015 and 2014 was \$20.5 million, \$11.9 million and \$9.5 million, respectively. Future estimated amortization expense on existing intangible assets in each of the next five years amounts to approximately \$19.6 million for 2017, \$19.6 million for 2018, \$18.8 million for 2019, \$18.8 million for 2020, and \$18.8 million for 2021.

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 2016, 2015 and 2014.

## NOTE 8 - ACQUISITIONS

## 2016

In June 2016 the Company acquired 100% of Trelock GmbH, a portable safety and security provider, and certain affiliated companies.

## 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 System Co., Ltd ("Milre")	July 2015
SimonsVoss Technologies GmbH ("SimonsVoss")	September 2015
AXA Stenman Holding ("AXA")	September 2015

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iDevices is a brand and development partner in the Internet of Things industry. The investment is accounted for using the equity method.

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. SimonsVoss generated sales of approximately \$69.2 million in 2014.

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. AXA generated sales of approximately \$79.8 million in 2014.

Total consideration paid for the acquisitions in 2015 was \$511.3 million (net of cash acquired). The final allocation of the aggregate purchase price to assets acquired and liabilities assumed for the acquisitions described above is as follows:

In millions	
Accounts and notes receivable, net	\$23.3
Inventories	34.8
Other current assets	4.2
Property, plant and equipment, net	27.2
Goodwill	257.5
Intangible assets, net	273.8
Other noncurrent assets	12.5
Accounts payable	(12.2 )
Accrued expenses and other current liabilities	(30.1 )
Deferred tax liabilities and other noncurrent liabilities	(79.7 )
	\$511.3

Intangible assets are primarily comprised of acquired customer lists and completed technologies. Goodwill results from several factors including Allegion-specific synergies that were excluded from the cash flow projections used in the valuation of intangible assets and intangible assets that do not qualify for separate recognition (i.e., assembled workforce). The majority of the goodwill is not deductible for tax purposes. These acquisitions are accounted for as business combinations.

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.





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The following unaudited pro forma financial information for the year ended December 31, 2015 reflects the consolidated results of operations of the Company as if the acquisitions had taken place on January 1, 2014.

	December 31, 2015
In millions, except per share amounts	
Net revenues	\$ 2,170.2
Net earnings attributable to Allegion plc	\$ 167.0
Basic income per share	\$ 1.74
Diluted income per share	\$ 1.72

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. For pro forma purposes, these expenses were assumed to have been incurred on January 1, 2014. Pro forma Net earnings (loss) attributable to Allegion plc in the table above has been adjusted to reflect the costs in the assumed acquisition period.

The Company's historical financial information was adjusted to give effect to the pro forma events that were directly attributable to the acquisitions. This unaudited pro forma financial information has been presented for informational purposes only and does not purport to be indicative of results of operations that would have occurred had the pro forma events taken place on the date indicated or the future consolidated results of operations of the combined company.

The unaudited pro forma financial information has been calculated after applying the Company's accounting policies and adjusting the results of the acquired companies to reflect the additional amortization that would have been charged assuming the fair value adjustments to intangible assets had been applied from January 1, 2014 with the consequential tax effects. Additionally, interest related to the issuance of \$300 million of senior notes and the borrowing of \$100 million on the revolving facility has been included in the pro forma results above as if the debt was outstanding as of January 1, 2014. For purposes of calculating interest on the additional debt amounts, the Company has assumed the total amount is outstanding for all pro forma periods presented.

## NOTE 9 - 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. Systems Integration operates a security system integration business exclusively in China and provides services primarily to Chinese governments and government agencies. Under the terms of the transaction, the Company was to receive consideration of up to \$75 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. Additionally, the Company has retained 15% of the shares of Systems Integration.

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 Loss on divestitures within the Statement of Comprehensive Income.

As of December 31, 2015, the fair value of the consideration was \$75.3 million, of which \$51.2 million is classified in Accounts and notes receivable, net and the remaining amount is classified within Other assets within the Consolidated Balance Sheet.

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As part of the Company's quarterly assessment of the collectibility of the above amounts during the third quarter of 2016, the receivable was considered impaired. It was determined during this evaluation 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. Prior to the impairment, the receivable balance was \$85.9 million. A charge of \$81.4 million (net of tax) was recorded, reducing the carrying value of the receivable to a fair value of \$4.5 million as of September 30, 2016. The fair value of the receivable was 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. Also during the third quarter of 2016, the Company accrued certain contractual obligations of \$3.0 million that were uncertain at the time of the sale.

The Company currently estimates the fair value of the consideration to be \$3.1 million, which is classified within Other noncurrent assets within the Consolidated Balance Sheet. The total charge recorded as Loss on divestitures within the Statement of Comprehensive Income was \$84.4 million for the twelve months ended December 31, 2016. The Company does not expect to incur any material charges in future periods related to the Systems Integration business.

Net revenues and loss before income taxes related to the divestiture of Systems Integration for the year ended December 31 were as follows:

In millions	Twelve months ended	
	2016	2015
Net Revenues	\$—	\$38.5
Loss before income taxes	\$(84.4)	\$(63.4)

Net revenues and earnings for Systems Integration were historically weighted to the second half of the year, reflecting typical seasonality of contract awards.

## NOTE 10 – DEBT AND CREDIT FACILITIES

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

In millions	2016	2015
Term Loan A Facility	\$ 879.8	\$ 926.7
5.75% Senior Notes due 2021	300.0	300.0
5.875% Senior Notes due 2023	300.0	300.0
Other debt, including capital leases, maturing in various amounts through 2024	2.3	18.7
Unamortized debt issuance costs, net	(18.3)	(22.3)
Total debt	1,463.8	1,523.1
	48.2	65.6

Less current portion of long term debt			
Total long-term debt \$	1,415.6	\$	1,457.5

#### Senior Secured Credit Facilities

The Company has credit facilities consisting of a \$938.4 million Term Loan Facility due in 2020 (the "Term Loan A Facility") and a \$500.0 million Senior Secured Revolving Credit Facility (the "Revolver") maturing in 2020. The Company refers to these credit facilities as its "Senior Secured Credit Facilities."

The applicable margin for LIBOR rate borrowings range from 1.375% to 1.875% and the applicable margin for base rate borrowings range from 0.375% to 0.875% in each case depending on the corporate credit or family rating. The Revolver and the Term Loan A Facility mature on October 15, 2020.

The Company repaid \$46.9 million of principal on its Term Loan A Facility during the year ended December 31, 2016. Borrowings outstanding under the Term Loan A Facility were \$879.8 million on December 31, 2016. Allegion plc is the primary borrower under the Senior Secured Credit Facilities.

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**Term Facilities.** The Term Loan A Facility amortizes in quarterly installments at the following rates per year: 5% in 2017; 5% in 2018 and 10% in each year thereafter, with the final installment due on October 15, 2020.

**Revolver.** The Senior Secured Revolving Credit Facility permits borrowings of up to \$500.0 million. The Revolver is comprised of two tranches: a \$400 million tranche available in U.S. Dollars and a multi-currency tranche capped at \$100 million. The Revolver also includes \$100.0 million available for the issuance of letters of credit, however outstanding letters of credit reduce availability under the Revolver. The Revolver matures and the commitments thereunder will terminate on October 15, 2020. The Company pays certain fees with respect to the Revolver, including a commitment fee on the undrawn portion of the Revolver of 0.25% per year. At December 31, 2016, the Company did not have any borrowings outstanding under the Revolver and had \$21.7 million of letters of credit outstanding.

**Guarantees and Collateral.** The indebtedness, obligations and liabilities under the Senior Secured Credit Facilities are unconditionally guaranteed jointly and severally on a senior secured basis by certain of Allegion plc's subsidiaries, and will be secured, subject to permitted liens and other exceptions and exclusions, by a first-priority lien on substantially all tangible and intangible assets of the borrowers and each U.S. guarantor (including (i) a perfected pledge of all of the capital stock of the borrower and each direct, wholly-owned material subsidiary held by the borrowers or any guarantor (subject to certain limitations with respect to non U.S. subsidiaries) and (ii) perfected security interests in, and mortgages on, accounts, inventory, equipment, general intangibles, commercial tort claims, investment property, intellectual property, material fee-owned real property, letter-of-credit rights, intercompany notes and proceeds of the foregoing, except for certain excluded assets.

**Mandatory Prepayments.** In accordance with the Senior Secured Credit Facility, net cash proceeds of non-recourse asset sales and proceeds received from certain additional indebtedness will require prepayment of the Term Loan A Facility with proceeds received. In addition, starting with the year ended December 31, 2016 the Company may be required to apply between 0%-50% of its annual excess cash flow (as defined in the Senior Secured Credit Facility) to the prepayment of the Senior Secured Credit Facility. However, this percentage reduces to certain levels and eventually to zero upon achievement of certain leverage ratios. During the year ended December 31, 2016, the Company was not required to make any prepayments on the Senior Secured Credit Facility.

**Voluntary Prepayments.** The Company may voluntarily prepay the outstanding Term Loan A Facility in whole or in part at any time without premium or penalty. Optional prepayments of the Term Loan A Facility will be applied to the remaining installments at the direction of the borrower.

Commitments under the Revolver may be reduced in whole or in part at any time without premium or penalty.

**Covenants.** The Senior Secured Credit Facility contains certain customary covenants that, among other things, limit or restrict (subject to certain exceptions) the Company's ability to incur certain indebtedness, grant certain liens, make certain investments, declare or pay certain dividends or redeem or repurchase capital stock.

In addition, the Senior Secured Credit Facility contains certain financial covenants, which include a maximum leverage ratio and an interest expense coverage ratio. As of December 31, 2016, the Company is required to comply with a maximum leverage ratio of 4.00 to 1.00 based on a ratio of total consolidated indebtedness, net of unrestricted cash up to \$150 million, to consolidated EBITDA. Additionally, the Company is required to have a minimum interest expense coverage ratio of 4.00 to 1.00 based on a ratio of consolidated EBITDA to consolidated interest expense, net of interest income. As of December 31, 2016 the Company was in compliance with all of these covenants.

**Interest Rates and Fees.** Outstanding borrowings under the Senior Secured Credit Facilities accrue interest, at the option of the borrower, at a per annum rate of (i) LIBOR plus the applicable margin or (ii) a base rate plus the

applicable margin. As of December 31, 2016, the Company elected to borrow utilizing LIBOR. The applicable margin for borrowings under the Revolver and the Term Loan A Facility is subject to a credit facility rating-based pricing grid with the LIBOR ranging from 1.375% to 1.875%. The margin for Term Loan A Facility borrowings was 1.375% as of December 31, 2016.

To manage the Company's exposure to fluctuations in LIBOR rates, the Company has forward starting interest rate swaps to fix interest rate paid during the contract period for \$525.0 million of the Company's variable rate Term Loan Facility. Swaps with notional amounts totaling \$275.0 million expire in September 2017 and swaps with notional amounts totaling \$250.0 million expire in December 2020.

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## Senior Notes

In October 2013, Allegion US Holding Company Inc., the Company's wholly-owned subsidiary ("Allegion US"), issued \$300.0 million of 5.75% senior notes due 2021 (the "2021 Senior Notes"). The 2021 Senior Notes have been registered under the Securities Act of 1933, as amended. The 2021 Senior Notes accrue interest at the rate of 5.75% per annum, payable semi-annually on April 1 and October 1 of each year. The 2021 Senior Notes mature on October 1, 2021. The terms of the indenture governing the 2021 Senior Notes (the "Indenture") provide that, among other things, the 2021 Senior Notes rank equally in right of payment to all of Allegion US's and Allegion plc's existing and future senior unsecured indebtedness and effectively junior to all of the issuer's and the guarantors' existing and future secured indebtedness (including indebtedness with respect to the Senior Secured Credit Facility) to the extent of the value of the assets securing such indebtedness. The 2021 Senior Notes are structurally subordinated to all of the existing and future liabilities of the Company's subsidiaries that do not guarantee the 2021 Senior Notes. The net proceeds of this indebtedness were distributed to Ingersoll Rand in connection with the Spin-off.

In September 2015, Allegion plc issued \$300.0 million of 5.875% senior notes due 2023 (the "2023 Senior Notes"). The 2023 Senior Notes have been registered under the Securities Act of 1933, as amended. The 2023 Senior Notes accrue interest at the rate of 5.875% per annum, payable semi-annually on March 15 and September 15 of each year, beginning March 15, 2016. The 2023 Senior Notes mature on September 15, 2023. The 2023 Senior Notes are pursuant to an indenture (the "Second Indenture"), which provides that, among other things, the 2023 Senior Notes rank equally in right of payment to all of Allegion plc's existing and future senior unsecured indebtedness and effectively junior to all of Allegion plc's and the guarantors' existing and future secured indebtedness (including indebtedness with respect to the Senior Secured Credit Facility) to the extent of the value of the assets securing such indebtedness. The 2023 Senior Notes are structurally subordinated to all of the existing and future liabilities of Allegion plc's subsidiaries that do not guarantee the 2023 Senior Notes. The Company used the net proceeds of the offering to repay approximately \$300.0 million under Allegion's revolving credit facility.

**Guarantees.** Allegion plc and certain of its subsidiaries jointly and severally guarantee Allegion US's obligations under the 2021 Senior Notes on a senior unsecured basis. Allegion US and certain of its subsidiaries jointly and severally guarantee Allegion plc's obligations under the 2023 Senior Notes.

**Covenants.** The 2021 Senior Notes and the 2023 Senior Notes contain certain customary covenants that, among other things, limit or restrict (subject to certain exceptions) the Company's ability to incur certain indebtedness, grant certain liens, make certain investments, declare or pay certain dividends or redeem or repurchase capital stock.

At December 31, 2016, future retirements of the amounts outstanding under the Senior Secured Credit Facilities, the 2021 Senior Notes and the 2023 Senior Notes are as follows:

In millions

2017	\$46.9
2018	46.9
2019	93.9
2020	692.1
2021	300.0
Thereafter	300.0
Total	\$1,479.8

At December 31, 2016, the weighted-average interest rate for borrowings was 2.5% under the Term Loan A Facility (including the effect of interest rate swaps), 5.75% under the 2021 Senior Notes and 5.875% under the 2023 Senior Notes. Cash paid for interest for the years ended December 31, 2016, 2015 and 2014 was \$56.0 million, \$39.0 million and \$45.0 million respectively.



NOTE 11 – FINANCIAL INSTRUMENTS

In the normal course of business, the Company uses various financial instruments, including derivative instruments, to manage the risks associated with currency 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

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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 \$132.6 million and \$269.4 million at December 31, 2016 and 2015. At December 31, 2016 and 2015, gains of \$0.8 million and \$1.7 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 amount expected to be reclassified into Net earnings over the next twelve months is a gain of \$0.8 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, 2016, the maximum term of the Company's currency derivatives was less than one year.

#### Interest Rate Swaps

The Company has forward starting interest rate swaps to fix interest rate paid during the contract period for \$525.0 million of the Company's variable rate Term Loan Facility. Swaps with notional amounts totaling \$275.0 million expire in September 2017 and swaps with notional amounts totaling \$250.0 million expire in December 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 were recognized in Accumulated other comprehensive loss. At December 31, 2016, \$2.6 million of gains were recorded in Accumulated other comprehensive loss related to these interest rate swaps. At December 31, 2015, \$1.2 million of losses were recorded in Accumulated other comprehensive loss related to these interest rate swaps. The amount expected to be reclassified into Net earnings over the next twelve months is a loss of \$0.4 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	
	2016	2015	2016	2015
Derivatives designated as hedges:				
Currency derivatives	\$0.7	\$1.8	\$0.1	\$—
Interest rate swaps	4.6	—	0.4	1.2
Derivatives not designated as hedges:				
Currency derivatives	0.3	1.0	0.2	4.5

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Total derivatives \$5.6 \$2.8 \$0.7 \$5.7

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.

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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		
	2016	2015	2014		2016	2015	2014
Currency derivatives	\$ 4.2	\$ 6.6	\$ 1.6	Cost of goods sold	\$ 5.4	\$ 6.5	\$ 2.5
Interest rate swaps	5.4	(0.3 )	(0.9 )	Interest expense	—	—	—
Total	\$ 9.6	\$ 6.3	\$ 0.7		\$ 5.4	\$ 6.5	\$ 2.5

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) expense, 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 12 – 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.

#### 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.

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

In millions	U.S.		NON-U.S.	
	2016	2015	2016	2015
<b>Change in benefit obligations:</b>				
Benefit obligation at beginning of year	\$280.7	\$282.9	\$371.7	\$388.4
Service cost	9.4	9.5	3.1	3.3
Interest cost	9.8	11.0	10.7	13.7
Employee contributions	—	—	0.3	0.3
Amendments	—	—	—	0.1
Actuarial (gains) losses	1.6	(6.1 )	80.8	6.6
Benefits paid	(12.6 )	(14.3 )	(18.7 )	(15.0 )
Currency translation	—	—	(63.5 )	(22.2 )
Curtailments and settlements	—	—	(1.8 )	(1.2 )
Other, including expenses paid	(2.0 )	(2.3 )	(2.1 )	(2.3 )
Benefit obligation at end of year	\$286.9	\$280.7	\$380.5	\$371.7
<b>Change in plan assets:</b>				
Fair value at beginning of year	\$192.7	\$213.2	\$340.4	\$372.0
Actual return on assets	16.4	(6.3 )	90.3	(0.9 )
Company contributions	7.9	—	6.0	6.5
Employee contributions	—	—	0.3	0.3
Benefits paid	(12.6 )	(11.9 )	(18.7 )	(15.0 )
Currency translation	—	—	(61.0 )	(19.0 )
Settlements	—	—	(1.8 )	(1.2 )
Other, including expenses paid	(2.0 )	(2.3 )	(2.1 )	(2.3 )
Fair value of assets end of year	\$202.4	\$192.7	\$353.4	\$340.4
<b>Funded status:</b>				
Plan assets less than the benefit obligations	\$(84.5 )	\$(88.0 )	\$(27.1 )	\$(31.3 )
<b>Amounts included in the balance sheet:</b>				
Accrued compensation and benefits	\$(0.1 )	\$—	\$(1.5 )	\$(1.0 )
Postemployment and other benefit liabilities	(84.4 )	(88.0 )	(25.6 )	(30.3 )
Net amount recognized	\$(84.5 )	\$(88.0 )	\$(27.1 )	\$(31.3 )

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, 2016, 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, 2014	\$(3.5)	\$(82.9 )	\$(86.4)
Current year changes recorded to Accumulated other comprehensive loss	—	(11.8 )	(11.8 )
Amortization reclassified to earnings	0.7	4.9	5.6
Settlements/curtailments reclassified to earnings	—	0.9	0.9
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)

In millions	NON-U.S.		
	Prior service cost	Net actuarial losses	Total
December 31, 2014	\$0.1	\$(73.5 )	\$(73.4)
Current year changes recorded to Accumulated other comprehensive loss	(0.1 )	(25.3 )	(25.4 )
Amortization reclassified to earnings	—	1.4	1.4
Settlements/curtailments reclassified to earnings	—	0.2	0.2
Currency translation and other	—	5.0	5.0
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)

## Weighted-average assumptions used:

Benefit obligations at December 31, 2016 2015

Discount rate:

U.S. plans 4.1 % 4.3 %

Non-U.S. plans 2.6 % 3.6 %

Rate of compensation increase:

U.S. plans 3.5 % 3.5 %

Non-U.S. plans 3.2 % 2.9 %

The accumulated benefit obligation for all U.S. defined benefit pension plans was \$272.5 million and \$265.5 million at December 31, 2016 and 2015. The accumulated benefit obligation for all Non-U.S. defined benefit pension plans was \$371.9 million and \$363.8 million at December 31, 2016 and 2015.

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

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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.

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

In millions	U.S.		NON-U.S.	
	2016	2015	2016	2015
Projected benefit obligation	\$286.9	\$280.7	\$30.2	\$371.7
Accumulated benefit obligation	272.5	265.5	25.9	363.8
Fair value of plan assets	\$202.4	\$192.7	\$6.8	\$340.4

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

In millions	U.S.	NON-U.S.
2017	\$14.7	\$ 16.0
2018	16.2	16.0
2019	15.6	16.5
2020	22.8	17.2
2021	18.6	17.8
2022 - 2026	\$106.4	\$ 99.2

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

	U.S.		
In millions	2016	2015	2014
Service cost	\$9.4	\$9.5	\$7.3
Interest cost	9.8	11.0	11.5
Expected return on plan assets	(10.2 )	(11.2 )	(11.2 )
Net amortization of:			
Prior service costs	0.7	0.7	0.7
Plan net actuarial losses	4.7	4.9	2.3
Net periodic pension benefit cost	14.4	14.9	10.6
Net curtailment and settlement losses	—	0.9	—
Net periodic pension benefit cost after net curtailment and settlement losses	\$14.4	\$15.8	\$10.6
	NON-U.S.		
In millions	2016	2015	2014
Service cost	\$3.1	\$3.3	\$4.6
Interest cost	10.7	13.7	17.3
Expected return on plan assets	(13.7)	(17.8)	(17.3)
Net amortization of:			
Prior service costs	—	—	0.1
Plan net actuarial losses	2.2	1.4	2.8
Net periodic pension benefit cost	2.3	0.6	7.5
Net curtailment and settlement losses	0.3	0.2	—
Net periodic pension benefit cost after net curtailment and settlement losses	\$2.6	\$0.8	\$7.5

Pension expense for 2017 is projected to be approximately \$11.9 million, utilizing the assumptions for calculating the pension benefit obligations at the end of 2016. The amounts expected to be recognized in net periodic pension cost during the year ended December 31, 2017 for prior service cost and plan net actuarial losses are \$0.4 million and \$6.3 million, respectively.

## Weighted-average assumptions used:

Net periodic pension cost for the year ended December 31,	2016	2015	2014
Discount rate:			
U.S. plans	4.3%	4.0%	5.0%
Non-U.S. plans	3.7%	3.7%	4.5%
Rate of compensation increase:			
U.S. plans	3.5%	3.5%	3.5%
Non-U.S. plans	3.0%	2.9%	4.8%
Expected return on plan assets:			
U.S. plans	5.5%	5.5%	5.5%
Non-U.S. plans	4.5%	5.0%	5.3%

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 and its historical returns and target asset allocations to determine the appropriate expected long-term rate of return on plan assets to be used.



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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.

Effective December 31, 2015, the Company adopted new accounting guidance for investments that calculate net asset value ("NAV") per share (or its equivalent). As a result of the adoption of this new guidance, certain investments that are measured at fair value using the net asset value per share (or its equivalent) as a practical expedient are not required to be classified in the fair value hierarchy. At December 31, 2016 and 2015, the net asset values of these investments were \$62.9 million and \$56.5 million and are included within the column Assets measured at NAV in the fair value tables below.

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			Total fair value
	Level 1	Level 2	Level 3	
			Assets measured at NAV	
Cash and cash equivalents	\$ —	\$ 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.

The fair values of the Company's U.S. pension plan assets at December 31, 2015 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 and cash equivalents	\$ —	\$ 2.7	\$ —	\$ 2.7
Equity mutual funds	—	—	56.5	56.5
Fixed income investments:				
U.S. government and agency obligations	—	49.2	—	49.2
Corporate and non-U.S. bonds <sup>(a)</sup>	—	82.6	—	82.6
	—	131.8	—	131.8
Total assets at fair value	\$ —	\$ 134.5	\$ 56.5	\$ 191.0
Receivables and payables, net				1.7
Net assets available for benefits				\$ 192.7

(a) Includes state and municipal bonds.

The Company determines the fair value of its US plan assets using the following methodologies:

• Cash, cash equivalents and short term investments –The 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

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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.

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-US 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, 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	\$—	
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.

The fair values of the Company's Non-U.S. pension plan assets at December 31, 2015 by asset category are as follows:

In millions	Fair value measurements			Total fair value
	Level 1	Level 2	Level 3	
	Cash and cash equivalents	\$20.2	\$—	
Equity mutual funds	—	121.6	—	121.6
Corporate and non-U.S. bonds	—	130.7	—	130.7
Real estate <sup>(a)</sup>	—	12.3	0.8	13.1
Other <sup>(b)</sup>	—	52.9	1.9	54.8
Total assets at fair value	\$20.2	\$317.5	\$ 2.7	\$ 340.4

<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.

Cash equivalents are valued using a market approach with inputs including quoted market prices for either identical or similar instruments. Fixed income securities are valued through a market approach with inputs including, but not limited to, benchmark yields, reported trades, broker quotes and issuer spreads. Equity funds are valued at their net asset value. Net asset values are calculated by the investment manager or sponsor of the fund. 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 \$7.9 million of contributions to the U.S. pension plan in 2016. The Company did not make any required or discretionary contributions to the U.S. pension plans in 2015 or 2014. The Company made required and discretionary contributions to its Non-U.S. pension plans of \$6.0 million in 2016, \$6.5 million in 2015, and \$17.5 million in 2014.

In January 2017, subsequent to the Consolidated Balance Sheet date, the Company made a discretionary \$50.0 million contribution to the U.S. qualified defined benefit pension plan, not reflected in the tables above, using cash on hand. The Company currently

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projects that an approximate \$9.4 million will be contributed to its U.S and Non-U.S. plans in 2017 in addition to the amount in January 2017. 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 2017 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 \$13.3 million, \$12.1 million, and \$10.2 million in 2016, 2015 and 2014. The Company's contributions relating to non-U.S. defined contribution plans and other non-U.S. benefit plans were \$5.6 million, \$6.2 million and \$7.0 million in 2016, 2015 and 2014.

## 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, 2016 the deferred compensation liability balance was \$16.8 million.

## 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	2016	2015
Change in benefit obligations:		
Benefit obligation at beginning of year	\$12.9	\$13.6
Service cost	0.1	0.1
Interest cost	0.4	0.5
Actuarial gains	(2.9 )	(0.3 )
Benefits paid, net of Medicare Part D subsidy	(0.8 )	(1.0 )
Benefit obligations at end of year	\$9.7	\$12.9
Funded status:		
Plan assets less than benefit obligations	\$(9.7)	\$(12.9)
Amounts included in the balance sheet:		
Accrued compensation and benefits	(0.9 )	(1.1 )
Postemployment and other benefit liabilities	(8.8 )	(11.8 )
Total	\$(9.7)	\$(12.9)

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

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In millions	Prior service gains	Net actuarial losses	Total
December 31, 2014	\$ 5.5	\$ (0.7 )	\$4.8
Current year changes recorded to Accumulated other comprehensive loss	—	(0.5 )	(0.5 )
Amortization reclassified to earnings	(1.6 )	—	(1.6 )
Balance at 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

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

In millions	2016	2015	2014
Service cost	\$0.1	\$0.1	\$0.1
Interest cost	0.4	0.5	0.5
Net amortization of:			
Prior service gains	(1.6 )	(1.6 )	(1.6 )
Net periodic postretirement benefit income	\$(1.1)	\$(1.0)	\$(1.0)

Postretirement income for 2017 is projected to be \$1.4 million. Amounts expected to be recognized in net periodic postretirement benefits cost in 2017 for prior service gains and plan net actuarial losses are \$1.6 million and \$0.1 million.

Assumptions:	2016	2015	2014
Weighted-average discount rate assumption to determine:			
Benefit obligations at December 31	3.5%	3.5%	3.5 %
Net periodic benefit cost	3.5%	3.5%	4.0 %
Assumed health-care cost trend rates at December 31:			
Current year medical inflation (a)	— %	— %	7.3 %
Ultimate inflation rate (a)	— %	— %	5.0 %
Year that the rate reaches the ultimate trend rate (a)	n/a	n/a	2021

(a) The current year medical inflation rate, ultimate inflation rate and year of ultimate trend rate is no longer applicable as the Company has capped the annual maximum amount it will pay for retiree healthcare costs.

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	
2017	\$0.9
2018	1.0
2019	1.0
2020	0.9
2021	0.9
2022 - 2026	\$3.7





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## NOTE 13 – 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.

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 swap	\$—\$ 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 swap	—0.4	—		0.4
Deferred compensation plans	—16.8	—		16.8
Total liability recurring fair value measurements	\$—\$ 17.5	\$		—\$17.5
Financial instruments not carried at fair value:				

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

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Assets and liabilities measured at fair value at December 31, 2015 are as follows:

In millions	Fair value measurements			Total fair value
	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	
Recurring fair value measurements				
Assets:				
Marketable securities	\$ 14.2	\$ —	\$ —	\$ 14.2
Foreign currency contracts	—	2.8	—	2.8
Total asset recurring fair value measurements	\$ 14.2	\$ 2.8	\$ —	\$ 17.0
Liabilities:				
Foreign currency contracts	\$ —	\$ 4.5	\$ —	\$ 4.5
Interest rate swap	—	1.2	—	1.2
Deferred compensation plans	—	15.5	—	15.5
Total liability recurring fair value measurements	\$ —	\$ 21.2	\$ —	\$ 21.2
Financial instruments not carried at fair value:				
Total debt	\$ —	\$ 1,556.6	\$ —	\$ 1,556.6
Total financial instruments not carried at fair value	\$ —	\$ 1,556.6	\$ —	\$ 1,556.6

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

Marketable securities – These securities include investments in publicly traded stock of non-U.S. companies held by non-U.S. subsidiaries of the Company. The fair value is obtained for the securities based on observable market prices quoted on public stock exchanges.

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 \$525.0 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.

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 2023. 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, 2016 are the same as those used at December 31, 2015. There have been no significant transfers between Level 1 and Level 2 categories.

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## NOTE 14 – EQUITY

## Ordinary Shares

The reconciliation of Ordinary shares is as follows:

In millions	Total
December 31, 2015	96.0
Shares issued under incentive plans	0.6
Repurchase of ordinary shares	(1.3 )
December 31, 2016	95.3

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, 2016. During the year ended December 31, 2016, the Company paid \$85.1 million to repurchase 1.3 million ordinary shares on the open market under a share repurchase authorization previously approved by its Board of Directors.

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 replaces the authorization established in 2014.

## 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, 2013	\$ 16.7	\$ (131.3)	\$ 17.9	\$ (96.7 )
Other comprehensive income (loss), net of tax	(1.0 )	15.2	(65.7 )	(51.5 )
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 income (loss), net of tax	(10.6 )	18.8	(40.3 )	(32.1 )
December 31, 2016	\$ 3.4	\$ (120.5)	\$ (147.2 )	\$ (264.3)

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

In millions	2016	2015	2014
Foreign currency items	\$(0.4)	\$(1.4)	\$(0.7)
Total other comprehensive loss attributable to noncontrolling interests	\$(0.4)	\$(1.4)	\$(0.7)

Included in equity for the year ended December 31, 2014 were \$13.0 million of adjustments related to the completion of the allocation of taxable income and the completion of the allocation of tax basis in certain assets between Ingersoll Rand and Allegion at the Spin-off.

## NOTE 15 – 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 3.7 million remain available as of December 31, 2016 for future incentive awards.

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## Compensation Expense

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

In millions	2016	2015	2014
Stock options	\$4.1	\$3.7	\$3.3
RSUs	7.7	5.8	6.0
PSUs	4.8	5.0	3.9
Deferred compensation	0.8	0.3	0.8
Pre-tax expense	17.4	14.8	14.0
Tax benefit	(5.6 )	(4.4 )	(4.7 )
Total	\$11.8	\$10.4	\$9.3

## 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, 2016 and 2015 was estimated to be \$15.86 per share and \$17.88 per share, respectively, using the Black-Scholes option-pricing model. The weighted average assumptions used were the following:

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

For grants issued on or after December 1, 2013, 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 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.



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Changes in options outstanding under the plans for the years ended December 31, 2016, 2015 and 2014 are as follows:

	Shares subject to option	Weighted- average exercise price (a)	Aggregate intrinsic value (millions)	Weighted- average remaining life (years)
December 31, 2013	2,482,056	\$ 25.21		
Granted	188,817	54.07		
Exercised	(683,383 )	24.18		
Canceled	(25,462 )	43.89		
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		
Outstanding December 31, 2016	1,313,070	\$ 39.87	\$ 31.7	5.5
Exercisable December 31, 2016	929,677	\$ 32.64	\$ 29.2	4.4

(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:

Range of exercise price	Options outstanding			Options exercisable		
	Number outstanding December 2016	Weighted- average remaining life (years)	Weighted- average exercise price	Number outstanding December 2016	Weighted- average remaining life (years)	Weighted- average exercise price
\$10.01 —\$20.00	149,389	2.3	\$ 14.87	149,389	2.3	\$ 14.87
20.01 —30.00	344,376	2.8	25.93	344,376	2.8	25.93
30.01 —40.00	139,747	5.0	32.31	139,747	5.0	32.31
40.01 —50.00	145,062	7.0	43.37	145,062	7.0	43.37
50.01 —60.00	533,234	8.0	56.84	151,103	6.8	55.49
60.01 —70.00	631	9.8	63.93	—	—	—
\$70.01 —\$80.00	631	9.6	72.12	—	—	—
	1,313,070	5.6	\$ 39.87	929,677	4.4	\$ 32.64

At December 31, 2016, there was \$2.9 million of total unrecognized compensation cost from stock option arrangements granted under the plan, which is primarily related to unvested shares of non-retirement eligible employees. The aggregate intrinsic value of the Company's options exercised during the year ended December 31, 2016 and 2015 was \$18.3 million and \$21.5 million, respectively. Generally, stock options expire ten years from their date of grant.

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The following table summarizes RSU activity for the years ended December 31, 2016, 2015 and 2014:

	RSUs	Weighted- average grant date fair value (a)
Outstanding and unvested at December 31, 2013	378,217	\$ 33.59
Granted	101,654	54.29
Vested	(149,392)	28.68
Canceled	(5,319 )	43.66
Outstanding and unvested at December 31, 2014	325,160	42.15
Granted	121,153	59.69
Vested	(92,029 )	36.63
Canceled	(9,354 )	49.32
Outstanding and unvested at December 31, 2015	344,930	49.59
Granted	123,299	59.49
Vested	(220,854)	45.83
Canceled	(41,741 )	52.40
Outstanding and unvested at December 31, 2016	205,634	\$ 58.99

The weighted average grant date fair value for periods ending prior to December 1, 2013 represents the fair value of awards granted with respect to Ingersoll Rand ordinary shares, prior to conversion to awards of the Company.  
(a) The weighted average grant date fair value of awards on or after December 1, 2013 represents the fair value of the awards on the grant date converted to ordinary shares of the Company.

At December 31, 2016, there was \$5.1 million of total unrecognized compensation cost from RSU arrangements granted under the plan, which is related to unvested shares of non-retirement eligible employees.

#### Performance Shares

The Company has a Performance Share Program ("PSP") for key employees. The program provides awards in the form of Performance Share Units ("PSU") based on performance against pre-established objectives. The annual target award level is expressed as a number of the Company's ordinary shares. All PSUs are settled in the form of ordinary shares unless deferred.

In December 2013, the Company's Compensation Committee granted PSUs that are earned based upon the Company's total shareholder return ("TSR") performance compared to the TSR of the companies currently comprising the S&P 400 Capital Goods Index over the three-year performance period based on the change in the 30 day average price for the index from December 2013 to the 30 day average price for the index in December 2016. The fair value of the market condition is estimated using a Monte Carlo simulation approach in a risk-neutral framework to model future stock price movements based upon the risk-free rate of return, the volatility of each entity, and the pair-wise correlations between each entity.

Beginning with the 2014 grant year, PSUs are earned based upon a 50% performance condition, measured at each reporting period by EPS performance in relation to pre-established targets set by the Compensation Committee, and upon a 50% market condition, measured by the Company's relative TSR against the S&P 400 Capital Goods Index over a three-year performance period based on the change in the 30 day average price for the grant year index to the 30 day average price for the index over the performance period. The fair values of the market conditions are estimated

using a Monte Carlo simulation approach in a risk-neutral framework to model future stock price movements based upon the risk-free rate of return, the volatility of each entity, and the pair-wise correlations between each entity.

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The following table summarizes PSU activity for the maximum number of shares that may be issued for the years ended December 31, 2016, 2015 and 2014:

	PSUs	Weighted-average grant date fair value (a)
Outstanding and unvested at December 31, 2013	62,883	\$ 29.27
Granted	110,387	72.70
Forfeited	(12,138 )	50.96
Outstanding and unvested at December 31, 2014	161,132	57.39
Granted	58,323	66.47
Vested	(17,327 )	75.05
Forfeited	(85 )	75.05
Outstanding and unvested at December 31, 2015	202,043	64.92
Granted	94,201	64.83
Vested	(64,979 )	72.69
Forfeited	(21,661 )	57.07
Outstanding and unvested at December 31, 2016	209,604	\$ 56.02

The weighted average grant date fair value for periods ending prior to December 1, 2013 represents the fair value of awards granted with respect to Ingersoll Rand ordinary shares, prior to conversion to awards of the Company.  
 (a) The weighted average grant date fair value of awards on or after December 1, 2013 represents the fair value of the awards on the grant date converted to ordinary shares of the Company.

At December 31, 2016, there was \$4.6 million of total unrecognized compensation cost from the PSP based on current performance, which is related to unvested shares. This compensation will be recognized over the required service period, which is generally the three-year vesting period.

#### Deferred Compensation

The Company allows key employees to defer a portion of their eligible compensation into a number of investment choices, including its ordinary share equivalents. Any amounts invested in ordinary share equivalents will be settled in ordinary shares of the Company at the time of distribution.

#### NOTE 16 – RESTRUCTURING

During 2016, 2015, and 2014, the Company incurred costs of \$3.1 million, \$15.1 million, and \$7.1 million respectively, associated with ongoing restructuring actions. These actions included workforce reductions as well as the closure and consolidation of manufacturing facilities in an effort to increase efficiencies across multiple lines of business.

#### 2015 Italy Restructuring Plan

In the second quarter of 2015, management committed to a restructuring plan in Italy. The plan aims to improve competitive position, ensure long-term viability and enhance customer experience. Expenses incurred for this plan for the years ended December 31 were as follows:

Twelve  
months  
ended

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In millions	2016	2015
EMEIA	\$0.9	\$14.7
Total	\$0.9	\$14.7
Cost of goods sold	\$0.3	\$13.6
Selling and administrative expenses	0.6	1.1
Total	\$0.9	\$14.7

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The above expenses primarily related to severance charges.

## Other Restructuring Plans

Restructuring charges recorded during the years ended December 31 as part of other restructuring plans were as follows:

In millions	2016	2015	2014
Americas	\$2.0	\$—	\$0.1
EMEIA	—	—	7.0
Asia Pacific	0.2	0.4	—
Total	\$2.2	\$0.4	\$7.1

Cost of goods sold	\$0.6	\$—	\$1.4
Selling and administrative expenses	1.6	0.4	5.7
Total	\$2.2	\$0.4	\$7.1

The charges in 2016 primarily related to workforce reductions and actions related to manufacturing foot print optimization primarily in the Americas segment. In 2015 and 2014 the charges primarily related to workforce reductions in an effort to increase efficiencies across multiple lines of business.

The changes in the restructuring reserve during the years ended December 31, 2016 and 2015 were as follows:

In millions	Americas	EMEIA	Asia Pacific	Total
December 31, 2014	\$ —	\$ 1.9	\$ —	\$1.9
Additions	—	14.7	0.4	15.1
Cash and non-cash uses	—	(6.0 )	(0.2 )	(6.2 )
Currency translation	—	(0.6 )	—	(0.6 )
December 31, 2015	—	10.0	0.2	10.2
Additions	2.0	0.9	0.2	3.1
Cash and non-cash uses	(1.7 )	(7.5 )	(0.4 )	(9.6 )
Currency translation	—	(0.2 )	—	(0.2 )
December 31, 2016	\$ 0.3	\$ 3.2	\$ —	\$3.5

The Company incurred other non-qualified restructuring charges of \$6.4 million and \$0.5 million during the years ended December 31, 2016 and 2015, respectively, in conjunction with the other restructuring plans, which represent costs that are directly attributable to restructuring activities, but do not fall into the severance, exit or disposal category.

The majority of the costs accrued as of December 31, 2016 will be paid within one year.

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## NOTE 17 – OTHER EXPENSE, NET

At December 31, the components of Other expense, net were as follows:

In millions	2016	2015	2014
Interest income	\$(1.9 )	\$(1.5)	\$(1.1)
Exchange loss	2.0	4.9	7.6
(Earnings) loss from equity investments	(3.6 )	0.3	(0.5 )
Other	(14.7 )	(11.5)	(1.4 )
Other (income) expense, net	\$(18.2)	\$(7.8)	\$4.6

During the year ended December 31, 2016 the Company recorded gains from the sale of marketable securities of \$12.4 million which is included within Other in the table above. During the year ended December 31, 2016 earnings from equity method investments increased primarily due to a gain recognized by an investment in the first quarter of 2016.

During the year ended December 31, 2015 the Company recorded gains from the sale of marketable securities of \$11.0 million which is included within Other in the table above. In February 2015, the Venezuelan government announced changes to its exchange rate system that included the launch of a new, market-based system called the Marginal Currency System, or "SIMADI." During the year ended December 31, 2015 the Company recorded a charge of \$2.8 million in order to remeasure net monetary assets at the SIMADI rate and other unfavorable currency impacts. These losses are within Exchange loss in the table above.

In March 2014, the Venezuelan government launched a SICAD II rate to provide a greater supply of U.S. dollars from sources other than the Venezuelan government. Given accelerated deterioration in economic conditions driven by a significant drop in the price of oil and no expectation of improvement for the foreseeable future, the Company concluded that the SICAD II exchange rate was the most appropriate rate at which to value bolivar denominated assets and liabilities. As a result, on December 31, 2014, the Company moved the exchange rate applied to bolivars from the official rate to the SICAD II rate. The Company recorded a charge of \$12.1 million in order to remeasure net monetary assets to the SICAD II rate.

## NOTE 18 – INCOME TAXES

Earnings before income taxes for the years ended December 31 were taxed within the following jurisdictions:

In millions	2016	2015	2014
United States	\$129.9	\$123.1	\$162.2
Non-U.S.	165.1	86.2	105.7
Total	\$295.0	\$209.3	\$267.9

The components of the Provision for income taxes for the years ended December 31 were as follows:

In millions	2016	2015	2014
Current tax expense:			
United States	\$43.8	\$53.4	\$52.9
Non-U.S.	13.8	3.5	14.1
Total:	57.6	56.9	67.0
Deferred tax expense (benefit):			
United States	14.4	2.1	15.6
Non-U.S.	(8.2 )	(4.4 )	1.6

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Total:	6.2	(2.3 )	17.2
Total tax expense (benefit):			
United States	58.2	55.5	68.5
Non-U.S.	5.6	(0.9 )	15.7
Total	\$63.8	\$54.6	\$84.2

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The Provision for income taxes differs from the amount of income taxes determined by applying the applicable U.S. statutory income tax rate to pretax income, as a result of the following differences:

	Percent of pretax income		
	2016	2015	2014
Statutory U.S. rate	35.0 %	35.0 %	35.0 %
Increase (decrease) in rates resulting from:			
Non-U.S. tax rate differential (1)	(17.4)	(11.1)	(9.6)
State and local income taxes (1)	2.0	2.8	3.0
Reserves for uncertain tax positions	2.0	(3.4)	(2.1)
Tax on unremitted earnings	1.2	1.5	0.3
Tax on remitted earnings	—	—	2.5
Venezuela devaluation	—	0.9	4.0
Production incentives	(0.6)	(1.0)	(2.4)
Other adjustments	(0.6)	1.4	0.7
Effective tax rate	21.6 %	26.1 %	31.4 %

(1) Net of changes in valuation allowances

At December 31, a summary of the deferred tax accounts were as follows:

In millions	2016	2015
Deferred tax assets:		
Inventory and accounts receivable	\$18.3	\$10.2
Fixed assets and intangibles	2.0	14.5
Postemployment and other benefit liabilities	42.0	65.5
Other reserves and accruals	16.0	12.7
Net operating losses, tax credits and other carryforwards	227.1	133.4
Investment and other asset basis differences	—	1.1
Other	5.3	6.2
Gross deferred tax assets	310.7	243.6
Less: deferred tax valuation allowances	(225.5)	(133.3)
Deferred tax assets net of valuation allowances	\$85.2	\$110.3
Deferred tax liabilities:		
Fixed assets and intangibles	\$(90.6)	\$(96.7)
Unremitted earnings of foreign subsidiaries	(4.2)	(3.9)
Other	(6.0)	(6.7)
Gross deferred tax liabilities	(100.8)	(107.3)
Net deferred tax (liabilities) assets	\$(15.6)	\$3.0

At December 31, 2016, \$4.2 million of deferred tax was recorded for certain undistributed earnings of foreign subsidiaries. No deferred taxes have been provided for any portion of the remaining undistributed earnings of the Company's subsidiaries since these earnings have been, and will continue to be, permanently reinvested in these subsidiaries. For many reasons, including the number of legal entities and jurisdictions involved, the complexity of the Company's legal entity structure, the complexity of tax laws in the relevant jurisdictions and the impact of projections of income for future years to any calculations, the Company believes it is not practicable to estimate, within any reasonable range, the amount of additional taxes which may be payable upon the distribution of earnings.

At December 31, 2016, the Company had the following tax losses and tax credit carryforwards available to offset taxable income in prior and future years:



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In millions	Amount	Expiration Period
U.S. Federal tax loss carryforwards	\$ 15.1	2027 & 2028
U.S. Federal and State credit carryforwards	22.7	2024-Unlimited
U.S. State tax loss carryforwards	26.6	2017-2037
Non-U.S. tax loss carryforwards	\$ 706.2	2018-Unlimited

The U.S. state loss carryforwards were incurred in various jurisdictions. The non-U.S. loss carryforwards were incurred in various jurisdictions, predominantly in China, Ireland, Luxembourg and the United Kingdom.

The Company evaluates its deferred income tax assets to determine if valuation allowances are required or should be adjusted. U.S. GAAP requires that companies assess whether valuation allowances should be established against their deferred tax assets based on consideration of all available evidence, both positive and negative, using a "more likely than not" standard. This assessment considers the nature, frequency and amount of recent losses, the duration of statutory carryforward periods and tax planning strategies. In making such judgments, significant weight is given to evidence that can be objectively verified.

Activity associated with the Company's valuation allowance is as follows:

In millions	2016	2015	2014
Beginning balance	\$133.3	\$50.8	\$46.9
Increase to valuation allowance	109.0	82.2	28.0
Decrease to valuation allowance	(13.9 )	(3.0 )	(15.8 )
Foreign exchange translation	(3.3 )	(1.6 )	(1.7 )
Accumulated other comprehensive income (loss)	0.4	4.9	(6.6 )
Ending balance	\$225.5	\$133.3	\$50.8

During 2016, the valuation allowance increased by \$92.2 million. This increase is the result of changes in jurisdictional profitability, country specific tax laws and changes in judgment and facts regarding the realizability of deferred tax assets.

The Company has total unrecognized tax benefits of \$32.0 million and \$23.8 million as of December 31, 2016, and December 31, 2015, respectively. The amount of unrecognized tax benefits that, if recognized, would affect the continuing operations effective tax rate are \$30.5 million as of December 31, 2016. A reconciliation of the beginning and ending amount of unrecognized tax benefits is as follows:

In millions	2016	2015	2014
Beginning balance	\$23.8	\$25.4	\$40.6
Additions based on tax positions related to the current year	9.1	3.9	3.1
Additions based on tax positions related to prior years	7.1	1.6	11.8
Reductions based on tax positions related to prior years	(5.5 )	(3.0 )	(23.9 )
Reductions related to settlements with tax authorities	(0.6 )	—	(0.7 )
Reductions related to lapses of statute of limitations	(0.9 )	(1.4 )	(2.7 )
Translation (gain)/loss	(1.0 )	(2.7 )	(2.8 )
Ending balance	\$32.0	\$23.8	\$25.4

The Company records interest and penalties associated with the uncertain tax positions within its Provision for income taxes. The Company had reserves associated with interest and penalties, net of tax, of \$5.4 million and \$5.3 million at

December 31, 2016 and 2015. For the year ended December 31, 2016 the Company recognized \$0.3 million in net interest and penalties, net of tax, in continuing operations and did not recognize any net interest and penalties, net of tax, in continuing operations for the year ended December 31, 2015 related to these uncertain tax positions.

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The total amount of unrecognized tax benefits relating to the Company's tax positions is subject to change based on future events including, but not limited to, the settlements of ongoing audits and/or the expiration of applicable statutes of limitations. Although the outcomes and timing of such events are highly uncertain, it is reasonably possible that the balance of gross unrecognized tax benefits, excluding interest and penalties, could potentially be reduced by up to approximately \$12.5 million during the next 12 months.

The provision for income taxes involves a significant amount of management judgment regarding interpretation of relevant facts and laws in the jurisdictions in which the Company operates. Future changes in applicable laws, projected levels of taxable income and tax planning could change the effective tax rate and tax balances recorded by the Company. In addition, tax authorities periodically review income tax returns filed by the Company and can raise issues regarding its filing positions, timing and amount of income or deductions, and the allocation of income among the jurisdictions in which the Company operates. 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 tax authority with respect to that return. In the normal course of business, the Company is subject to examination by taxing authorities throughout the world, including such major jurisdictions as Canada, France, Germany, Italy, Mexico, the Netherlands and the United States. In general, the examination of the material tax returns of subsidiaries of the Company is complete for the years prior to 2003, with certain matters being resolved through appeals and litigation.

In connection with the Spin-off, the Company and Ingersoll Rand entered into a Tax Matters Agreement for the allocation of taxes. In the second quarter of 2016, the Company reached a settlement agreement on a Canadian competent authority matter. The Company made a net remittance of \$49.2 million to Ingersoll Rand related to this competent authority matter in the third quarter of 2016. At December 31, 2016, the Company has recorded a \$4.2 million receivable from Ingersoll Rand related to this competent authority matter. The Company expects to collect the \$4.2 million receivable in 2017. During the fourth quarter of 2016, the Company received a \$44.1 million income tax refund (net of tax on interest income accrued on the refund) from the Canadian Tax authorities related to the competent authority matter. At December 31, 2016, the Company has recorded \$3.1 million as an Other current asset (net of tax on interest income accrued on the refund) which is due from certain Canadian Provincial Tax Agencies related to the competent authority matter. The Company expects to collect the \$3.1 million receivable in 2017.

As of December 31, 2016, the Company agreed to indemnify Ingersoll Rand \$0.1 million for various tax matters, exclusive of interest and penalties of \$0.1 million, which is reflected as an Other noncurrent liability (\$0.6 million and \$0.6 million at December 31, 2015). In addition, the Company also has other indemnity receivables from Ingersoll Rand in the amount of \$5.6 million reflected as an Other noncurrent asset at December 31, 2016 (\$5.0 million at December 31, 2015). The indemnity receivable is primarily related to additional competent authority relief filings.

## NOTE 19 – DISCONTINUED OPERATIONS

Discontinued operations recognized a loss of \$0.4 million and \$11.1 million for the years ended December 31, 2015 and 2014, respectively. There was no amount associated with discontinued operations for the year ended December 31, 2016. These losses were mainly related to the sale of the United Kingdom (UK) Door Business in the third quarter of 2014 in addition to non-cancellable lease expense and other miscellaneous expenses from previously sold businesses.

## NOTE 20 – EARNINGS PER SHARE (EPS)

Basic EPS is calculated by dividing Net earnings attributable to Allegion plc by the weighted-average number of ordinary shares outstanding for the applicable period. Diluted EPS is calculated after adjusting the denominator of the

basic EPS calculation for the effect of all potentially dilutive ordinary shares, which in the Company's case, includes shares issuable under share-based compensation plans.

Basic and Diluted EPS for all periods prior to the Spin-off reflect the number of distributed shares on December 1, 2013, or 96.0 million shares. For 2013 year to date calculations, these shares are treated as issued and outstanding from January 1, 2013 for purposes of calculating historical basic EPS. At the time of the Spin-off, stock options and restricted stock awards were converted to awards of Allegion, and therefore there were no dilutive securities outstanding for historical periods. For 2013, the Company determined its weighted average dilutive share outstanding assuming that the date of our separation from Ingersoll Rand was the beginning of the period. The following table summarizes the weighted-average number of ordinary shares outstanding for basic and diluted earnings per share calculations.

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In millions	2016	2015	2014
Weighted-average number of basic shares	95.8	95.9	96.1
Shares issuable under incentive stock plans	1.1	1.0	1.1
Weighted-average number of diluted shares	96.9	96.9	97.2

At December 31, 2016, 0.6 million stock options were excluded from the computation of weighted average diluted shares outstanding because the effect of including these shares would have been anti-dilutive.

**NOTE 21 – COMMITMENTS AND CONTINGENCIES**

The Company is involved in various litigations, claims and administrative proceedings, including those related to environmental and product warranty matters. Amounts recorded for identified contingent liabilities are estimates, which are reviewed periodically and adjusted to reflect additional information when it becomes available. Subject to the uncertainties inherent in estimating future costs for contingent liabilities, except as expressly set forth in this note, management believes that any liability which may result from these legal matters would not have a material adverse effect on the financial condition, results of operations, liquidity or cash flows of the Company.

**Environmental Matters**

The Company is dedicated to an environmental program to reduce the utilization and generation of hazardous materials during the manufacturing process and to remediate identified environmental concerns. As to the latter, the Company is 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. Changes to the Company's remediation programs may result in increased expenses and increased environmental reserves.

The Company is sometimes a party to environmental lawsuits and claims and has received notices of potential violations of environmental laws and regulations from the U.S. Environmental Protection Agency and similar state authorities. It has 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, the Company's involvement is minimal.

In estimating its liability, the Company has assumed it 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.

The Company incurred \$23.3 million, \$4.4 million, and \$2.9 million of expenses during the years ended December 31, 2016, 2015 and 2014, respectively, for environmental remediation at sites presently or formerly owned or leased by the Company. In the fourth-quarter of 2016, with the collaboration and approval of state regulators, the Company launched a proactive, alternative approach to remediate two sites in the United States. This approach will allow the Company to more aggressively address environmental conditions at these sites and reduce the impact of potential changes in regulatory requirements. As a result, the Company recorded a \$15 million charge for environmental remediation in the fourth quarter.

Environmental remediation costs are recorded in Costs of goods sold within the Consolidated Statements of Comprehensive Income. As of December 31, 2016 and 2015, the Company has recorded reserves for environmental matters of \$30.6 million and \$15.2 million. The total reserve at December 31, 2016 and 2015 included \$9.6 million and \$2.8 million related to remediation of sites previously disposed by the Company. Environmental reserves are classified as Accrued expenses and other current liabilities or Other noncurrent liabilities based on their expected term. The Company's total current environmental reserve at December 31, 2016 and 2015 was \$6.1 million and \$3.7 million and the remainder is classified as noncurrent. Given the evolving nature of environmental laws, regulations

and technology, the ultimate cost of future compliance is uncertain.

**Warranty Liability**

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.

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The changes in the standard product warranty liability for the year ended December 31, were as follows:

In millions	2016	2015	2014
Balance at beginning of period	\$11.7	\$9.8	\$9.4
Reductions for payments	(6.5 )	(5.4 )	(4.9 )
Accruals for warranties issued during the current period	8.1	7.1	6.1
Changes to accruals related to preexisting warranties	0.2	0.5	(0.6 )
Translation	(0.2 )	(0.3 )	(0.2 )
Balance at end of period	\$13.3	\$11.7	\$9.8

Standard product warranty liabilities are classified as Accrued expenses and other current liabilities.

Other Commitments and Contingencies

Certain office and warehouse facilities, transportation vehicles and data processing equipment are leased by the Company. Total rental expense was \$32.5 million in 2016, \$30.3 million in 2015 and \$32.5 million in 2014. Minimum lease payments required under non-cancellable operating leases with terms in excess of one year for the next five years are as follows: \$19.8 million in 2017, \$13.1 million in 2018, \$9.0 million in 2019, \$5.8 million in 2020, and \$2.9 million in 2021.

## NOTE 22 – BUSINESS SEGMENT INFORMATION

The accounting policies of the operating segments are the same as those described in the summary of significant accounting policies except that the operating segments' results are prepared on a management basis that is consistent with the manner in which the Company disaggregates financial information for internal review and decision making. The Company largely evaluates performance based on Segment operating income and Segment operating margins.

Segment operating income is the measure of profit and loss that the Company's 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, the Company believes that Segment operating income represents the most relevant measure of segment profit and loss. The Company's 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 its operating decisions. The Company defines Segment operating margin as Segment operating income as a percentage of Net revenues.

Each reportable segment is based primarily on the geography in which it operates. A description of the Company's reportable segments is as follows:

The Americas segment provides 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 frames, 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.

The EMEIA segment provides security products and solutions throughout Europe, the Middle East, India and Africa in approximately 85 countries. The segment offers customers the same portfolio of products as the Americas segment, as well as time and attendance and workforce productivity solutions. This segment's primary brands are Bricard, CISA, Interflex and SimonsVoss. This segment also resells Schlage, Von Duprin and LCN products, primarily in the Middle East.

The Asia Pacific segment provides security products and solutions throughout Asia Pacific in approximately 14 countries. The segment offers customers the same portfolio of products as the Americas segment. This segment's primary brands are Milre, Schlage, CISA, Von Duprin and LCN.

Effective September 1, 2014 the Company completed the sale of its United Kingdom (UK) Door businesses to an unrelated third party. The businesses sold included the Dor-o-Matic™ branded automatic door business, the Martin Roberts™ branded performance

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steel doorset business and the UK service organization. Historical results of the component have been reclassified to discontinued operations for all periods presented. See Note 19 - Discontinued Operations for more information.

A summary of operations and balance sheet information by reportable segments as of and for the years ended December 31 were as follows:

Dollar amounts in millions	2016	2015	2014
<b>Americas</b>			
Net revenues	\$1,645.7	\$1,558.4	\$1,560.0
Segment operating income	448.1	418.0	387.3
Segment operating margin	27.2	% 26.8	% 24.8
Depreciation and amortization	26.4	26.4	24.8
Capital expenditures	21.5	18.9	23.6
Total segment assets	852.7	806.1	990.7
<b>EMEIA</b>			
Net revenues	485.9	386.3	393.4
Segment operating income	35.9	8.6	4.9
Segment operating margin	7.4	% 2.2	% 1.2
Depreciation and amortization	27.6	17.2	16.4
Capital expenditures	13.6	5.6	4.9
Total segment assets	886.2	899.4	457.7
<b>Asia Pacific</b>			
Net revenues	106.4	123.4	164.9
Segment operating income (loss)	6.1	(3.4)	2.3
Segment operating margin	5.7	% (2.8)	% 1.4
Depreciation and amortization	2.4	2.1	1.1
Capital expenditures	1.1	2.0	1.5
Total segment assets	177.4	237.1	442.2
<b>Total net revenues</b>	<b>\$2,238.0</b>	<b>\$2,068.1</b>	<b>\$2,118.3</b>
<b>Reconciliation to earnings before income taxes</b>			
Segment operating income from reportable segments	\$490.1	\$423.2	\$394.5
Unallocated corporate expense	64.6	64.6	68.2
Interest expense	64.3	52.9	53.8
Loss on divestitures	84.4	104.2	—
Other expense (income), net	(18.2)	(7.8)	4.6
<b>Total earnings before income taxes</b>	<b>\$295.0</b>	<b>\$209.3</b>	<b>\$267.9</b>
Depreciation and amortization from reportable segments	\$56.4	\$45.7	\$42.3
Unallocated depreciation and amortization	5.0	3.1	1.9
<b>Total depreciation and amortization</b>	<b>\$61.4</b>	<b>\$48.8</b>	<b>\$44.2</b>
Capital expenditures from reportable segments	\$36.2	\$26.5	\$30.0
Corporate capital expenditures	6.3	8.7	21.5
<b>Total capital expenditures</b>	<b>\$42.5</b>	<b>\$35.2</b>	<b>\$51.5</b>
Assets from reportable segments	\$1,916.3	\$1,942.6	\$1,890.6
Unallocated assets (a)	331.1	320.4	125.3
<b>Total assets</b>	<b>\$2,247.4</b>	<b>\$2,263.0</b>	<b>\$2,015.9</b>

(a) Unallocated assets consists of debt issuance costs, deferred income tax balances and cash.

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Revenues by destination and product as well as long-lived assets by geographic area for the years ended December 31 were as follows:

In millions	2016	2015	2014
Revenues			
United States	\$1,531.2	\$1,425.1	\$1,332.0
Non-U.S.	706.8	643.0	786.3
Total	\$2,238.0	\$2,068.1	\$2,118.3

In millions	2016	2015	2014
Revenues			
Mechanical products	\$1,793.1	\$1,661.4	\$1,685.0
All other	444.9	406.7	433.3
Total	\$2,238.0	\$2,068.1	\$2,118.3

Less than 10% of the Company's net revenues come from the sale of services.

In millions	2016	2015
Long-lived assets		
United States	\$117.1	\$134.9
Non-U.S.	402.3	400.2
Total	\$519.4	\$535.1

## NOTE 23 – SUBSEQUENT EVENTS

On January 3, 2017, the Company acquired Republic Doors & Frames, Inc. through one of its subsidiaries.

On February 2, 2017, the Company's Board of Directors declared a quarterly dividend of \$0.16 cents per ordinary share. The dividend is payable March 31, 2017 to shareholders of record on March 15, 2017.

Also 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 replaces the authorization established in 2014.

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## NOTE 24 – GUARANTOR FINANCIAL INFORMATION

Allegion US Holding Company, Inc. ("Allegion US Holding") is the issuer of the 2021 Senior Notes and a guarantor of the 2023 Senior Notes. Allegion plc is the issuer of the 2023 Senior Notes and a guarantor of the 2023 Senior Notes. Schlage Lock Company LLC and Von Duprin LLC (together, the "Other Subsidiary Guarantors") are guarantors of the 2021 Senior Notes and the 2023 Senior Notes. The following condensed and consolidated financial information of Allegion plc, Allegion US Holding, the Subsidiary Guarantors and the other Allegion subsidiaries that are not guarantors (the "Other Subsidiaries") on a combined basis as of December 31, 2016 and for the years ended December 31, 2016, 2015 and 2014, is being presented in order to meet the reporting requirements under the Senior Notes indenture and Rule 3-10 of Regulation S-X. In accordance with Rule 3-10(d) of Regulation S-X, separate financial statements for the Issuer, the Parent and the Subsidiary Guarantors are not required to be filed with the SEC as the subsidiary debt issuer and the guarantors are directly or indirectly 100% owned by the Parent and the guarantees are full and unconditional and joint and several.

Condensed and Consolidated Statement of Comprehensive Income  
For the year ended December 31, 2016

In millions	Allegion plc	Allegion US Holding	Other Subsidiary Guarantors	Other Subsidiaries	Consolidating Adjustments	Total
Net revenues	\$—	\$—	\$ 1,589.3	\$ 1,081.4	\$ (432.7 )	\$ 2,238.0
Cost of goods sold	—	—	918.7	766.7	(432.7 )	1,252.7
Selling and administrative expenses	4.7	—	331.3	223.8	—	559.8
Operating income (loss)	(4.7 )	—	339.3	90.9	—	425.5
Equity earnings (loss) in affiliates, net of tax	277.4	148.3	0.3	306.6	(732.6 )	—
Interest expense	43.5	20.2	—	0.6	—	64.3
Intercompany interest and fees	(0.4 )	97.9	(147.2 )	49.7	—	—
Loss on divestitures	—	—	—	84.4	—	84.4
Other (income) expense, net	—	—	(19.4 )	1.2	—	(18.2 )
Earnings (loss) before income taxes	229.6	30.2	506.2	261.6	(732.6 )	295.0
Provision (benefit) for income taxes	0.5	(45.5 )	199.4	(90.6 )	—	63.8
Net earnings (loss)	229.1	75.7	306.8	352.2	(732.6 )	231.2
Less: Net earnings attributable to noncontrolling interests	—	—	—	2.1	—	2.1
Net earnings (loss) attributable to Allegion plc	\$ 229.1	\$ 75.7	\$ 306.8	\$ 350.1	\$ (732.6 )	\$ 229.1
Total comprehensive income (loss)	\$ 197.0	\$ 79.4	\$ 313.8	\$ 306.9	\$ (698.4 )	\$ 198.7
Less: Total comprehensive income attributable to noncontrolling interests	—	—	—	1.7	—	1.7
Total comprehensive income (loss) attributable to Allegion plc	\$ 197.0	\$ 79.4	\$ 313.8	\$ 305.2	\$ (698.4 )	\$ 197.0

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For the year ended December 31, 2015

In millions	Allegion plc	Allegion US Holding	Other Subsidiary Guarantors	Other Subsidiaries	Consolidating Adjustments	Total
Net revenues	\$—	\$—	\$ 1,506.0	\$ 761.6	\$ (199.5 )	\$ 2,068.1
Cost of goods sold	—	—	859.2	539.3	(199.5 )	1,199.0
Selling and administrative expenses	4.7	(0.1 )	307.1	198.8	—	510.5
Operating income (loss)	(4.7 )	0.1	339.7	23.5	—	358.6
Equity earnings (loss) in affiliates, net of tax	190.6	167.2	3.8	291.6	(653.2 )	—
Interest expense	31.2	21.1	—	0.6	—	52.9
Intercompany interest and fees	(0.4 )	95.0	(140.0 )	45.4	—	—
Loss on divestitures	—	—	—	104.2	—	104.2
Other (income) expense, net	(0.2 )	—	0.9	(8.5 )	—	(7.8 )
Earnings (loss) before income taxes	155.3	51.2	482.6	173.4	(653.2 )	209.3
Provision (benefit) for income taxes	1.2	(44.7 )	187.1	(89.0 )	—	54.6
Earnings (loss) from continuing operations	154.1	95.9	295.5	262.4	(653.2 )	154.7
Discontinued operations, net of tax	—	—	(0.1 )	(0.3 )	—	(0.4 )
Net earnings (loss)	154.1	95.9	295.4	262.1	(653.2 )	154.3
Less: Net earnings attributable to noncontrolling interests	—	—	—	0.4	—	0.4
Net earnings (loss) attributable to Allegion plc	\$ 154.1	\$ 95.9	\$ 295.4	\$ 261.7	\$ (653.2 )	\$ 153.9
Total comprehensive income (loss)	\$ 69.8	\$ 95.6	\$ 290.2	\$ 183.7	\$ (570.4 )	\$ 68.9
Less: Total comprehensive income attributable to noncontrolling interests	—	—	—	(0.9 )	—	(0.9 )
Total comprehensive income (loss) attributable to Allegion plc	\$ 69.8	\$ 95.6	\$ 290.2	\$ 184.6	\$ (570.4 )	\$ 69.8

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For the year ended December 31, 2014

In millions	Allegion plc	Allegion US Holding	Other Subsidiary Guarantors	Other Subsidiaries	Consolidating Adjustments	Total
Net revenues	\$—	\$—	\$ 1,399.9	\$ 916.4	\$ (198.0 )	\$ 2,118.3
Cost of goods sold	—	—	803.1	659.5	(198.0 )	1,264.6
Selling and administrative expenses	4.5	0.2	304.4	218.3	—	527.4
Operating income (loss)	(4.5 )	(0.2 )	292.4	38.6	—	326.3
Equity earnings (loss) in affiliates, net of tax	182.0	170.8	6.9	351.5	(711.2 )	—
Interest expense	5.6	58.0	—	1.0	(10.8 )	53.8
Intercompany interest and fees	(3.2 )	63.0	(285.5 )	225.7	—	—
Other (income) expense, net	(0.1 )	—	(0.2 )	4.9	—	4.6
Earnings (loss) before income taxes	175.2	49.6	585.0	158.5	(700.4 )	267.9
Provision (benefit) for income taxes	—	(46.7 )	222.6	(95.7 )	4.0	84.2
Earnings (loss) from continuing operations	175.2	96.3	362.4	254.2	(704.4 )	183.7
Discontinued operations, net of tax	—	—	—	(11.1 )	—	(11.1 )
Net earnings (loss)	175.2	96.3	362.4	243.1	(704.4 )	172.6
Less: Net earnings attributable to noncontrolling interests	—	—	—	(2.6 )	—	(2.6 )
Net earnings (loss) attributable to Allegion plc	\$ 175.2	\$ 96.3	\$ 362.4	\$ 245.7	\$ (704.4 )	\$ 175.2
Total comprehensive income (loss)	\$ 123.7	\$ 96.3	\$ 362.4	\$ 242.4	\$ (704.4 )	\$ 120.4
Less: Total comprehensive income attributable to noncontrolling interests	—	—	—	(3.3 )	—	(3.3 )
Total comprehensive income (loss) attributable to Allegion plc	\$ 123.7	\$ 96.3	\$ 362.4	\$ 245.7	\$ (704.4 )	\$ 123.7



Table of ContentsCondensed and Consolidated Balance Sheet  
December 31, 2016

In millions	Allegion plc	Allegion US Holding	Other Subsidiary Guarantors	Other Subsidiaries	Consolidating Adjustments	Total
Current assets:						
Cash and cash equivalents	\$0.5	\$0.1	\$ 166.0	\$ 145.8	\$—	\$312.4
Accounts and notes receivable, net	—	—	140.0	120.0	—	260.0
Inventories	—	—	77.6	143.0	—	220.6
Other current assets	0.4	49.7	9.4	142.9	(168.3)	34.1
Assets held for sale	—	—	—	2.2	—	2.2
Accounts and notes receivable affiliates	—	331.6	395.0	320.6	(1,047.2)	—
Total current assets	0.9	381.4	788.0	874.5	(1,215.5)	829.3
Investment in affiliates	1,229.4	2,814.1	193.4	3,422.6	(7,659.5)	—
Property, plant and equipment, net	—	—	122.0	104.6	—	226.6
Intangible assets, net	—	—	180.8	893.4	—	1,074.2
Notes receivable affiliates	53.2	1,149.8	3,444.7	1,679.8	(6,327.5)	—
Other noncurrent assets	5.4	14.8	61.9	35.2	—	117.3
Total assets	\$1,288.9	\$4,360.1	\$ 4,790.8	\$ 7,010.1	\$(15,202.5)	\$2,247.4
Current liabilities:						
Accounts payable and accruals	\$7.0	\$4.7	\$ 353.2	\$ 184.8	\$(168.3)	\$381.4
Short-term borrowings and current maturities of long-term debt	46.9	—	—	1.3	—	48.2
Accounts and note payable affiliates	0.4	36.4	629.6	380.8	(1,047.2)	—
Total current liabilities	54.3	41.1	982.8	566.9	(1,215.5)	429.6
Long-term debt	1,120.2	294.4	—	1.0	—	1,415.6
Note payable affiliate	—	2,690.7	53.3	3,583.5	(6,327.5)	—
Other noncurrent liabilities	1.1	—	138.7	146.0	—	285.8
Total liabilities	1,175.6	3,026.2	1,174.8	4,297.4	(7,543.0)	2,131.0
Equity:						
Total shareholders equity (deficit)	113.3	1,333.9	3,616.0	2,709.6	(7,659.5)	113.3
Noncontrolling interests	—	—	—	3.1	—	3.1
Total equity (deficit)	113.3	1,333.9	3,616.0	2,712.7	(7,659.5)	116.4
Total liabilities and equity	\$1,288.9	\$4,360.1	\$ 4,790.8	\$ 7,010.1	\$(15,202.5)	\$2,247.4

Table of ContentsCondensed and Consolidated Balance Sheet  
December 31, 2015

In millions	Allegion plc	Allegion US Holding	Other Subsidiary Guarantors	Other Subsidiaries	Consolidating Adjustments	Total
Current assets:						
Cash and cash equivalents	\$3.3	\$0.3	\$ 73.8	\$ 122.3	\$—	\$ 199.7
Accounts and notes receivable, net	—	—	121.6	181.8	—	303.4
Inventories	—	—	106.7	97.4	—	204.1
Other current assets	0.5	44.7	9.9	(27.2 )	—	27.9
Accounts and notes receivable affiliates	248.6	356.4	375.9	324.5	(1,305.4 )	—
Total current assets	252.4	401.4	687.9	698.8	(1,305.4 )	735.1
Investment in affiliates	986.2	3,001.4	192.9	4,660.2	(8,840.7 )	—
Property, plant and equipment, net	—	—	147.6	77.2	—	224.8
Intangible assets, net	—	—	181.4	905.1	—	1,086.5
Notes receivable affiliates	—	1,144.2	3,549.9	1,726.3	(6,420.4 )	—
Other noncurrent assets	10.8	1.5	82.1	122.2	—	216.6
Total assets	\$ 1,249.4	\$ 4,548.5	\$ 4,841.8	\$ 8,189.8	\$ (16,566.5 )	\$ 2,263.0
Current liabilities:						
Accounts payable and accruals	\$8.2	\$4.3	\$ 356.7	\$ 12.3	\$—	\$ 381.5
Short-term borrowings and current maturities of long-term debt	46.9	—	0.1	18.6	—	65.6
Accounts and note payable affiliates	0.3	57.5	636.4	611.2	(1,305.4 )	—
Total current liabilities	55.4	61.8	993.2	642.1	(1,305.4 )	447.1
Long-term debt	1,168.4	289.1	—	—	—	1,457.5
Note payable affiliate	—	2,750.8	—	3,669.6	(6,420.4 )	—
Other noncurrent liabilities	—	1.2	124.7	202.8	—	328.7
Total liabilities	1,223.8	3,102.9	1,117.9	4,514.5	(7,725.8 )	2,233.3
Equity:						
Total shareholders equity (deficit)	25.6	1,445.6	3,723.9	3,671.2	(8,840.7 )	25.6
Noncontrolling interests	—	—	—	4.1	—	4.1
Total equity (deficit)	25.6	1,445.6	3,723.9	3,675.3	(8,840.7 )	29.7
Total liabilities and equity	\$ 1,249.4	\$ 4,548.5	\$ 4,841.8	\$ 8,189.8	\$ (16,566.5 )	\$ 2,263.0

Table of ContentsCondensed and Consolidated Statement of Cash Flows  
For the year ended December 31, 2016

In millions	Allegion plc	Allegion US Holding	Other Subsidiary Guarantors	Other Subsidiaries	Consolidating Adjustments	Total
Net cash provided by (used in) operating activities	\$ (25.6 )	\$ 34.1	\$ 584.7	\$ 631.5	\$ (847.2 )	\$ 377.5
Cash flows from investing activities:						
Capital expenditures	—	—	(19.4 )	(23.1 )	—	(42.5 )
Acquisition of businesses, net of cash acquired	—	—	—	(31.4 )	—	(31.4 )
Proceeds from sales and maturities of marketable securities	—	—	—	14.1	—	14.1
Proceeds (payments) related to business dispositions	—	—	—	(4.3 )	—	(4.3 )
Other investing activities, net	—	—	—	0.1	—	0.1
Net cash used in investing activities	—	—	(19.4 )	(44.6 )	—	(64.0 )
Cash flows from financing activities:						
Net debt repayments	(47.0 )	—	—	(17.4 )	—	(64.4 )
Debt issuance costs	(0.3 )	—	—	—	—	(0.3 )
Net inter-company proceeds (payments)	195.4	(34.3 )	214.9	(376.0 )	—	—
Dividends paid to shareholders	(46.0 )	—	—	—	—	(46.0 )
Dividends paid to noncontrolling interests	—	—	—	(2.7 )	—	(2.7 )
Dividends paid	—	—	(688.0 )	(159.2 )	847.2	—
Repurchase of ordinary shares	(85.1 )	—	—	—	—	(85.1 )
Other financing activities, net	5.8	—	—	(3.3 )	—	2.5
Net cash provided by (used in) financing activities	22.8	(34.3 )	(473.1 )	(558.6 )	847.2	(196.0 )
Effect of exchange rate changes on cash and cash equivalents	—	—	—	(4.8 )	—	(4.8 )
Net increase (decrease) in cash and cash equivalents	(2.8 )	(0.2 )	92.2	23.5	—	112.7
Cash and cash equivalents - beginning of period	3.3	0.3	73.8	122.3	—	199.7
Cash and cash equivalents - end of period	\$ 0.5	\$ 0.1	\$ 166.0	\$ 145.8	\$ —	\$ 312.4

Table of ContentsCondensed and Consolidated Statement of Cash Flows  
For the year ended December 31, 2015

In millions	Allegion plc	Allegion US Holding	Other Subsidiary Guarantors	Other Subsidiaries	Consolidating Adjustments	Total
Net cash provided by (used in) continuing operating activities	\$(23.4 )	\$ 125.8	\$ 484.7	\$ 682.1	\$ (1,011.8 )	\$ 257.4
Net cash used in discontinued operating activities	—	—	(0.1 )	(0.3 )	—	(0.4 )
Net cash provided by (used in) operating activities	\$(23.4 )	\$ 125.8	\$ 484.6	\$ 681.8	\$ (1,011.8 )	\$ 257.0
Cash flows from investing activities:						
Capital expenditures	—	—	(27.2 )	(8.0 )	—	(35.2 )
Acquisition of businesses, net of cash acquired	—	—	(31.3 )	(480.0 )	—	(511.3 )
Proceeds from sales and maturities of marketable securities	—	—	—	12.3	—	12.3
Proceeds from business disposition, net of cash sold	—	—	4.4	(4.3 )	—	0.1
Other investing activities, net	—	—	0.1	0.2	—	0.3
Net cash used in investing activities	—	—	(54.0 )	(479.8 )	—	(533.8 )
Cash flows from financing activities:						
Net debt proceeds	263.8	—	—	14.5	—	278.3
Debt issuance costs	(9.0 )	—	—	—	—	(9.0 )
Net inter-company proceeds (payments)	(200.9 )	(126.0 )	230.6	96.3	—	—
Dividends paid to shareholders	(38.3 )	—	—	—	—	(38.3 )
Dividends paid to noncontrolling interests	—	—	—	(20.0 )	—	(20.0 )
Dividends paid	—	—	(713.7 )	(298.1 )	1,011.8	—
Repurchase of ordinary shares	(30.0 )	—	—	—	—	(30.0 )
Other financing activities, net	14.0	—	—	—	—	14.0
Net cash provided by (used in) financing activities	(0.4 )	(126.0 )	(483.1 )	(207.3 )	1,011.8	195.0
Effect of exchange rate changes on cash and cash equivalents	—	—	—	(9.0 )	—	(9.0 )
Net decrease in cash and cash equivalents	(23.8 )	(0.2 )	(52.5 )	(14.3 )	—	(90.8 )
Cash and cash equivalents - beginning of period	27.1	0.5	126.3	136.6	—	290.5
Cash and cash equivalents - end of period	\$ 3.3	\$ 0.3	\$ 73.8	\$ 122.3	\$ —	\$ 199.7

Table of ContentsCondensed and Consolidated Statement of Cash Flows  
For the year ended December 31, 2014

In millions	Allegion plc	Allegion US Holding	Other Subsidiary Guarantors	Other Subsidiaries	Consolidating Adjustments	Total
Net cash provided by (used in) continuing operating activities	\$ 105.4	\$(847.5)	\$ 567.2	\$ 1,172.4	\$ (738.5 )	\$ 259.0
Net cash used in discontinued operating activities	—	—	—	(3.1 )	—	(3.1 )
Net cash provided by (used in) operating activities	105.4	(847.5 )	567.2	1,169.3	(738.5 )	255.9
Cash flows from investing activities:						
Capital expenditures	—	—	(41.6 )	(9.9 )	—	(51.5 )
Acquisition of businesses, net of cash acquired	—	—	—	(25.2 )	—	(25.2 )
Capital contributions to subsidiaries	(975.0 )	(135.0 )	—	(160.7 )	1,270.7	—
Proceeds from business disposition, net of cash sold	—	—	—	1.2	—	1.2
Other investing activities, net	—	—	0.5	40.2	—	40.7
Net cash provided by (used in) investing activities	(975.0 )	(135.0 )	(41.1 )	(154.4 )	1,270.7	(34.8 )
Cash flows from financing activities:						
Net debt (repayments) proceeds	962.8	(1,000.0)	—	(40.8 )	—	(78.0 )
Debt issuance costs	(5.8 )	—	—	—	—	(5.8 )
Net inter-company proceeds (payments)	—	1,822.3	(44.1 )	(1,778.2 )	—	—
Capital contributions received	—	160.7	7.0	1,103.0	(1,270.7 )	—
Dividends paid to shareholders	(30.0 )	—	—	—	—	(30.0 )
Dividends paid to noncontrolling interests	—	—	—	(4.5 )	—	(4.5 )
Dividends paid	—	—	(441.5 )	(297.0 )	738.5	—
Repurchase of ordinary shares	(50.3 )	—	—	—	—	(50.3 )
Other financing activities, net	18.6	—	—	—	—	18.6
Net cash provided by (used in) financing activities	895.3	983.0	(478.6 )	(1,017.5 )	(532.2 )	(150.0 )
Effect of exchange rate changes on cash and cash equivalents	—	—	—	(8.0 )	—	(8.0 )
Net increase (decrease) in cash and cash equivalents	25.7	0.5	47.5	(10.6 )	—	63.1
Cash and cash equivalents - beginning of period	1.4	—	78.8	147.2	—	227.4
Cash and cash equivalents - end of period	\$ 27.1	\$ 0.5	\$ 126.3	\$ 136.6	\$ —	\$ 290.5

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SCHEDULE II  
 ALLEGION PLC  
 VALUATION AND QUALIFYING ACCOUNTS  
 FOR THE YEARS ENDED December 31, 2016, 2015 AND 2014  
 (Amounts in millions)

## Allowances for Doubtful Accounts:

Balance December 31, 2013	\$2.4
Additions charged to costs and expenses	2.1
Deductions*	(1.1 )
Currency translation	(0.2 )
Balance December 31, 2014	3.2
Additions charged to costs and expenses	1.6
Deductions*	(1.5 )
Business acquisitions and divestitures, net	0.9
Currency translation	(0.4 )
Balance December 31, 2015	3.8
Additions charged to costs and expenses	0.1
Deductions*	(1.1 )
Business acquisitions and divestitures, net	—
Currency translation	(0.1 )
Balance December 31, 2016	\$2.7

(\*)"Deductions" include accounts and advances written off, less recoveries.