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

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**FORM 10-K**

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

For the fiscal year ended December 31, 2017

OR

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

For the transition period from \_\_\_\_\_ to \_\_\_\_\_

Commission File Number 1-475

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**A. O. Smith Corporation**

(Exact name of registrant as specified in its charter)

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Delaware  
(State of  
Incorporation)

11270 West Park Place, Milwaukee, Wisconsin  
(Address of Principal Executive Office)

39-0619790  
(I.R.S. Employer  
Identification No.)

53224-9508  
(Zip Code)

(414) 359-4000

Registrant's telephone number, including area code

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

<u>Title of Each Class</u>	<u>Shares of Stock Outstanding</u> <u>February 12, 2018</u>	<u>Name of Each Exchange on</u> <u>Which Registered</u>
Class A Common Stock (par value \$5.00 per share)	26,065,195	Not listed
Common Stock (par value \$1.00 per share)	145,446,771	New York Stock Exchange

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

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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.

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

in Rule 12b-2 of the Exchange Act.

Large accelerated filer

Accelerated filer

Non-accelerated filer  (Do not check if a smaller reporting company)

Smaller reporting company

Emerging growth company

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

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

The aggregate market value of voting stock held by non-affiliates of the registrant was \$54,942,874 for Class A Common Stock and \$8,057,328,456 for Common Stock as of June 30, 2017.

#### **DOCUMENTS INCORPORATED BY REFERENCE**

1. Portions of the company's definitive Proxy Statement for the 2018 Annual Meeting of Stockholders (to be filed with the Securities and Exchange Commission under Regulation 14A within 120 days after the end of the registrant's fiscal year and, upon such filing, to be incorporated by reference in Part III).
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**PART 1****ITEM 1- BUSINESS**

Our company is comprised of two reporting segments: North America and Rest of World. Our Rest of World segment is primarily comprised of China, Europe and India. Both segments manufacture and market comprehensive lines of residential and commercial gas and electric water heaters, boilers and water treatment products. Both segments primarily manufacture and market in their respective regions of the world. Our North America segment also manufactures and markets water system tanks. Our Rest of World segment also manufactures and markets in-home air purification products in China.

With the acquisition of Aquasana, Inc. (Aquasana) in 2016 and Hague Quality Water International (Hague) in 2017, we entered the North American water treatment market. Sales of water treatment products in North America totaled \$57 million in 2017 and \$18 million in 2016.

The following table summarizes our sales. This summary and all other information presented in this section should be read in conjunction with the Consolidated Financial Statements and Notes to Consolidated Financial Statements, which appear in Item 8 in this document.

	Years Ended December 31 (dollars in millions)				
	2017	2016	2015	2014	2013
<b>North America</b>	\$1,904.8	\$1,743.2	\$1,703.0	\$1,621.7	\$1,520.0
<b>Rest of World</b>	1,116.3	965.6	866.1	768.3	668.0
<b>Inter-segment</b>	(24.4)	(22.9)	(32.6)	(34.0)	(34.2)
<b>Total Sales</b>	<u>\$2,996.7</u>	<u>\$2,685.9</u>	<u>\$2,536.5</u>	<u>\$2,356.0</u>	<u>\$2,153.8</u>

**NORTH AMERICA**

Sales in our North America segment increased 9.3 percent, or \$161.6 million, in 2017 compared with the prior year. The sales increase in 2017 was the result of higher volumes of water heaters and boilers, and price increases in the U.S. for residential and commercial water heaters related to steel cost increases. North America water treatment sales in 2017, comprised of recently acquired Hague as well as a full year of Aquasana, incrementally added approximately \$40 million of sales compared with 2016.

We serve residential and commercial end markets in North America with a broad range of products including:

*Water heaters.* Our residential and commercial water heaters come in sizes ranging from 2.5 gallon (point-of-use) models to 12,000 gallon products with varying efficiency ranges. We offer electric, natural gas and liquid propane tank-type models as well as tankless (gas and electric), heat pump and solar tank units. Typical applications for our water heaters include residences, restaurants, hotels and motels, office buildings, laundries, car washes and small businesses.

*Boilers.* Our residential and commercial boilers range in size from 40,000 British Thermal Units (BTUs) to 6.0 million BTUs. Our commercial boilers are primarily used in space heating applications for hospitals, schools, hotels and other large commercial buildings.

*Water treatment products.* Our water treatment products range from on-the-go filtration bottles and point-of-use carbon and reverse osmosis products to point-of-entry water softeners and whole-home water filtrations products. We also offer a complete line of food and beverage filtration products. Typical applications for our water treatment products include residences, restaurants, hotels and offices. A large portion of our sales of water treatment products is comprised of replacement filters.

*Other.* In our North America segment, we also manufacture expansion tanks, commercial solar water heating systems, swimming pool and spa heaters, related products and parts.

A significant portion of our North America sales is derived from the replacement of existing products.

We are the largest manufacturer and marketer of water heaters in North America with a leading share in both the residential and commercial markets. In the commercial markets for both water heating and space heating, we believe our comprehensive product lines and our high-efficiency products give us a competitive advantage in these portions of the markets. Our wholesale

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distribution channel, where we sell our products primarily under the A. O. Smith and State brands, includes more than 1,300 independent wholesale plumbing distributors serving residential and commercial end markets. We also sell our residential water heaters through the retail and maintenance, repair and operations (MRO) channels. In the retail channel, our customers include four of the six largest national hardware and home center chains, including a long-standing exclusive relationship with Lowe's where we sell A. O. Smith branded products.

Our Lochinvar brand is one of the leading residential and commercial boiler brands in the U.S. Approximately 40 percent of Lochinvar-branded sales consist of residential and commercial water heaters while the remaining 60 percent of Lochinvar-branded sales consist primarily of boilers and related parts. Our commercial boiler distribution channel is primarily comprised of manufacturer representative firms.

We sell our Aquasana branded products primarily directly to consumers through e-commerce as well as on-line retailers including Amazon and through other retail chains. Our Hague branded products, primarily water softeners, are sold through Hague water quality dealers and home center retail chains.

Our energy efficient product offerings continue to be a sales driver for our business. Our Cyclone product family and our condensing boilers continue to be an option for commercial customers looking for high efficiency water and space heating with a short payback period through energy savings. We offer residential heat pump, condensing tank-type and tankless water heaters in North America, as well as other higher efficiency water heating solutions to round out our energy efficient product offerings.

We sell our water heating products in highly competitive markets. We compete in each of our targeted market segments based on product design, reliability, quality of products and services, advanced technologies, energy efficiency, maintenance costs and price. Our principal water heating and boiler competitors in North America include Rheem, Bradford White, Rinnai, Aereco and Navien. Numerous other manufacturing companies also compete. Our principal water treatment competitors in the U.S. are Brita, Culligan, Kinetico and Ecowater as well as numerous independent water quality dealers.

### **REST OF WORLD**

Sales in our Rest of World segment increased 15.6 percent, or \$150.7 million, in 2017 compared with the prior year. A 15.9 percent increase in sales in China to over \$1 billion was the primary source of the increase. Excluding the appreciation of the U.S. dollar, sales in China increased 17.9 percent in 2017.

We have operated in China for more than 20 years. In that time, we have been aggressively expanding our presence while building A. O. Smith brand recognition in the residential and commercial markets. The Chinese water heater market is predominantly comprised of electric wall-hung, gas tankless, combi-boiler and solar water heaters. We believe we are one of the leading suppliers of water heaters to the residential market in China in dollar terms, with a broad product offering including electric, gas tankless, heat pump and combi boilers as well as solar units. We also manufacture and market water treatment products and air purification products, primarily in China.

We sell water heaters in more than 8,000 retail outlets in China, of which over 2,900 exclusively sell our products. Our water treatment products and air purification products are sold in over 7,400 and 3,500 retail outlets in China, respectively. Our e-commerce sales continued to grow in China, to approximately \$250 million in 2017.

In 2008, we established a sales office in India and began importing products specifically designed for India. We began manufacturing water heaters in India in 2010 and water treatment products in 2015. Our total sales in India were \$26.2 million in 2017 compared with \$18.2 million in 2016.

Our primary competitors in China in the electric water heater market segment are Haier and Midea, Chinese companies. We compete with Rinnai and Noritz in the gas tankless water heater market segment. Our principal competitors in the water treatment market are Qinyuan, Angel and Midea. We also compete with numerous other Chinese private and state-owned water heater and water treatment companies in China. Our principal competitors in the China air purification market are Phillips, Panasonic and Sharp. In India, we compete with Bajaj and MTS-Racold in the water heater market and Eureka Forbes, Kent and Hindustan Unilever in the water treatment market.

In addition, we sell water heaters in the European and Middle Eastern markets and water treatment products in Hong Kong, Turkey and Vietnam, all of which combined comprised less than six percent of total Rest of World sales in 2017.

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### **RAW MATERIALS**

Raw materials for our manufacturing operations, primarily consisting of steel, are generally available in adequate quantities. A portion of our customers are contractually obligated to accept price changes based on fluctuations in steel prices. There has been volatility in steel costs over the last several years.

### **RESEARCH AND DEVELOPMENT**

To improve our competitiveness by generating new products and processes, we conduct research and development at our Corporate Technology Center in Milwaukee, Wisconsin, at our Global Engineering Center in Nanjing, China, and at our operating locations. Our total expenditures for research and development in 2017, 2016 and 2015 were \$86.4 million, \$80.1 million and \$73.7 million, respectively.

### **PATENTS AND TRADEMARKS**

We own and use in our businesses various trademarks, trade names, patents, trade secrets and licenses. We do not believe that our business as a whole is materially dependent upon any such trademark, trade name, patent, trade secret or license. However, our trade name is important with respect to our products, particularly in China, India and the U.S.

### **EMPLOYEES**

We employed approximately 16,100 employees as of December 31, 2017, primarily non-union.

### **BACKLOG**

Due to the short-cycle nature of our businesses, none of our operations sustain significant backlogs.

### **ENVIRONMENTAL LAWS**

Our operations are governed by a variety of federal, foreign, state and local laws intended to protect the environment. Compliance with environmental laws has not had and is not expected to have a material effect upon the capital expenditures, earnings, or competitive position of our company. See Item 3.

### **AVAILABLE INFORMATION**

We maintain a website with the address [www.aosmith.com](http://www.aosmith.com). The information contained on our website is not included as a part of, or incorporated by reference into, this Annual Report on Form 10-K. Other than an investor's own internet access charges, we make available free of charge through our website our Annual Report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and amendments to these reports as soon as reasonably practical after we have electronically filed such material with, or furnished such material to, the Securities and Exchange Commission (SEC).

We are committed to sound corporate governance and have documented our corporate governance practices by adopting the A. O. Smith Corporate Governance Guidelines. The Corporate Governance Guidelines, Criteria for Selection of Directors, Financial Code of Ethics, the A. O. Smith Guiding Principles, as well as the charters for the Audit, Personnel and Compensation, Nominating and Governance and the Investment Policy Committees of the Board of Directors and other corporate governance materials, may be viewed on the company's website. Any waiver of or amendments to the Financial Code of Conduct or the A. O. Smith Guiding Principles also would be posted on this website; to date there have been none. Copies of these documents will be sent to stockholders free of charge upon written request of the corporate secretary at the address shown on the cover page of this Annual Report on Form 10-K.

## **ITEM 1A—RISK FACTORS**

You should carefully consider the risk factors set forth below and all other information contained in this Annual Report on Form 10-K, including the documents incorporated by reference, before making an investment decision regarding our common stock. If any of the events contemplated by the following risks actually occurs, then our business, financial condition, or results of operations could be materially adversely affected. As a result, the trading price of our common stock could decline, and you may lose all or part of your investment. The risks and uncertainties below are not the only risks facing our company.

- *The effects of a global economic downturn could have a material adverse effect on our business*

Global economic growth remains uneven and could stall or reverse course. If this were to occur it could adversely affect consumer confidence and spending patterns which could result in decreased demand for the products we sell, a delay in purchases, increased price competition, or slower adoption of energy efficient water heaters and boilers, or high quality water treatment products which could negatively impact our profitability and cash flows. In addition, a deterioration in current economic conditions, including credit market conditions, could negatively impact our vendors and customers, which could result in an increase in bad debt expense, customer and vendor bankruptcies, interruption or delay in supply of materials, or increased material prices, which could negatively impact our ability to distribute, market and sell our products and our financial condition, results of operations and cash flows.

- *We increasingly sell our products and operate outside the U.S., and to a lesser extent, rely on imports and exports, which may present additional risks to our business*

Approximately 43 percent of our net sales in 2017 were attributable to products sold outside of the U.S., primarily in China and Canada, and to a lesser extent in Europe and India. We also have operations and business relationships outside the U.S. that comprise a portion of our manufacturing, supply, and distribution. Approximately 10,000 of our 16,100 employees as of December 31, 2017 were located in China. At December 31, 2017, approximately \$815 million of cash, cash equivalents and marketable securities were held by our foreign subsidiaries, \$587 million of which was located in China. International operations generally are subject to various risks, including: political, religious, and economic instability; local labor market conditions; the imposition of tariffs or other trade restrictions, or changes to trade agreements; the impact of foreign government regulations, actions or policies; the effects of income taxes; governmental expropriation; the imposition or increases in withholding and other taxes on remittances and other payments by foreign subsidiaries; labor relations problems; the imposition of environmental or employment laws, or other restrictions or actions by foreign governments; and differences in business practices. Unfavorable changes in the political, regulatory, or trade climate, diplomatic relations, or government policies, particularly in relation to countries where we have a presence, including Canada, China, India and Mexico, could have a material adverse effect on our financial condition, results of operations and cash flows or our ability to repatriate funds to the U.S.

- *A portion of our business could be affected by a slowdown in the transition of the Chinese economy to a consumer driven economy*

Our sales growth in China has averaged approximately 17.5 percent per year in local currency over the past three years, and we anticipate sales growth of approximately 13 percent in local currency in 2018. We expanded our water heater capacity substantially over the last few years and we are in the process of expanding our manufacturing capacity for water treatment and air purification products in China to meet local demand. If there is a slowdown in the transition to a more consumer driven economy or the rate of urbanization was to stall, it could adversely affect our financial condition, results of operations and cash flows.

- *A material loss, cancellation, reduction, or delay in purchases by one or more of our largest customers could harm our business*

Net sales to our five largest customers represented approximately 38 percent of our sales in 2017. We expect that our customer concentration will continue for the foreseeable future. Our concentration of sales to a relatively small number of customers makes our relationship with each of these customers important to our business. We cannot assure that we will be able to retain our largest customers. Some of our customers may shift their purchases to our competitors in the future. The loss of one or more of our largest customers, any material reduction or delay in sales to these customers, or our inability to successfully develop relationships with additional customers could have a material adverse effect on our financial position, results of operations and cash flows.

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- *Our international operations are subject to risks related to foreign currencies*

We have significant operations outside of the U.S., primarily in China and Canada and to a lesser extent Europe and India, and therefore, hold assets, including \$587 million of cash in China, incur liabilities, earn revenues and pay expenses in a variety of currencies other than the U.S. dollar. The financial statements of our foreign subsidiaries are translated into U.S. dollars in our consolidated financial statements. As a result, we are subject to risks associated with operating in foreign countries, including fluctuations in currency exchange rates and interest rates, or hyperinflation in some foreign countries. Furthermore, typically our products are priced in foreign countries in local currencies. As a result, an increase in the value of the U.S. dollar relative to the local currencies of our foreign markets has had and would continue to have a negative effect on our profitability. In addition to currency translation risks, we incur a currency transaction risk whenever one of our subsidiaries enters into either a purchase or sale transaction using a currency different from the operating subsidiaries' functional currency. The majority of our foreign currency transaction risk results from sales of our products in Canada which we manufacture in the U.S. These risks may hurt our reported sales and profits in the future or negatively impact revenues and earnings translated from foreign currencies into U.S. dollars.

- *A portion of our business could be adversely affected by a decline in North American new residential and commercial construction or a decline in replacement related volume*

Residential and commercial construction activity in North America has shown modest growth and activity could decline again in the future. We believe that the majority of the markets we serve are for replacement of existing products and replacement related volume growth was strong in 2017. Changes in replacement volume and in the construction market could negatively affect us.

- *Because we participate in markets that are highly competitive, our revenues and earnings could decline as we respond to competition*

We sell all of our products in highly competitive markets. We compete in each of our targeted markets based on product design, reliability, quality of products and services, advanced technologies, product performance, maintenance costs and price. Some of our competitors may have greater financial, marketing, manufacturing, research and development and distribution resources than we have, and some are increasingly expanding beyond their existing manufacturing or geographic footprints. Consumer purchasing behavior may shift to new distribution channels, including e-commerce, which is a rapidly developing area. Development of a successful e-commerce strategy involves significant time, investment and resources. We cannot assure that our products and services will continue to compete successfully with those of our competitors or that we will be able to retain our customer base or improve or maintain our profit margins on sales to our customers, all of which could materially and adversely affect our financial condition, results of operations and cash flows.

- *If we are unable to develop product innovations and improve our technology and expertise, we could lose customers or market share*

Our success may depend on our ability to adapt to technological changes in the water heating, boiler, water treatment and air purifier industries. If we are unable to timely develop and introduce new products, or enhance existing products, in response to changing market conditions or customer requirements or demands, our competitiveness could be materially and adversely affected. Our ability to develop and successfully market new products and to develop, acquire, and retain necessary intellectual property rights is essential to our continued success, but cannot reasonably be assured.

- *Changes in regulations or standards could adversely affect our business*

Our products are subject to a wide variety of statutory, regulatory and industry standards and requirements related to, among other items, energy efficiency, environmental emissions, labeling and safety. While we believe our products are currently efficient, safe and environment-friendly, a significant change to regulatory requirements, whether federal, foreign, state or local, or to industry standards, could substantially increase manufacturing costs, impact the size and timing of demand for our products, or put us at a competitive disadvantage, any of which could harm our business and have a material adverse effect on our financial condition, results of operations and cash flow.

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- *Newly enacted U.S. government tax reform could have a negative impact on the results of future operations*

On December 22, 2017, the Tax Cuts and Jobs Act (U.S. Tax Reform) was enacted effective January 1, 2018 and contained substantial changes to the Internal Revenue Code, some of which could have an adverse effect on our business. U.S. Tax Reform significantly revises the U.S. corporate income tax by, among other things, lowering corporate income tax rates, implementing a territorial tax system and imposing a repatriation tax on undistributed foreign earnings of foreign subsidiaries. With the enactment of U.S. Tax Reform, our results of operations for the year ended December 31, 2017 included provisional charges for income tax expense of approximately \$81.8 million resulting from the deemed repatriation tax on undistributed foreign earnings and the re-measurement of our deferred tax assets and liabilities to reflect the recently enacted 21 percent U.S. federal corporate income tax rate. These provisional amounts are based on our initial analysis of U.S. Tax Reform. Given the significant complexity of U.S. Tax Reform, anticipated guidance from the Internal Revenue Service about implementing U.S. Tax Reform, and the potential for additional guidance from the Securities and Exchange Commission or the Financial Accounting Standards Board related to U.S. Tax Reform, these provisional amounts may be adjusted in future periods during 2018, which could result in further impact to our results of operations, financial condition and cash flow.

- *Our business may be adversely impacted by product defects*

Product defects can occur through our own product development, design and manufacturing processes or through our reliance on third parties for component design and manufacturing activities. We may incur various expenses related to product defects, including product warranty costs, product liability and recall or retrofit costs. While we maintain a reserve for product warranty costs based on certain estimates and our knowledge of current events and actions, our actual warranty costs may exceed our reserve, resulting in current period expenses and a need to increase our reserves for warranty charges. In addition, product defects and recalls may diminish the reputation of our brand. Further, our inability to cure a product defect could result in the failure of a product line or the temporary or permanent withdrawal from a product or market. Any of these events may have a material adverse impact on our financial condition, results of operations and cash flows.

- *Our operations could be adversely impacted by material price volatility and supplier concentration*

The market prices for certain raw materials we purchase, primarily steel, have been volatile. Significant increases in the cost of any of the key materials we purchase could increase our cost of doing business and ultimately could lead to lower operating earnings if we are not able to recover these cost increases through price increases to our customers. Historically, there has been a lag in our ability to recover increased material costs from customers, and that lag could negatively impact our profitability. In addition, in some cases we are dependent on a limited number of suppliers for some of the raw materials and components we require in the manufacture of our products. A significant disruption or termination of the supply from one of these suppliers could delay sales or increase costs which could result in a material adverse effect on our financial condition, results of operations and cash flows.

- *We are subject to U.S. and global laws and regulations covering our domestic and international operations that could adversely affect our business and results of operations*

Due to our global operations, we are subject to many laws governing international relations, including those that prohibit improper payments to government officials and restrict where we can do business, what information or products we can supply to certain countries and what information we can provide to a non-U.S. government, including but not limited to the Foreign Corrupt Practices Act and the U.S. Export Administration Act. Violations of these laws may result in criminal penalties or sanctions that could have a material adverse effect on our financial condition, results of operations and cash flows.

- *Our results of operations may be negatively impacted by product liability lawsuits and claims*

Our products expose us to potential product liability risks that are inherent in the design, manufacture, sale and use of our products. While we currently maintain what we believe to be suitable product liability insurance, we cannot be certain that we will be able to maintain this insurance on acceptable terms, that this insurance will provide adequate protection against potential liabilities or that our insurance providers will be able to ultimately pay all insured losses. In addition, we self-insure a portion of product liability claims. A series of successful claims against us could materially and adversely affect our reputation and our financial condition, results of operations and cash flows.

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- *Retention of key personnel is important to our business*

Attracting and retaining talented employees is important to the continued success and growth of our business. Failure to retain key personnel, particularly on the leadership team, could have a material effect on our business and our ability to execute our business strategies in a timely and effective manner.

- *Sales growth of our boilers could stall resulting in lower than expected revenues and earnings*

The compound annual growth rate of our boiler sales has been approximately ten percent per year since our acquisition of Lochinvar in 2011, largely due to the transition in the boiler industry in the U.S. from lower efficiency, non-condensing boilers to higher efficiency, higher priced, condensing boilers, as well as new product introductions. We expect the transition to condensing boilers to continue, but if the transition to higher efficiency, higher priced, condensing boilers stalls as a result of lower energy costs, a U.S. recession occurs, or our competitors' technologies surpass our technology, our growth rate could be lower than expected.

- *An inability to adequately maintain our information systems and their security, as well as to protect data and other confidential information, could adversely affect our business and reputation*

In the ordinary course of business, we utilize information systems for day-to-day operations, to collect and store sensitive data and information, including our proprietary and regulated business information and personally identifiable information of our customers, suppliers, employees and business partners, as well as personally identifiable information about our employees. Our information systems, like those of other companies, are susceptible to outages due to system failures, failures on the part of third-party information system providers, natural disasters, power loss, telecommunications failures, viruses, or breaches of security. We continue to take steps to maintain and improve data security and address these risks and uncertainties by implementing and improving internal controls, security technologies, insurance programs, network and data center resiliency and recovery processes. However, any operations failure or breach of security from increasingly sophisticated cyber threats could lead to disruptions of our business activities, the loss or disclosure of both our and our customers' financial, product and other confidential information and could result in regulatory actions and have a material adverse effect on our financial condition, results of operations and cash flows and our reputation.

- *Potential acquisitions could use a significant portion of our capital and we may not successfully integrate future acquisitions or operate them profitably or achieve strategic objectives*

We will continue to evaluate potential acquisitions, and we could use a significant portion of our available capital to fund future acquisitions. If we complete any future acquisitions, then we may not be able to successfully integrate the acquired businesses or operate them profitably or accomplish our strategic objectives for those acquisitions. If we complete any future acquisitions in new geographies, our unfamiliarity with local regulations and market customs may impact our ability to operate them profitably or achieve our strategic objectives for those acquisitions. Our level of indebtedness may increase in the future if we finance acquisitions with debt, which would cause us to incur additional interest expense and could increase our vulnerability to general adverse economic and industry conditions and limit our ability to service our debt or obtain additional financing. The impact of future acquisitions may have a material adverse effect on our financial condition, results of operations and cash flows.

- *Our underfunded pension plans may require future pension contributions which could limit our flexibility in managing our company*

The projected benefit obligations of our defined benefit pension plans exceeded the fair value of the plan assets by approximately \$48 million at December 31, 2017. U.S. employees hired after January 1, 2010 have not participated in our defined benefit plan, and benefit accruals for the majority of current salaried and hourly employees ended on December 31, 2014. We are forecasting that we will not be required to make a contribution to the plan in 2018, and we do not plan to make any voluntary contributions. However, we cannot provide any assurance that contributions will not be required in the future. Among the key assumptions inherent in our actuarially calculated pension plan obligation and pension plan expense are the discount rate and the expected rate of return on plan assets. If interest rates and actual rates of return on invested plan assets were to decrease significantly, our pension plan obligations could increase materially. The size of future required pension contributions could result in us dedicating a significant portion of our cash flows from operations to making the contributions which could negatively impact our flexibility in managing the company.

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- *We have significant goodwill and indefinite-lived intangible assets and an impairment of our goodwill or indefinite-lived intangible assets could cause a decline in our net worth*

Our total assets include significant goodwill and indefinite-lived intangible assets. Our goodwill results from our acquisitions, representing the excess of the purchase prices we paid over the fair value of the net tangible and intangible assets we acquired. We assess whether there have been impairments in the value of our goodwill or indefinite-lived intangible assets during the fourth quarter of each calendar year or sooner if triggering events warrant. If future operating performance at our businesses does not meet expectations, we may be required to reflect non-cash charges to operating results for goodwill or indefinite-lived intangible asset impairments. The recognition of an impairment of a significant portion of goodwill or indefinite-lived intangible assets would negatively affect our results of operations and total capitalization, the effect of which could be material. A significant reduction in our stockholders' equity due to an impairment of goodwill or indefinite-lived intangible assets may affect our ability to maintain the debt-to-capital ratio required under our existing debt arrangements. We have identified the valuation of goodwill and indefinite-lived intangible assets as a critical accounting policy. See "Management's Discussion and Analysis of Financial Condition and Results of Operations – Critical Accounting Policies—Goodwill and Indefinite-lived Intangible Assets" included in Item 7 of this Annual Report on Form 10-K.

- *Certain members of the founding family of our company and trusts for their benefit have the ability to influence all matters requiring stockholder approval*

We have two classes of common equity: our Common Stock and our Class A Common Stock. The holders of Common Stock currently are entitled, as a class, to elect only one-third of our board of directors. The holders of Class A Common Stock are entitled, as a class, to elect the remaining directors. Certain members of the founding family of our company and trusts for their benefit (Smith Family) have entered into a voting trust agreement with respect to shares of our Class A Common Stock and shares of our Common Stock they own. As of December 31, 2017, through the voting trust, these members of the Smith Family own approximately 62.3 percent of the total voting power of our outstanding shares of Class A Common Stock and Common Stock, taken together as a single class, and approximately 96.3 percent of the voting power of the outstanding shares of our Class A Common Stock, as a separate class. Due to the differences in the voting rights between shares of our Common Stock (one-tenth of one vote per share) and shares of our Class A Common Stock (one vote per share), the Smith Family voting trust is in a position to control to a large extent the outcome of matters requiring a stockholder vote, including the adoption of amendments to our certificate of incorporation or bylaws or approval of transactions involving a change of control. This ownership position may increase if other members of the Smith Family enter into the voting trust agreement, and the voting power relating to this ownership position may increase if shares of our Class A Common Stock held by stockholders who are not parties to the voting trust agreement are converted into shares of our Common Stock. The voting trust agreement provides that, in the event one of the parties to the voting trust agreement wants to withdraw from the trust or transfer any of its shares of our Class A Common Stock, such shares of our Class A Common Stock are automatically exchanged for shares of our Common Stock held by the trust to the extent available in the trust. In addition, the trust will have the right to purchase the shares of our Class A Common Stock and our Common Stock proposed to be withdrawn or transferred from the trust. As a result, the Smith Family members that are parties to the voting trust agreement have the ability to maintain their collective voting rights in our company even if certain members of the Smith Family decide to transfer their shares.

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### **ITEM 1B- UNRESOLVED STAFF COMMENTS**

None.

### **ITEM 2- PROPERTIES**

Properties utilized by us at December 31, 2017 were as follows:

#### **North America**

In this segment, we have 15 manufacturing plants located in seven states and two non-U.S. countries, of which 12 are owned directly by us or our subsidiaries and three are leased from outside parties. The terms of leases in effect at December 31, 2017 expire between 2018 and 2025.

#### **Rest of World**

In this segment, we have six manufacturing plants located in four non-U.S. countries, of which three are owned directly by us or our subsidiaries and three are leased from outside parties. The terms of leases in effect at December 31, 2017 expire between 2018 and 2020.

#### **Corporate and General**

We consider our plants and other physical properties to be suitable, adequate, and of sufficient productive capacity to meet the requirements of our business. The manufacturing plants operate at varying levels of utilization depending on the type of operation and market conditions. The executive offices of the company, which are leased, are located in Milwaukee, Wisconsin.

### **ITEM 3- LEGAL PROCEEDINGS**

We are involved in various unresolved legal actions, administrative proceedings and claims in the ordinary course of our business involving product liability, property damage, insurance coverage, exposure to asbestos and other substances, patents and environmental matters, including the disposal of hazardous waste. Although it is not possible to predict with certainty the outcome of these unresolved legal actions or the range of possible loss or recovery, we believe, based on past experience, adequate reserves and insurance availability, that these unresolved legal actions will not have a material effect on our financial position or results of operations. A more detailed discussion of certain of these matters appears in Note 13 of Notes to Consolidated Financial Statements.

### **ITEM 4- MINE SAFETY DISCLOSURES**

Not applicable.

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### **EXECUTIVE OFFICERS OF THE COMPANY**

Pursuant to General Instruction of G(3) of Form 10-K, the following is a list of the executive officers which is included as an unnumbered Item in Part I of this report in lieu of being included in our Proxy Statement for our 2017 Annual Meeting of Stockholders.

### **EXECUTIVE OFFICERS OF THE COMPANY**

Pursuant to General Instruction of G(3) of Form 10-K, the following is a list of our executive officers which is included as an unnumbered Item in Part I of this report in lieu of being included in our Proxy Statement for our 2018 Annual Meeting of Stockholders.

<b><u>Name (Age)</u></b>	<b><u>Positions Held</u></b>	<b><u>Period Position Was Held</u></b>
Wilfridus M. Brouwer (59)	Senior Vice President – International	2017 to Present
	Senior Vice President – Asia Corporate Development	2015 to 2017
	Senior Vice President	2013 to 2014
	President – A. O. Smith Holdings (Barbados) SRL	2013 to Present
	Senior Vice President – Asia	2009 to 2012
	President and General Manager – A. O. Smith (China) Investment Co., Ltd.	2009 to 2012
Paul R. Dana (55)	Senior Vice President – Global Manufacturing	2016 to Present
	Vice President – Global Manufacturing	2015
	President – APCOM, a division of State Industries, LLC, a subsidiary of the Company	2011 to 2017
	Vice President – Product Engineering	2006 to 2010
	Plant Manager – Productos de Agua, S. de R.L. de C.V.	1998 to 2005
Wei Ding (55)	Senior Vice President	2013 to Present
	President – A. O. Smith China	2017 to Present
	President – A. O. Smith (China) Investment Co., Ltd.; General Manager – A. O. Smith (China) Water Heater Co., Ltd. and A. O. Smith (Nanjing) Water Treatment Products Co. Ltd.	2013 to 2017
	President and General Manager – A. O. Smith (China) Water Heater Co., Ltd.	2013
	Senior Vice President – A. O. Smith Water Products Company	2011 to 2012
	Vice President – China – A. O. Smith Water Products Company	2006 to 2011
Robert J. Heideman (51)	General Manager – A. O. Smith (China) Water Heater Co., Ltd.	1999 to 2012
	Senior Vice President – Chief Technology Officer	2013 to Present
	Senior Vice President – Engineering & Technology	2011 to 2012
	Senior Vice President – Corporate Technology	2010 to 2011
	Vice President – Corporate Technology	2007 to 2010
	Director – Materials	2005 to 2007
Section Manager	2002 to 2005	

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<u>Name (Age)</u>	<u>Positions Held</u>	<u>Period Position Was Held</u>
John J. Kita (62)	Executive Vice President and Chief Financial Officer	2011 to Present
	Senior Vice President, Corporate Finance and Controller	2006 to 2011
	Vice President, Treasurer and Controller	1996 to 2006
	Treasurer and Controller	1995 to 1996
	Assistant Treasurer	1988 to 1994
Charles T. Lauber (55)	Senior Vice President, Strategy and Corporate Development	2013 to Present
	Senior Vice President – Chief Financial Officer – A. O. Smith Water Products Company	2006 to 2012
	Vice President – Global Finance – A. O. Smith Electrical Products Company	2004 to 2006
	Vice President and Controller – A. O. Smith Electrical Products Company	2001 to 2004
	Director of Audit and Tax	1999 to 2001
Peter R. Martineau (63)	Senior Vice President – Chief Information Officer	2016 to Present
	Vice President – Business Transformation	2013 to 2015
	Vice President – Customer Satisfaction	2010 to 2012
Mark A. Petrarca (54)	Senior Vice President – Human Resources and Public Affairs	2006 to Present
	Vice President – Human Resources and Public Affairs	2005 to 2006
	Vice President – Human Resources – A. O. Smith Water Products Company	1999 to 2004
Ajita G. Rajendra (66)	Chairman and Chief Executive Officer	2017 to Present
	Chairman, President and Chief Executive Officer	2014 to 2017
	President and Chief Executive Officer	2013 to 2014
	President and Chief Operating Officer	2011 to 2012
	Executive Vice President	2006 to 2011
	President – A. O. Smith Water Products Company	2005 to 2011
James F. Stern (55)	Senior Vice President	2005 to 2007
	Executive Vice President, General Counsel and Secretary	2007 to Present
William L. Vallett Jr. (58)	Partner – Foley & Lardner LLP	1997 to 2007
	Senior Vice President	2013 to Present
	Chief Executive Officer – Lochinvar, LLC	2012 to Present
	Chief Executive Officer – Lochinvar Corporation	1992 to 2012

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<u>Name (Age)</u>	<u>Positions Held</u>	<u>Period Position Was Held</u>
David R. Warren (53)	Senior Vice President	2017 to Present
	President and General Manager North America Water Heating	2017 to Present
	Vice President – International	2008 to 2017
	Managing Director – A.O. Smith Water Products Company B.V.	2004 to 2008
	Director, Reliance Sales	2002 to 2004
	Regional Sales Manager	1999 to 2002
	District Sales Manager	1990 to 1996
	Sales Coordinator	1989 to 1990
Kevin J. Wheeler (58)	President and Chief Operating Officer	2017 to Present
	Senior Vice President	2013 to 2017
	President and General Manager – North America, India and Europe Water Heating	2013 to 2017
	Senior Vice President and General Manager – North America, India and Europe – A. O. Smith Water Products Company	2011 to 2012
	Senior Vice President and General Manager – U.S. Retail – A. O. Smith Water Products Company	2007 to 2011
	Vice President – International – A. O. Smith Water Products Company	2004 to 2007
	Managing Director – A. O. Smith Water Products Company B.V.	1999 to 2004

**PART II**

**ITEM 5 - MARKET FOR REGISTRANT’S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES**

On September 7, 2016, our Board of Directors declared a two-for-one stock split of our Class A Common Stock and Common Stock (including treasury shares) in the form of a 100 percent stock dividend to stockholders of record on September 21, 2016 and payable on October 5, 2016. All references in this Item 5 to numbers of A. O. Smith Corporation shares or price per share have been adjusted to reflect the split.

- (a) Market Information. Our Common Stock is listed on the New York Stock Exchange under the symbol AOS. Our Class A Common Stock is not listed. EQ Shareowner Services, P.O. Box 64874, St. Paul, Minnesota, 55164-0874 serves as the registrar, stock transfer agent and the dividend reinvestment agent for our Common Stock and Class A Common Stock.

Quarterly Common Stock Price Range

	<u>1st Qtr.</u>	<u>2nd Qtr.</u>	<u>3rd Qtr.</u>	<u>4th Qtr.</u>
<u>2017</u>				
High	\$52.56	\$57.58	\$59.72	\$63.70
Low	46.44	49.48	53.23	58.21
<u>2016</u>				
High	\$38.71	\$44.06	\$49.70	\$51.49
Low	30.15	37.61	42.88	43.66

- (b) Holders. As of January 31, 2018, the approximate number of stockholders of record of Common Stock and Class A Common Stock were 616 and 179, respectively.
- (c) Dividends. Dividends declared on the common stock are shown in Note 15 of Notes to Consolidated Financial Statements appearing elsewhere herein.
- (d) Stock Repurchases. In 2016, our Board of Directors authorized the purchase of an additional 3,000,000 shares of our Common Stock. Under the share repurchase program, our Common Stock may be purchased through a combination of Rule 10b5-1 automatic trading plan and discretionary purchases in accordance with applicable securities laws. The number of shares purchased and the timing of the purchase will depend on a number of factors, including share price, trading volume and general market conditions, as well as on working capital requirements, general business conditions and other factors, including alternative investment opportunities. The stock repurchase authorization remains effective until terminated by our Board of Directors which may occur at any time, subject to the parameters of any Rule 10b5-1 automatic trading plan that we may then have in effect. In 2017, we repurchased 2,533,350 shares at an average price of \$54.90 per share and at a total cost of \$139.1 million. As of December 31, 2017, there were 2,373,053 shares remaining on the existing repurchase authorization.

The following table sets forth the number of shares of common stock we repurchased during the fourth quarter of 2017:

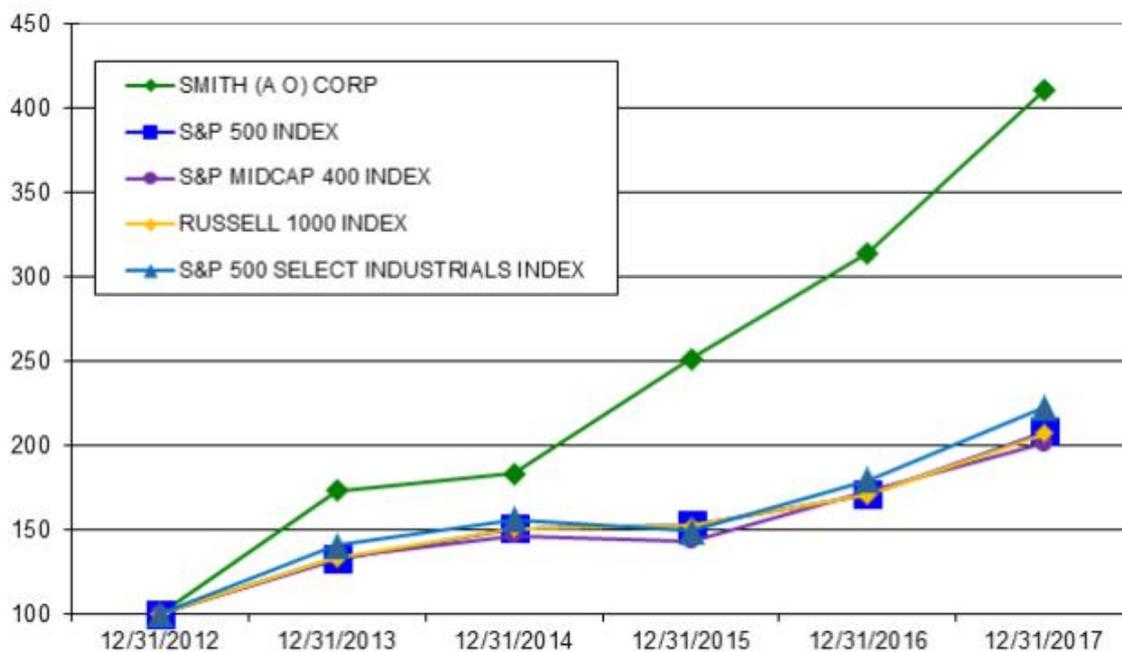
<u>Period</u>	<u>ISSUER PURCHASES OF EQUITY SECURITIES</u>			
	<u>Total Number of Shares Purchased</u>	<u>Average Price Paid per Share</u>	<u>Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs</u>	<u>Maximum Number of Shares that may yet be Purchased Under the Plans or Programs</u>
October 1 – October 31, 2017	206,000	\$ 60.52	206,000	2,758,053
November 1 – November 30, 2017	204,000	59.64	204,000	2,554,053
December 1 – December 31, 2017	181,000	61.70	181,000	2,373,053

- (e) Performance Graph. The following information in this Item 5 of this Annual Report on Form 10-K is not deemed to be “soliciting material” or to be “filed” with the SEC or subject to Regulation 14A or 14C under the Securities Exchange Act of 1934 or to the liabilities of Section 18 of the Securities Exchange Act of 1934, and will not be deemed to be incorporated by reference into any filing under the Securities Act of 1933 or the Securities Exchange Act of 1934, except to the extent we specifically incorporate it by reference into such a filing.

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The graph below shows a five-year comparison of the cumulative shareholder return on our Common Stock with the cumulative total return of the Standard & Poor's (S&P) 500 Index, S&P 500 Select Industrials Index, S&P Mid Cap 400 Index and the Russell 1000 Index, all four of which are published indices. The company added the S&P 500 Index and the S&P 500 Select Industrials Index as indices for comparison in this Annual Report on Form 10-K because our common stock was added to the S&P 500 Index in July 2017 and removed from the S&P Midcap 400 Index at the same time. In future periods, the S&P Midcap 400 Index and the Russell 1000 Index will not be included in the comparison.

Comparison of Five-Year Cumulative Total Return  
From December 31, 2012 to December 31, 2017  
Assumes \$100 Invested with Reinvestment of Dividends



Company/Index	Base Period	Indexed Returns				
	12/31/12	12/31/13	12/31/14	12/31/15	12/31/16	12/31/17
A. O. Smith Corporation	100.0	172.9	183.1	251.4	314.2	410.9
S&P 500 Index	100.0	132.4	150.5	152.6	170.8	208.1
S&P Mid Cap 400 Index	100.0	133.5	146.6	143.4	173.1	201.2
Russell 1000 Index	100.0	133.1	150.7	152.1	170.4	207.0
S&P 500 Select Industrial Index	100.0	140.8	155.9	149.3	179.3	222.6

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(dollars in millions, except per share amounts)

	Years ended December 31				
	2017(1)	2016(2)	2015	2014	2013(3)
Net sales	\$2,996.7	\$2,685.9	\$2,536.5	\$2,356.0	\$2,153.8
Net earnings(1)	\$ 296.5	\$ 326.5	\$ 282.9	\$ 207.8	\$ 169.7
Basic earnings per share of common stock(1,2,3)					
Net earnings	\$ 1.72	\$ 1.87	\$ 1.59	\$ 1.15	\$ 0.92
Diluted earnings per share of common stock(1,2,3)					
Net earnings	\$ 1.70	\$ 1.85	\$ 1.58	\$ 1.14	\$ 0.91
Cash dividends per common share(2,3)	\$ 0.56	\$ 0.48	\$ 0.38	\$ 0.30	\$ 0.23
	December 31				
	2017	2016	2015	2014	2013
Total assets	\$3,197.3	\$2,891.0	\$2,629.2	\$2,498.1	\$2,351.5
Long-term debt(4)	402.9	316.4	236.1	210.1	177.7
Total stockholders' equity	1,648.8	1,515.3	1,442.3	1,381.3	1,328.7

(1) Due to the enactment of the U.S. Tax Cuts & Jobs Act in December 2017, we recorded provisional one-time charges of \$81.8 million, our estimate of the costs primarily associated with the repatriation of undistributed foreign earnings. These charges reduced earnings per share by \$0.47.

(2) In September 2016, we declared a 100 percent stock dividend to holders of Common Stock and Class A Common Stock which is not included in cash dividends. Basic and diluted earnings per share are calculated using the weighted average shares outstanding which were restated for all periods presented to reflect the stock dividend.

(3) In April 2013, we declared a 100 percent stock dividend to holders of Common Stock and Class A Common Stock which is not included in cash dividends. Basic and diluted earnings per share are calculated using the weighted average shares outstanding which were restated for all periods presented to reflect the stock dividend.

(4) Excludes the current portion of long-term debt.

## **ITEM 7 - MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS**

### **OVERVIEW**

Our company is comprised of two reporting segments: North America and Rest of World. Our Rest of World segment is primarily comprised of China, Europe and India. Both segments manufacture and market comprehensive lines of residential and commercial gas and electric water heaters, boilers and water treatment products. Both segments primarily manufacture and market in their respective regions of the world. Our North America segment also manufactures and markets water systems tanks. Our Rest of World segment also manufactures and markets in-home air purification products in China.

In our North America segment, we project our sales in the U.S. will grow in 2018 compared to 2017 due to higher residential water heater and boiler volumes resulting from expected industry-wide new construction growth and expansion of replacement demand. We expect the North America residential water heater industry to have three to 3.5 percent unit growth in 2018. Due to nearly 20 percent unit growth in 2017, partially driven by an anticipated 2018 regulatory change and resulting pre-buy, we expect the North America commercial water heater industry to have a three percent unit decline in 2018. Our sales of boilers grew 13 percent in 2017, and we expect ten percent sales growth in 2018, driven by the continuing U.S. industry transition to higher efficiency products and our introduction of new products. We continued to expand our North America water treatment platform with the acquisition of Hague on September 5, 2017. We expect sales of North America water treatment products to increase by approximately 50 percent in 2018, compared to 2017, primarily due to volume growth and a full year of Hague sales.

In our Rest of World segment, we expect China sales to grow in 2018 at a rate of approximately 13 percent, as we believe overall water heater market growth, geographic expansion, market share gains, and growth in water treatment and air purification products will contribute to our growth. In addition, we expect our sales in India to grow over 40 percent in 2018 from approximately \$26 million in 2017.

Combining all of these factors, we expect total company sales growth of between 8.5 percent to 9.5 percent in 2018.

Our stated acquisition strategy includes a number of our water-related strategic initiatives. We will look to continue to grow our core residential and commercial water heating, boiler and water treatment businesses throughout the world. We will also continue to look for opportunities to add to our existing operations in high growth regions demonstrated by our introduction in 2015 of air purification products in China and water treatment products in India and Vietnam.

### **RESULTS OF OPERATIONS**

Our sales in 2017 were a company record \$2,997 million surpassing 2016 sales of \$2,686 million by 11.6 percent. The increase in sales in 2017 was primarily due to higher sales in China as well as higher sales of water heaters and boilers in North America. Sales in China grew 15.9 percent to over \$1 billion in 2017, and excluding the impact of the appreciation of the U.S. dollar, sales in China increased 17.9 percent in 2017. Our sales in 2016 were higher than 2015 sales of \$2,537 million by 5.9 percent. In 2016, excluding the impact from the appreciation of the U.S. dollar against the Chinese currency, our sales grew approximately eight percent. Sales in China grew 12.5 percent in 2016, and excluding the impact of the appreciation of the U.S. dollar, sales in China increased by 18.9 percent in 2016.

Our gross profit margin in 2017 decreased to 41.3 percent from 41.7 percent in 2016. The slightly lower margin in 2017 was due to significantly higher steel costs that more than offset pricing actions taken in 2017 in North America and China. Our gross profit margin in 2016 increased from 39.8 percent in 2015 primarily due to price increases in the U.S., lower material costs in the first half of 2016 and higher sales of boilers and commercial water heaters in the U.S. than in 2015.

Selling, general and administrative (SG&A) expenses were \$59.3 million higher in 2017 than in 2016. The increase in SG&A expenses in 2017 to \$718.2 million was primarily due to higher selling and advertising expenses to support increased volumes and brand building in our newer product categories. SG&A expenses were \$48.2 million higher in 2016 than in 2015 primarily due to higher selling costs supporting our sales efforts in tier 2 and tier 3 cities in China as well as higher advertising costs to support brand building in China.

Pension income in 2017 was \$9.1 million compared to \$6.9 million in 2016 and \$0.1 million of pension expense in 2015. As of December 31, 2015, we changed to what we believe is a more precise method to estimate the service cost and interest components of net periodic benefit cost for our pension and post-retirement plans. The change was the reason for \$7.7 million and \$7.1 million of decreases in 2017 and 2016, respectively, compared to 2015, in service and interest costs.

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Interest expense was \$10.1 million in 2017 compared to \$7.3 million in 2016 and \$7.4 million in 2015. The higher interest expense in 2017 compared to 2016 was primarily related to higher interest rates as well as higher overall debt levels primarily due to increased share repurchases and acquisitions completed in 2016 and 2017.

Other income was \$10.4 million in 2017 compared to \$9.4 million in 2016 and \$10.8 million in 2015. The increase in other income in 2017 compared to 2016 was primarily due to higher interest income. The decrease in other income in 2016 compared to 2015 was primarily due to a decrease in interest income caused by lower interest rates in China in 2016.

Our effective income tax rate was 43.1 percent in 2017, compared with 29.4 percent in 2016 and 29.7 percent in 2015. The significant increase in our effective income tax rate in 2017 compared to previous years was due to provisional one-time charges associated with the U.S. Tax Cuts & Jobs Act (U.S. Tax Reform) of \$81.8 million, primarily related to the mandatory repatriation tax on undistributed foreign earnings that we are required to pay over eight years. Excluding the impact of the U.S. Tax Reform provisional one-time charges, our adjusted effective income tax rate was 27.4 percent in 2017. Our adjusted effective income tax rate in 2017 was lower than our effective income tax rate in 2016 primarily due to lower U.S. state income taxes and higher deductions for share-based compensation. Our lower effective income tax rate in 2016 compared to 2015 was primarily due to our adoption of an accounting standard for share-based compensation partially offset by a change in geographic earnings mix. We estimate our annual effective income tax rate for the full year 2018 will be approximately 22.0 to 22.5 percent, significantly lower than previous years due to U.S. Tax Reform.

### **North America**

Sales in our North America segment were \$1,905 million in 2017 or \$162 million higher than sales of \$1,743 million in 2016. The increase in sales in 2017 compared to 2016 was primarily due to higher volumes of water heaters and boilers, price increases in the U.S. for water heaters largely related to steel cost increases as well as our customer's pre-buy of commercial water heaters in advance of an anticipated 2018 regulatory change. North America water treatment sales, comprised of Hague, acquired in September 2017 and Aquasana, acquired in August 2016, incrementally added approximately \$40 million of sales in 2017. Sales in 2016 were \$40 million higher than sales of \$1,703 million in 2015. The sales increase in 2016 resulted from a full year of U.S. price increases for residential water heaters related to a regulatory change in April 2015, and a 2016 price increase in the U.S. related to higher steel prices and other cost inflation. Sales in 2016 also benefitted from higher volumes of boilers and commercial water heaters in the U.S. as well as the addition of \$18.4 million of sales of water treatment products resulting from our Aquasana acquisition. Lower volumes of U.S. residential water heaters in 2016 compared to 2015 offset these benefits.

North America segment earnings were \$428.6 million in 2017 compared to segment earnings of \$385.9 million and \$339.9 million in 2016 and 2015, respectively. Segment margins were 22.5 percent, 22.1 percent and 20.0 percent in 2017, 2016 and 2015, respectively. The higher segment earnings and segment margin in 2017 compared to 2016 were primarily due to higher water heater and boiler volumes and pricing actions which were partially offset by higher steel costs. Segment margin in 2017 also benefitted from lower SG&A expenses as a percent of sales. The higher segment earnings and segment margin in 2016 compared to 2015 were primarily due to pricing actions in the U.S., lower material costs in the first half of 2016 and higher boiler and commercial water heater volumes in the U.S., which were partially offset by lower U.S. residential water heater volumes. We estimate our 2018 North America segment margin will be between 22 and 22.5 percent primarily due to anticipated growth in boiler and residential water heater volumes offset by higher steel costs.

### **Rest of World**

Sales in our Rest of World segment in 2017 were \$1,116 million or \$150 million higher than sales of \$966 million in 2016. Sales in China grew 15.9 percent to over \$1 billion in 2017 due to higher demand for our consumer products, led by water treatment and air purification products and pricing actions primarily due to higher steel and installation costs. Excluding the impact from the appreciation of the U.S. dollar in 2017, sales in China increased 17.9 percent. Water heater and water treatment sales in India increased \$8 million, over 40 percent, in 2017 compared to 2016. Sales in our Rest of World segment in 2016 were \$100 million higher than sales of \$866 million in 2015. Sales in China grew 12.5 percent in 2016. Excluding the impact from the appreciation of the U.S. dollar in 2016, sales in China increased 18.9 percent in 2016 driven by higher demand for water heaters, water treatment products and residential air purification products. Water treatment sales in China totaled \$177 million in 2016 compared to \$130 million in 2015. Sales of air purification products were \$26 million in 2016 compared to \$9 million in 2015.

Rest of World segment earnings were \$149.3 million in 2017 compared to segment earnings of \$129.1 million and \$113.0 million in 2016 and 2015, respectively. Segment margins were 13.4 percent in 2017 compared to 13.4 percent and 13.0 percent in 2016 and 2015, respectively. Higher segment earnings in 2017 compared to 2016 were primarily due to higher sales in China, which included a price increase, partially offset by higher steel costs, higher fees paid to installers and increased SG&A expenses. Higher SG&A expenses in China were primarily due to the expansion of water treatment and air purification product retail outlets in tier 2 and tier 3 cities, higher advertising expenses related to brand building in our newer product

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categories and higher water treatment product development engineering costs. Higher segment earnings and segment margin in 2016 compared to 2015 were primarily due to higher sales in China partially offset by increased SG&A expenses in China. Higher selling costs in China to support our sales efforts in tier 2 and tier 3 cities and higher advertising costs to support brand building were the primary drivers of higher SG&A expenses in 2016. Operating earnings in 2016 were also negatively impacted by almost \$8 million due to the appreciation of the U.S. dollar in 2016. We expect 2018 Rest of World segment margin to expand 30 to 40 basis points compared to 2017.

### **LIQUIDITY AND CAPITAL RESOURCES**

Our working capital was \$978.3 million at December 31, 2017 compared with \$796.4 million and \$750.1 million at December 31, 2016 and December 31, 2015, respectively. Cash generation in China and sales-related increases in accounts receivable, and inventory levels explain the majority of the increase in 2017 and 2016. As of December 31, 2017, essentially all of our \$820.0 million of cash, cash equivalents and marketable securities were held by our foreign subsidiaries. In December 2017, we recorded provisional one-time charges of \$81.8 million primarily associated with the mandatory repatriation tax of undistributed foreign earnings under U.S. Tax Reform. In addition, we had an existing accrual of \$38.6 million associated with withholding taxes due upon issuance of foreign dividends. We expect to repatriate approximately \$200 million in the first half of 2018 and use the proceeds to repay floating rate debt.

Cash provided by operating activities during 2017 was \$326.4 million compared with \$446.6 million during 2016 and \$351.7 million during 2015. The decline in cash flows in 2017 compared to 2016 was primarily due to higher outlays for working capital than the below normal levels experienced in 2016, which more than offset the impact of higher earnings in 2017. The increase in cash flows in 2016 compared to 2015 was primarily due to higher earnings from operations and lower outlays for working capital. We experienced favorable cash flow impacts in China late in the fourth quarter of 2016 primarily from a series of unanticipated large customer payments including customer deposits.

Over the two-year period from 2016 to 2017, we generated operating cash of approximately \$773 million, which compares with \$616 million of operating cash flows during 2014 to 2015. We anticipate cash provided by operating activities to be \$475 to \$500 million in 2018, compared to \$326 million in 2017, due to higher projected earnings and lower outlays for working capital, particularly inventory.

Our capital expenditures were \$94.2 million in 2017, \$80.7 million in 2016 and \$72.7 million in 2015. We broke ground in 2016 on the construction of a new water treatment and air purification products manufacturing facility in Nanjing, China, to support the expected growth of these products in China. Included in 2017 capital expenditures were approximately \$24 million related to capacity expansion in China. Included in 2016 capital expenditures were approximately \$13 million related to capacity expansion in China as well as approximately \$11 million related to the continuation of our enterprise resource planning (ERP) system implementation. Included in 2015 capital expenditures were approximately \$16 million related to our ERP implementation and approximately \$19 million related to capacity expansion in China and the U.S. to support growth. We project approximately \$100 million of capital expenditures in 2018, which includes approximately \$30 million related to the completion of capacity expansion in China. We project depreciation and amortization expense of approximately \$80 million in 2018.

In January 2015, we issued \$75 million of fixed rate term notes to an insurance company. Principal payments commence in 2020 and the notes mature in 2030. The notes carry an interest rate of 3.52 percent. We used proceeds of the notes to pay down borrowings under our revolving credit facility.

In November 2016, we issued \$45 million of fixed rate term notes in two tranches to two insurance companies. Principal payments commence in 2023 and 2028 and the notes mature in 2029 and 2034, respectively. The notes carry interest rates of 2.87 and 3.10, respectively. We used proceeds of the notes to pay down borrowings under our revolving credit facility.

In December 2016, we completed a \$500 million multi-currency five year revolving credit facility with a group of nine banks. The facility has an accordion provision which allows it to be increased up to \$700 million if certain conditions (including lender approval) are satisfied. Borrowing rates under the facility are determined by our leverage ratio. The facility requires us to maintain two financial covenants, a leverage ratio test and an interest coverage test, and we were in compliance with the covenants as of December 31, 2017. The facility backs up commercial paper and credit line borrowings, and it expires on December 15, 2021. As a result of the long-term nature of this facility, the commercial paper and credit line borrowings, as well as drawings under the facility are classified as long-term debt.

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At December 31, 2017, we had available borrowing capacity of \$217.1 million under this facility. We believe that our combination of cash, available borrowing capacity and operating cash flow will provide sufficient funds to finance our existing operations for the foreseeable future.

Our total debt increased to \$410.4 million at December 31, 2017 compared with \$323.6 million at December 31, 2016, as our cash flows generated in the U.S. were more than offset by our share repurchase activity and our acquisition of Hague. As a result, our leverage, as measured by the ratio of total debt to total capitalization, was 19.9 percent at the end of 2017 compared with 17.6 percent at the end of 2016.

Our U.S. pension plan continues to meet all funding requirements under ERISA regulations. We were not required to make a contribution to our pension plan in 2017 but made a voluntary \$30 million contribution due to escalating Pension Benefit Guaranty Corporation insurance premiums. We forecast that we will not be required to make a contribution to the plan in 2018, and we do not plan to make any voluntary contributions in 2018. For further information on our pension plans, see Note 10 of the Notes to Consolidated Financial Statements.

In 2017, we repurchased 2,533,350 shares at an average price of \$54.90 per share and a total cost of \$139.1 million. A total of 2,373,053 shares remained on the existing repurchase authorization at December 31, 2017. Depending on factors such as stock price, working capital requirements and alternative investment opportunities, such as acquisitions, we expect to spend approximately \$135 million on share repurchase activity in 2018 using a 10b5-1 repurchase plan. In addition, we may opportunistically repurchase our shares in the open market in 2018.

We have paid dividends for 78 consecutive years with payments increasing each of the last 26 years. We paid dividends of \$0.56 per share in 2017 compared with \$0.48 per share in 2016. In January 2018, we increased our dividend by 29 percent and anticipate paying dividends of \$0.72 per share in 2018.

### **Aggregate Contractual Obligations**

A summary of our contractual obligations as of December 31, 2017, is as follows:

(dollars in millions)

Contractual Obligations	Total	Payments due by period			
		Less Than 1 year	1 - 2 Years	3 - 5 Years	More than 5 years
Long-term debt	\$410.4	\$ 7.5	\$ 6.8	\$296.5	\$ 99.6
Fixed rate interest	34.1	4.1	7.7	6.8	15.5
Operating leases	47.5	20.2	8.5	5.6	13.2
Purchase obligations	118.5	118.3	0.1	0.1	—
Pension and post-retirement obligations	57.2	0.8	17.0	2.0	37.4
Total	<u>\$667.7</u>	<u>\$ 150.9</u>	<u>\$40.1</u>	<u>\$311.0</u>	<u>\$ 165.7</u>

As of December 31, 2017, our liability for uncertain income tax positions was \$6.2 million. Due to the high degree of uncertainty regarding timing of potential future cash flows associated with these liabilities, we are unable to make a reasonably reliable estimate of the amount and period in which these liabilities might be paid.

We utilize blanket purchase orders to communicate expected annual requirements to many of our suppliers. Requirements under blanket purchase orders generally do not become committed until several weeks prior to our scheduled unit production. The purchase obligation amount presented above represents the value of commitments that we consider firm.

### **Recent Accounting Pronouncements**

Refer to *Recent Accounting Pronouncements* in Note 1 of Notes to Consolidated Financial Statements.

## Critical Accounting Policies

Our accounting policies are described in Note 1 of Notes to Consolidated Financial Statements. Also as disclosed in Note 1, the preparation of financial statements in conformity with accounting principles generally accepted in the U.S. requires the use of estimates and assumptions about future events that affect the amounts reported in the financial statements and accompanying notes. Future events and their effects cannot be determined with absolute certainty. Therefore, the determination of estimates requires the exercise of judgment. Actual results inevitably will differ from those estimates, and such differences may be material to the financial statements.

The most significant accounting estimates inherent in the preparation of our financial statements include estimates associated with the evaluation of the impairment of goodwill and indefinite-lived intangible assets, as well as significant estimates used in the determination of liabilities related to warranty activity, product liability and pensions. Various assumptions and other factors underlie the determination of these significant estimates. The process of determining significant estimates is fact-specific and takes into account factors such as historical experience and trends, and in some cases, actuarial techniques. We monitor these significant factors and adjustments are made as facts and circumstances dictate. Historically, actual results have not significantly deviated from those determined using the estimates described above.

### *Goodwill and Indefinite-lived Intangible Assets*

In conformity with U.S. Generally Accepted Accounting Principles (GAAP), goodwill and indefinite-lived intangible assets are tested for impairment annually or more frequently if events or changes in circumstances indicate that the assets might be impaired. We perform impairment reviews for our reporting units using a fair-value method based on management's judgments and assumptions. The fair value represents the estimated amount at which a reporting unit could be bought or sold in a current transaction between willing parties on an arm's-length basis. The estimated fair value is then compared with the carrying amount of the reporting unit, including recorded goodwill. We are subject to financial statement risk to the extent that goodwill and indefinite-lived intangible assets become impaired. Any impairment review is, by its nature, highly judgmental as estimates of future sales, earnings and cash flows are utilized to determine fair values. However, we believe that we conduct thorough and competent annual valuations of goodwill and indefinite-lived intangible assets and that there has been no impairment in goodwill or indefinite-lived assets in 2017.

### *Product warranty*

Our products carry warranties that generally range from one to ten years and are based on terms that are generally accepted in the market. We provide for the estimated cost of product warranty at the time of sale. The product warranty provision is estimated based upon warranty loss experience using actual historical failure rates and estimated costs of product replacement. The variables used in the calculation of the provision are reviewed at least annually. At times, warranty issues may arise which are beyond the scope of our historical experience. We provide for any such warranty issues as they become known and estimable. While our warranty costs have historically been within calculated estimates, it is possible that future warranty costs could differ significantly from those estimates. The allocation of the warranty liability between current and long-term is based on the expected warranty liability to be paid in the next year as determined by historical product failure rates. At December 31, 2017 and 2016, our reserve for product warranties was \$142.4 million and \$140.9 million, respectively.

### *Product liability*

Due to the nature of our products, we are subject to product liability claims in the normal course of business. We maintain insurance to reduce our risk. Most insurance coverage includes self-insured retentions that vary by year. In 2017, we maintained a self-insured retention of \$7.5 million per occurrence with an aggregate insurance limit of \$125.0 million.

We establish product liability reserves for our self-insured retention portion of any known outstanding matters based on the likelihood of loss and our ability to reasonably estimate such loss. There is inherent uncertainty as to the eventual resolution of unsettled matters due to the unpredictable nature of litigation. We make estimates based on available information and our best judgment after consultation with appropriate advisors and experts. We periodically revise estimates based upon changes to facts or circumstances. We also utilize an actuary to calculate reserves required for estimated incurred but not reported claims as well as to estimate the effect of adverse development of claims over time. At December 31, 2017 and 2016, our reserve for product liability was \$40.1 million and \$38.6 million, respectively.

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### *Pensions*

We have significant pension benefit costs that are developed from actuarial valuations. The valuations reflect key assumptions regarding, among other things, discount rates, expected return on plan assets, retirement ages, and years of service. Consideration is given to current market conditions, including changes in interest rates in making these assumptions. Our assumption for the expected return on plan assets was 7.50 percent in 2017 and 2016. The discount rate used to determine net periodic pension costs decreased to 4.15 percent in 2017 from 4.40 percent in 2016. For 2018, our expected return on plan assets is 7.15 percent and our discount rate is 3.65 percent.

In developing our expected return on plan assets, we evaluate our pension plan's current and target asset allocation, the expected long-term rates of return of equity and bond indices and the actual historical returns of our pension plan. Our plan's target allocation to equity managers is approximately 45 to 55 percent, with the remainder allocated primarily to bond managers, private equity managers and real estate managers. Our actual asset allocation as of December 31, 2017, was 45 percent to equity managers, 43 percent to bond managers, nine percent to real estate managers, two percent to private equity managers and one percent to others. We regularly review our actual asset allocation and periodically rebalance our investments to our targeted allocation when considered appropriate. Our pension plan's historical ten-year and 25-year compounded annualized returns are 6.3 percent and 9.2 percent, respectively. We believe that with our target allocation and the expected long-term returns of equity and bond indices as well as our actual historical returns, our 7.15 percent expected return on plan assets for 2018 is reasonable.

The discount rate assumptions used to determine future pension obligations at December 31, 2017 and 2016 were based on the AonHewitt AA Only Above Median yield curve, which was designed by AonHewitt to provide a means for plan sponsors to value the liabilities of their postretirement benefit plans. The AA Only Above Median yield curve represents a series of annual discount rates from bonds with AA minimum average rating as rated by Moody's Investor Service, Standard & Poor's and Fitch Ratings. We will continue to evaluate our actuarial assumptions at least annually, and we will adjust the assumptions as necessary.

We recognized pension income of \$9.1 million in 2017 compared to \$6.9 million of pension income in 2016 and \$0.1 million of pension expense in 2015. As of December 31, 2015, we changed the method we used to estimate the service and interest components of net periodic pension benefit cost for our pension plan and post-retirement benefit plan. Historically, we estimated the service and interest cost components utilizing a single weighted-average discount rate derived from the yield curve used to measure the benefit obligation at the beginning of the period. We elected to utilize an approach that discounts the individual expected cash flows underlying the service cost and interest cost using the applicable spot rates derived from the yield curve used in the determination of the benefit obligation to the relevant projected cash flows. This change was made to provide a more precise measurement of service and interest costs by improving the correlation between the projected benefit cash flows to the corresponding spot yield curve rates. The change was the reason for \$7.7 million and \$7.1 million decreases in 2017 and 2016, respectively, compared to 2015, in service and interest costs.

Costs associated with our replacement retirement plan in 2017 were approximately \$6 million, consistent with 2016. We made changes to our pension plan including closing the plan to new entrants effective January 1, 2010, and the sunset of our plan for the majority of our employees on December 31, 2014 which significantly decreased pension expense beginning in 2015. Lowering the expected return on plan assets by 25 basis points would increase our net pension expense for 2017 by approximately \$2.0 million. Lowering the discount rate by 25 basis points would decrease our 2017 net pension expense by approximately \$0.3 million.

### *Non-GAAP Measures*

We provide non-GAAP measures (adjusted earnings and adjusted earnings per share) that exclude one-time expenses associated with U.S. Tax Reform. We believe that these non-GAAP measures better reflect our financial performance.

As such, we believe that the measures of adjusted earnings and adjusted earnings per share provide management and investors with a useful measure of our results. We have prepared annual reconciliations of adjusted earnings and adjusted earnings per share for 2017.

**A. O. SMITH CORPORATION**  
**Adjusted Earnings and Adjusted EPS**  
**(dollars in millions, except per share data)**  
**(unaudited)**

The following is a reconciliation of net earnings and diluted earnings per share (EPS) to adjusted earnings (non-GAAP) and adjusted EPS (non-GAAP):

	Years ended December 31,	
	2017	2016
<b>Net Earnings (GAAP)</b>	\$ 296.5	\$ 326.5
U.S. Tax Reform income tax expense	81.8	—
<b>Adjusted Earnings</b>	<u>\$ 378.3</u>	<u>\$ 326.5</u>
<b>Diluted EPS (GAAP)</b>	\$ 1.70	\$ 1.85
U.S. Tax Reform income tax expense per diluted share	0.47	—
<b>Adjusted EPS</b>	<u>\$ 2.17</u>	<u>\$ 1.85</u>

Excluding the impact of U.S. Tax Reform provisional one-time charges, our 2017 adjusted effective income tax rate was 27.4 percent as compared to our effective income tax rate of 43.1 percent in 2017.

### Outlook

We expect our consolidated sales to grow 8.5 to 9.5 percent in 2018. With our organic growth potential and our stable replacement markets, we expect to achieve full-year earnings of between \$2.50 and \$2.58 per share, which excludes the potential impact from future acquisitions. Our guidance includes the estimated benefit related to our lower projected income tax rate under U.S. Tax Reform.

### OTHER MATTERS

#### Environmental

Our operations are governed by a number of federal, foreign, state, local and environmental laws concerning the generation and management of hazardous materials, the discharge of pollutants into the environment and remediation of sites owned by the company or third parties. We have expended financial and managerial resources complying with such laws. Expenditures related to environmental matters were not material in 2017 and we do not expect them to be material in any single year. We have reserves and available insurance coverage associated with environmental obligations at various facilities and we believe these reserves are sufficient to cover reasonably anticipated remediation costs. Although we believe that our operations are substantially in compliance with such laws and maintain procedures designed to maintain compliance, there are no assurances that substantial additional costs for compliance will not be incurred in the future. However, since the same laws govern our competitors, we should not be placed at a competitive disadvantage.

#### Market Risk

We are exposed to various types of market risks, primarily currency. We monitor our risks in such areas on a continuous basis and generally enter into forward contracts to minimize such exposures for periods of less than one year. We do not engage in speculation in our derivatives strategies. Further discussion regarding derivative instruments is contained in Note 1 of Notes to Consolidated Financial Statements.

We enter into foreign currency forward contracts to minimize the effect of fluctuating foreign currencies. At December 31, 2017, we had net foreign currency contracts outstanding with notional values of \$94.9 million. Assuming a hypothetical ten percent movement in the respective currencies, the potential foreign exchange gain or loss associated with the change in exchange rates would amount to \$9.5 million. However, gains and losses from our forward contracts will be offset by gains and losses in the underlying transactions being hedged.

Our earnings exposure related to movements in interest rates is primarily derived from outstanding floating-rate debt instruments that are determined by short-term money market rates. At December 31, 2017, we had \$282.9 million in outstanding floating-rate debt with a weighted-average interest rate of 2.3 percent at year end. A hypothetical ten percent annual increase or decrease in the year-end average cost of our outstanding floating-rate debt would result in a change in annual pre-tax interest expense of approximately \$0.6 million.

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### **Forward-Looking Statements**

This filing contains statements that the company believes are “forward-looking statements” within the meaning of the Private Securities Litigation Reform Act of 1995. Forward-looking statements generally can be identified by the use of words such as “may,” “will,” “expect,” “intend,” “estimate,” “anticipate,” “believe,” “forecast,” “guidance” or words of similar meaning. All forward-looking statements are subject to risks and uncertainties that could cause actual results to differ materially from those anticipated as of the date of this filing. Important factors that could cause actual results to differ materially from these expectations include, among other things, the following: a further slowdown in the growth rate of the Chinese economy and/or a decline in the growth rate of consumer spending in China; potential slower rate of conversion in the high efficiency boiler segment in the U.S.; significant volatility in raw material prices; our inability to implement or maintain pricing actions; potential weakening in U.S. residential or commercial construction or instability in our replacement markets; foreign currency fluctuations; our inability to successfully integrate or achieve our strategic objectives resulting from acquisitions; competitive pressures on our businesses; the impact of potential information technology or data security breaches; changes in government regulations or regulatory requirements; the impact of U.S. Tax Reform for effective income tax rates and one-time expenses under the new law and adverse developments in general economic, political and business conditions in key regions of the world. Forward-looking statements included in this filing are made only as of the date of this release, and the company is under no obligation to update these statements to reflect subsequent events or circumstances. All subsequent written and oral forward-looking statements attributed to the company, or persons acting on its behalf, are qualified entirely by these cautionary statements.

### **ITEM 7A– QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK**

See “Market Risk” above.

**ITEM 8—FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA**

**REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

The Board of Directors and Stockholders  
A. O. Smith Corporation

**Opinion on the Financial Statements**

We have audited the accompanying consolidated balance sheets of A. O. Smith Corporation (the Company) as of December 31, 2017 and 2016, and the related consolidated statements of earnings, comprehensive earnings, stockholders' equity, and cash flows for each of the three years in the period ended December 31, 2017, and the related notes and financial statement schedule listed in the index at Item 15(a) (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the consolidated financial position of the Company at December 31, 2017 and 2016, and the consolidated results of its operations and its cash flows for each of the three years in the period ended December 31, 2017, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2017, based on criteria established in Internal Control - Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) and our report dated February 16, 2018 expressed an unqualified opinion thereon.

**Basis for Opinion**

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ Ernst & Young LLP

We have served as A. O. Smith Corporation's auditor since 1917.

Milwaukee, Wisconsin  
February 16, 2018

[Table of Contents](#)**CONSOLIDATED BALANCE SHEETS**

December 31 (dollars in millions)

	2017	2016
<b>Assets</b>		
<b>Current Assets</b>		
Cash and cash equivalents	\$ 346.6	\$ 330.4
Marketable securities	473.4	424.2
Receivables	598.4	518.7
Inventories	291.2	251.1
Other current assets	57.2	37.6
<b>Total Current Assets</b>	<b>1,766.8</b>	<b>1,562.0</b>
Net property, plant and equipment	528.9	461.9
Goodwill	516.7	491.5
Other intangibles	308.7	308.3
Other assets	76.2	67.3
<b>Total Assets</b>	<b>\$3,197.3</b>	<b>\$2,891.0</b>
<b>Liabilities</b>		
<b>Current Liabilities</b>		
Trade payables	\$ 535.0	\$ 528.6
Accrued payroll and benefits	90.8	84.3
Accrued liabilities	110.7	101.0
Product warranties	44.5	44.5
Long-term debt due within one year	7.5	7.2
<b>Total Current Liabilities</b>	<b>788.5</b>	<b>765.6</b>
Long-term debt	402.9	316.4
Product warranties	97.9	96.4
Pension liabilities	48.1	109.0
Other liabilities	211.1	88.3
<b>Total Liabilities</b>	<b>1,548.5</b>	<b>1,375.7</b>
Commitments and contingencies	—	—
<b>Stockholders' Equity</b>		
Preferred Stock	—	—
Class A Common Stock (shares issued 26,239,559 and 26,313,351)	131.2	131.6
Common Stock (shares issued 164,468,033 and 164,394,241)	164.5	164.4
Capital in excess of par value	486.5	477.6
Retained earnings	1,792.6	1,593.0
Accumulated other comprehensive loss	(299.5)	(363.2)
Treasury stock at cost	(626.5)	(488.1)
<b>Total Stockholders' Equity</b>	<b>1,648.8</b>	<b>1,515.3</b>
<b>Total Liabilities and Stockholders' Equity</b>	<b>\$3,197.3</b>	<b>\$2,891.0</b>

See accompanying notes which are an integral part of these statements.

[Table of Contents](#)**CONSOLIDATED STATEMENT OF EARNINGS**

Years ended December 31 (dollars in millions, except per share amounts)

	2017	2016	2015
Net sales	\$2,996.7	\$2,685.9	\$2,536.5
Cost of products sold	1,758.0	1,566.6	1,526.7
Gross profit	1,238.7	1,119.3	1,009.8
Selling, general and administrative expenses	718.2	658.9	610.7
Interest expense	10.1	7.3	7.4
Other income - net	(10.4)	(9.4)	(10.8)
Earnings before provision for income taxes	520.8	462.5	402.5
Provision for income taxes	224.3	136.0	119.6
<b>Net Earnings</b>	<b>\$ 296.5</b>	<b>\$ 326.5</b>	<b>\$ 282.9</b>
<b>Net Earnings Per Share of Common Stock</b>	<b>\$ 1.72</b>	<b>\$ 1.87</b>	<b>\$ 1.59</b>
<b>Diluted Net Earnings Per Share of Common Stock</b>	<b>\$ 1.70</b>	<b>\$ 1.85</b>	<b>\$ 1.58</b>

**CONSOLIDATED STATEMENT OF COMPREHENSIVE EARNINGS**

Years ended December 31 (dollars in millions)

	2017	2016	2015
Net Earnings	\$296.5	\$326.5	\$282.9
Other comprehensive earnings (loss)			
Foreign currency translation adjustments	52.7	(39.8)	(42.7)
Unrealized net (loss) gain on cash flow derivative instruments, less related income tax benefit (provision) of \$0.7 in 2017, \$0.6 in 2016 and \$(0.2) in 2015	(1.1)	(1.0)	0.3
Change in pension liability less related income tax (provision) benefit of \$(7.5) in 2017, \$5.7 in 2016 and \$(0.5) in 2015	12.1	(9.0)	1.0
Comprehensive Earnings	<u>\$360.2</u>	<u>\$276.7</u>	<u>\$241.5</u>

See accompanying notes which are an integral part of these statements.

[Table of Contents](#)**CONSOLIDATED STATEMENT OF CASH FLOWS**

Years ended December 31 (dollars in millions)

	2017	2016	2015
<b>Operating Activities</b>			
Net earnings	\$ 296.5	\$ 326.5	\$ 282.9
Adjustments to reconcile earnings to cash provided by (used in) operating activities:			
Depreciation and amortization	70.1	65.1	63.0
U.S. Tax Reform income tax expense	81.8	—	—
Pension (income) expense	(9.1)	(6.9)	0.1
Stock based compensation expense	9.9	9.4	8.8
Net changes in operating assets and liabilities, net of acquisitions:			
Current assets and liabilities	(127.8)	68.5	16.8
Noncurrent assets and liabilities	5.0	(16.0)	(19.9)
<b>Cash Provided by Operating Activities</b>	<u>326.4</u>	<u>446.6</u>	<u>351.7</u>
<b>Investing Activities</b>			
Acquisitions of businesses	(43.1)	(90.8)	—
Investments in marketable securities	(583.5)	(563.8)	(428.8)
Proceeds from sales of marketable securities	562.7	435.1	315.4
Capital expenditures	(94.2)	(80.7)	(72.7)
<b>Cash Used in Investing Activities</b>	<u>(158.1)</u>	<u>(300.2)</u>	<u>(186.1)</u>
<b>Financing Activities</b>			
Long-term debt incurred	86.5	74.1	28.1
Common stock repurchases	(139.1)	(135.2)	(128.1)
Net (payments) proceeds from stock option activity	(0.9)	5.7	6.4
Acquisition related contingent payment	(1.7)	—	—
Dividends paid	(96.9)	(84.2)	(67.8)
<b>Cash Used in Financing Activities</b>	<u>(152.1)</u>	<u>(139.6)</u>	<u>(161.4)</u>
Net increase in cash and cash equivalents	16.2	6.8	4.2
Cash and cash equivalents-beginning of year	330.4	323.6	319.4
<b>Cash and Cash Equivalents-End of Year</b>	<u>\$ 346.6</u>	<u>\$ 330.4</u>	<u>\$ 323.6</u>

See accompanying notes which are an integral part of these statements.

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**CONSOLIDATED STATEMENT OF STOCKHOLDERS' EQUITY**

Years ended December 31 (dollars in millions)

	2017	2016	2015
<b>Class A Common Stock</b>			
Balance at the beginning of the year	\$ 131.6	\$ 131.8	\$ 132.2
Conversion of Class A Common Stock	(0.4)	(0.2)	(0.4)
Balance at the end of the year	<u>\$ 131.2</u>	<u>\$ 131.6</u>	<u>\$ 131.8</u>
<b>Common Stock</b>			
Balance at the beginning of the year	\$ 164.4	\$ 164.4	\$ 164.2
Conversion of Class A Common Stock	0.1	—	0.2
Balance at the end of the year	<u>\$ 164.5</u>	<u>\$ 164.4</u>	<u>\$ 164.4</u>
<b>Capital in Excess of Par Value</b>			
Balance at the beginning of the year	\$ 477.6	\$ 469.3	\$ 451.9
Conversion of Class A Common Stock	0.3	0.2	0.2
Issuance of share units	(4.9)	(4.6)	(4.2)
Vesting of share units	(2.9)	(2.0)	(3.2)
Stock based compensation expense	9.2	8.8	8.1
Exercises of stock options	1.4	0.3	1.1
Tax benefit from exercises of stock options and vesting of share units	—	—	10.4
Stock incentives	5.8	5.6	5.0
Balance at the end of the year	<u>\$ 486.5</u>	<u>\$ 477.6</u>	<u>\$ 469.3</u>
<b>Retained Earnings</b>			
Balance at the beginning of the year	\$1,593.0	\$1,350.7	\$1,135.5
Net earnings	296.5	326.5	282.9
Cash dividends on stock	(96.9)	(84.2)	(67.7)
Balance at the end of the year	<u>\$1,792.6</u>	<u>\$1,593.0</u>	<u>\$1,350.7</u>
<b>Accumulated Other Comprehensive Loss</b>			
Balance at the beginning of the year	\$ (363.2)	\$ (313.4)	\$ (272.0)
Foreign currency translation adjustments	52.7	(39.8)	(42.7)
Unrealized net (loss) gain on cash flow derivative instruments, less related income tax benefit (provision) of \$0.7 in 2017, \$0.6 in 2016 and \$(0.2) in 2015	(1.1)	(1.0)	0.3
Change in pension liability less related income tax (provision) benefit of \$(7.5) in 2017, \$5.7 in 2016 and \$(0.5) in 2015	12.1	(9.0)	1.0
Balance at the end of the year	<u>\$ (299.5)</u>	<u>\$ (363.2)</u>	<u>\$ (313.4)</u>
<b>Treasury Stock</b>			
Balance at the beginning of the year	\$ (488.1)	\$ (360.5)	\$ (230.5)
Exercise of stock options, net of 160,856, 54,019 and 418,754 shares surrendered as proceeds and to pay taxes in 2017, 2016 and 2015, respectively	(2.4)	4.0	(5.2)
Stock incentives and directors' compensation	0.2	0.2	0.1
Shares repurchased	(139.1)	(135.2)	(128.1)
Vesting of share units	2.9	3.4	3.2
Balance at the end of the year	<u>\$ (626.5)</u>	<u>\$ (488.1)</u>	<u>\$ (360.5)</u>
<b>Total Stockholders' Equity</b>	<u>\$1,648.8</u>	<u>\$1,515.3</u>	<u>\$1,442.3</u>

See accompanying notes which are an integral part of these statements.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

### 1. Organization and Significant Accounting Policies

**Organization.** A. O. Smith Corporation (A. O. Smith or the Company) is comprised of two reporting segments: North America and Rest of World. The Rest of World segment is primarily comprised of China, Europe and India. Both segments manufacture and market comprehensive lines of residential and commercial gas and electric water heaters, boilers and water treatment products. Both segments primarily manufacture and market in their respective regions of the world. The North America segment also manufactures and markets water system tanks. The Rest of World segment also manufactures and markets in-home air purification products in China.

**Consolidation.** The consolidated financial statements include the accounts of the Company and its wholly owned subsidiaries after elimination of intercompany transactions.

**Use of estimates.** The preparation of financial statements in conformity with accounting principles generally accepted in the United States (U.S.) requires management to make estimates and assumptions that affect the amounts reported in the accompanying financial statements and notes. Actual results could differ from those estimates.

**Fair value of financial instruments.** The carrying amounts of cash, cash equivalents, marketable securities, receivables, floating rate debt and trade payables approximated fair value as of December 31, 2017 and 2016, due to the short maturities or frequent rate resets of these instruments. As of December 31, 2017 and 2016, the carrying value of term notes with insurance companies was approximately \$127.5 million and 134.4 million, respectively, which approximated fair value in both years. The fair value was estimated based on current rates offered for debt with similar maturities.

**Foreign currency translation.** For all subsidiaries outside the U.S., with the exception of its Barbados, Hong Kong and Mexican companies and its non-operating companies in the Netherlands, the Company uses the local currency as the functional currency. For those operations using a functional currency other than the U.S. dollar, assets and liabilities were translated into U.S. dollars at year-end exchange rates, and revenues and expenses were translated at weighted-average exchange rates. The resulting translation adjustments were recorded as a separate component of stockholders' equity. The Barbados, Dutch, Hong Kong and Mexican companies use the U.S. dollar as the functional currency. Gains and losses from foreign currency transactions were included in net earnings and were not significant in 2017, 2016 or 2015.

**Cash and cash equivalents.** The Company considers all highly liquid investments with a maturity of three months or less when purchased to be cash equivalents.

**Marketable securities.** The Company considers all highly liquid investments with maturities greater than 90 days when purchased to be marketable securities. At December 31, 2017, the Company's marketable securities consisted of bank time deposits with original maturities ranging from 180 days to 12 months and were primarily located at investment grade rated banks in China.

**Inventory valuation.** Inventories are carried at lower of cost or market. Cost is determined on the last-in, first-out (LIFO) method for a majority of the Company's domestic inventories, which comprised 59 percent and 61 percent of the Company's total inventory at December 31, 2017 and 2016, respectively. Inventories of foreign subsidiaries, the remaining domestic inventories and supplies were determined using the first-in, first-out (FIFO) method.

**Property, plant and equipment.** Property, plant and equipment are stated at cost. Depreciation is computed primarily by the straight-line method. The estimated service lives used to compute depreciation are generally 25 to 50 years for buildings, three to 20 years for equipment and three to 15 years for software. Maintenance and repair costs are expensed as incurred.

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### 1. Organization and Significant Accounting Policies (continued)

**Goodwill and other intangibles.** Goodwill and indefinite-lived intangible assets are not amortized but are reviewed for impairment on an annual basis. Separable intangible assets, primarily comprised of customer relationships, that are not deemed to have an indefinite life are amortized on a straight-line basis over their estimated useful lives which range from three to 25 years.

**Impairment of long-lived and amortizable intangible assets.** Property, plant and equipment and intangible assets subject to amortization are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. If the sum of the expected undiscounted cash flows is less than the carrying value of the related asset or group of assets, a loss is recognized for the difference between the fair value and carrying value of the asset or group of assets. Such analyses necessarily involve significant judgment.

**Product warranties.** The Company's products carry warranties that generally range from one to ten years and are based on terms that are consistent with the market. The Company records a liability for the expected cost of warranty-related claims at the time of sale. The allocation of the warranty liability between current and long-term is based on expected warranty claims to be paid in the next year as determined by historical product failure rates.

The following table presents the Company's product warranty liability activity in 2017 and 2016:

Years ended December 31 (dollars in millions)	2017	2016
Balance at beginning of year	\$140.9	\$139.3
Expense	39.7	42.5
Claims settled	(38.2)	(40.9)
Balance at end of year	<u>\$142.4</u>	<u>\$140.9</u>

**Derivative instruments.** The Company utilizes certain derivative instruments to enhance its ability to manage currency as well as raw materials price risk. The Company does not enter into contracts for speculative purposes. The fair values of all derivatives are recorded in the consolidated balance sheets. The change in a derivative's fair value is recorded each period in current earnings or accumulated other comprehensive loss (AOCI), depending on whether the derivative is designated as part of a hedge transaction and if so, the type of hedge transaction. See Note 11, "Derivative Instruments" of the notes to consolidated financial statements for disclosure of the Company's derivative instruments and hedging activities.

**Fair Value Measurements.** Accounting Standards Codification (ASC) 820 *Fair Value Measurements*, among other things, defines fair value, establishes a consistent framework for measuring fair value and expands disclosure for each major asset and liability category measured at fair value on either a recurring basis or nonrecurring basis. ASC 820 clarifies that fair value is an exit price, representing the amount that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants. As such, fair value is a market-based measurement that should be determined based on assumptions that market participants would use in pricing an asset or liability. As a basis for considering such assumptions, ASC 820 establishes a three-tier fair value hierarchy, which prioritizes the inputs used in measuring fair value as follows: (Level 1) observable inputs such as quoted prices in active markets; (Level 2) inputs, other than the quoted prices in active markets, that are observable either directly or indirectly; and (Level 3) unobservable inputs in which there is little or no market data, which require the reporting entity to develop its own assumptions.

Assets and liabilities measured at fair value are based on the market approach which are prices and other relevant information generated by market transactions involving identical or comparable assets or liabilities.

Assets measured at fair value on a recurring basis are as follows (dollars in millions):

Fair Value Measurement Using	December 31, 2017	December 31, 2016
Quoted prices in active markets for identical assets (Level 1)	\$ 475.1	\$ 424.5

There were no changes in the valuation techniques used to measure fair values on a recurring basis.

## 1. Organization and Significant Accounting Policies (continued)

**Revenue recognition.** The Company recognizes revenue upon transfer of title, which occurs upon shipment of the product to the customer except for certain export sales where transfer of title occurs when the product reaches the customer destination.

Contracts and customer purchase orders are used to determine the existence of a sales arrangement. Shipping documents are used to verify shipment. The Company assesses whether the selling price is fixed or determinable based upon the payment terms associated with the transaction and whether the sales price is subject to refund or adjustment. The Company assesses collectability based on the creditworthiness of the customer as determined by credit checks and analysis, as well as the customer's payment history. The allowance for doubtful accounts was \$5.3 million and \$6.3 million at December 31, 2017 and 2016, respectively.

Reserves for customer returns for defective product are based on historical experience with similar types of sales. Accruals for rebates and incentives are based on pricing agreements and are tied to sales volume. Changes in such accruals may be required if future returns differ from historical experience or if actual sales volume differs from estimated sales volume. Rebates and incentives are recognized as a reduction of sales.

Shipping and handling costs billed to customers are included in net sales and the related costs are included in cost of products sold.

**Advertising.** The majority of advertising costs are charged to operations as incurred and amounted to \$126.9 million, \$113.9 million and \$102.2 million during 2017, 2016 and 2015, respectively. Included in total advertising costs are expenses associated with store displays for water heater, water treatment and air purification products in China that are amortized over 12 to 24 months which totaled \$43.0 million, \$37.0 million and \$27.4 million during 2017, 2016 and 2015, respectively.

**Research and development.** Research and development costs are charged to operations as incurred and amounted to \$86.4 million, \$80.1 million and \$73.7 million during 2017, 2016 and 2015, respectively.

**Environmental costs.** The Company accrues for costs associated with environmental obligations when such costs are probable and reasonably estimable. Costs of estimated future expenditures are not discounted to their present value. Recoveries of environmental costs from other parties are recorded as assets when their receipt is considered probable. The accruals are adjusted as facts and circumstances change.

**Stock-based compensation.** Compensation cost is recognized using the straight-line method over the vesting period of the award and forfeitures are recognized as they occur. The Company adopted amended ASC 718 *Compensation – Stock Compensation* as of January 1, 2016. Refer to the Recent Accounting Pronouncements section later in this footnote for additional information on the adoption of this pronouncement. As required under amended ASC 718, the Company recognized \$11.6 million and \$5.9 million of discrete income tax benefits on settled stock based compensation awards during 2017 and 2016, respectively. As required under previous guidance, in the year ended December 31, 2015, the Company recognized \$10.4 million of excess tax deductions as cash flows provided by financing activities.

**Income taxes.** The provision for income taxes is computed using the asset and liability method, in accordance with ASC 740 *Income Taxes*, under which deferred tax assets and liabilities are recognized for the expected future tax consequences of temporary differences between the financial reporting and tax bases of assets and liabilities and for operating losses and tax credit carryforwards. Deferred tax assets and liabilities are measured using the currently enacted tax rates that apply to taxable income in effect for the years in which those tax assets are expected to be realized or settled and are classified as noncurrent in the consolidated balance sheet. The Company records a valuation allowance to reduce deferred tax assets to the amount that is believed more likely than not to be realized.

The Company recognizes the tax benefit from an uncertain tax position only if it is more likely than not the tax position will be sustained on examination by the taxing authorities, based on the technical merits of the position. The tax benefits recognized in the financial statements from such positions are then measured based on the largest benefit that has a greater than 50 percent likelihood of being realized upon settlement.

## 1. Organization and Significant Accounting Policies (continued)

**Earnings per share of common stock.** The Company is not required to use the two-class method of calculating earnings per share since its Class A Common Stock and Common Stock have equal dividend rights. The numerator for the calculation of basic and diluted earnings per share is net earnings. The following table sets forth the computation of basic and diluted weighted-average shares used in the earnings per share calculations:

	2017	2016	2015
Denominator for basic earnings per share - weighted-average shares outstanding	172,666,056	174,712,683	177,622,280
Effect of dilutive stock options, restricted stock and share units	1,939,133	2,112,597	1,386,900
Denominator for diluted earnings per share	<u>174,605,189</u>	<u>176,825,280</u>	<u>179,009,180</u>

On April 11, 2016, the Company's stockholders approved a proposal to increase the Company's authorized shares of Common Stock and on September 7, 2016, the Company's Board of Directors declared a two-for-one stock split of the Company's Class A Common Stock and Common Stock (including treasury shares) in the form of a 100 percent stock dividend to stockholders of record on September 21, 2016 and payable on October 5, 2016. All references in the financial statements and footnotes to the number of shares outstanding, price per share, per share amounts and stock based compensation data have been recast to reflect the stock split for all periods presented.

**Reclassifications.** Certain amounts from prior years have been reclassified to conform with current year presentation.

### Recent Accounting Pronouncements

In August 2017, the Financial Accounting Standards Board (FASB) amended ASC 815, *Derivatives and Hedging* (issued under Accounting Standards Update (ASU) 2017-12, "Targeted Improvements to Accounting for Hedging Activities"). Under this amendment, more hedging strategies are eligible for hedge accounting treatment. ASU 2017-12 also amends the presentation and disclosure requirements regarding derivatives and hedging and changes how companies assess effectiveness. The amendment requires adoption on January 1, 2019 and permits early adoption in any interim or annual period. The Company does not expect that the adoption of ASU 2017-12 will have a material impact on its consolidated balance sheets, statements of earnings or statements of cash flows.

In May 2017, the FASB amended ASC 718, *Compensation – Stock Compensation* (issued under ASU 2017-09, "Scope of Modification Accounting"). This amendment clarifies when changes to the terms or conditions of share-based payment awards must be accounted for as a modification. Under this amendment, modification accounting must be used if three conditions are met: the fair value changes, the vesting conditions change, or the classification of the award changes due to the changes in terms or conditions. The amendment requires adoption on January 1, 2018. The Company does not expect that the adoption of ASU 2017-09 will have a material impact on its consolidated balance sheets, statements of earnings or statements of cash flows.

In March 2017, the FASB amended ASC 715, *Compensation – Retirement Benefits* (issued under ASU 2017-07, "Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost"). This amendment changes the way net periodic benefit cost associated with employer-sponsored defined benefit plans is presented in the statement of earnings. Under the amendment, the service cost component of net periodic benefit cost is included in the same lines in the statement of earnings as other employee compensation costs and the other components of net periodic benefit cost must be presented separately outside of income from operations. The amendment requires adoption on January 1, 2018. The Company does not expect the adoption of ASU 2017-07 to have a material impact on its consolidated balance sheets, statements of earnings or statements of cash flows.

In January 2017, the FASB amended ASC 350, *Intangibles – Goodwill and Other* (issued under ASU 2017-04, "Simplifying the Test for Goodwill Impairment"). This amendment simplifies the test for goodwill impairment by only requiring an entity to perform an annual or interim goodwill impairment test by comparing the fair value of a reporting unit with its carrying amount and recognize an impairment charge for the amount that the carrying amount exceeds the reporting unit's fair value. Any loss recognized should not exceed the total amount of goodwill allocated to that reporting unit. The amendment requires adoption on January 1, 2020. The Company does not expect that the adoption of ASU 2017-04 will have a material impact on its consolidated balance sheets, statements of earnings or statements of cash flows.

**1. Organization and Significant Accounting Policies (continued)**

In October 2016, the FASB amended ASC 740, *Income Taxes* (issued under ASU 2016-16). This amendment requires that the income tax consequences of an intra-entity transfer of an asset other than inventory be recognized when the transfer occurs. The amendment is effective for the Company beginning January 1, 2018. This amendment is required to be applied on a modified retrospective basis through a cumulative-effect adjustment directly to retained earnings. The Company does not expect the adoption of amended ASU 2016-16 will have a material impact on the Company's consolidated balance sheets, statement of earnings or statements of cash flows.

In August 2016, the FASB amended ASC 230, *Statement of Cash Flows* (issued under ASU 2016-15, "Clarification of Certain Cash Receipts and Cash Payments"). This amendment clarified reporting for contingent consideration payments made after a business combination depending on how soon after the acquisition the payments are made. The Company adopted ASU 2016-15 effective January 1, 2017.

In March 2016, the FASB amended ASC 718, *Compensation—Stock Compensation* (issued under ASU 2016-09). This amendment simplified several aspects of the accounting for share-based payment transactions. The Company adopted this amendment effective January 1, 2016. The amendment requires the benefits or deficiencies of tax deductions in excess of or less than the recognized compensation cost to be recorded as income tax benefits or expense in the consolidated statement of earnings in the periods in which they occur. The amendment also eliminated previous guidance that required unrecognized future excess income tax benefits to be considered used to repurchase shares in the calculation of diluted shares which resulted in lower diluted shares outstanding than the calculation under the amendment. The Company applied this guidance prospectively. As such, the Company recognized \$11.6 million and \$5.9 million of discrete income tax benefits associated with excess tax benefits on settled stock based compensation awards during 2017 and 2016, respectively. The Company's diluted shares outstanding for the 2017 and 2016 increased as compared to the way it was calculated under previous guidance.

In February 2016, the FASB amended ASC 842, *Leases* (issued under ASU 2016-02). This amendment requires the recognition of lease assets and lease liabilities on the balance sheet for most leasing arrangements currently classified as operating leases. This amendment is effective for periods beginning January 1, 2019. The Company is in the process of completing its analysis of its lease population and does not expect the adoption of ASU 2016-02 to have a material impact on its consolidated balance sheets, statements of earnings and statements of cash flows.

In May 2014, the FASB issued ASC 606-10, *Revenue from Contracts with Customers* (issued under ASU 2014-09). ASU 2014-09 will replace all existing revenue recognition guidance when effective. In July 2015, the FASB approved a one year deferral of the effective date to periods beginning January 1, 2018. The Company has completed its review of its customer contracts and its analysis of the impact of the disclosure requirements of ASU 2014-09. The Company will adopt ASU 2014-09 on January 1, 2018 using the full retrospective method. The adoption of ASU 2014-09 will not have a material impact on our financial statements on an on-going basis.

## 2. Acquisitions

On September 5, 2017, the Company acquired 100 percent of the shares of Hague Quality Water International (Hague), an Ohio-based water softener company. With the addition of Hague, the Company grew its North America water treatment platform. Hague is included in the Company's North America segment for reporting purposes.

The Company paid an aggregate cash purchase price of \$43.1 million, net of \$4.1 million of cash acquired. In addition, the Company established a \$1.5 million holdback liability to satisfy any potential obligations of the former owners of Hague, should they arise, otherwise the amount will be paid to the former owners of Hague on September 5, 2018. The Company also agreed to make a contingent payment of up to an additional \$2.0 million based on the amount by which products manufactured by or branded Hague increase over the two-year period ending June 30, 2019. In addition, the Company incurred acquisition-related costs of approximately \$0.2 million. As of the acquisition date and December 31, 2017, the Company estimated the fair value of the holdback liability and additional contingent consideration at \$1.5 million and \$2.0 million, respectively, and has recorded liabilities for those amounts.

The following table summarizes the allocation of fair value of the assets acquired and liabilities assumed at the date of acquisition of Hague for purposes of allocating the purchase price. The Company is in the process of finalizing the fair value estimates; therefore the allocation of the purchase price is subject to refinement. The \$12.8 million of acquired intangible assets was comprised of \$1.1 million of trade names that are not subject to amortization and \$11.7 million of customer lists being amortized over 18 years.

September 5, 2017 (dollars in millions)	
Current assets, net of cash acquired	\$ 7.8
Property, plant and equipment	6.9
Intangible assets	12.8
Goodwill	22.2
Total assets acquired	49.7
Current liabilities	(5.6)
Long-term liabilities	(1.0)
Total liabilities assumed	(6.6)
Net assets acquired	<u>\$43.1</u>

The acquisition was accounted for using the purchase method of accounting, and accordingly, the results of operations have been included in the Company's consolidated financial statements from September 5, 2017, the date of acquisition. Net sales and pre-tax earnings associated with Hague included in the consolidated statement of earnings totaled \$8.6 million and \$2.0 million, respectively, which included \$2.2 million of operating earnings less \$0.2 million of acquisition-related costs incurred by the Company resulting from the acquisition.

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### 2. Acquisitions (continued)

On August 8, 2016, the Company acquired 100 percent of the shares of Aquasana, Inc. (Aquasana), a Texas-based water treatment company. With the addition of Aquasana, the Company entered the North America water treatment market. Aquasana is included in the Company's North America segment for reporting purposes.

The Company paid an aggregate cash purchase price of \$85.1 million, net of \$1.9 million of cash acquired. In addition, the Company incurred acquisition-related costs of approximately \$1.2 million and recorded a holdback liability to satisfy any potential obligations of the former owners of Aquasana to pay any adjustment to the purchase price. As of the acquisition date, the fair value of the holdback liability was \$1.7 million. The Company paid the full holdback liability to the former owners of Aquasana in 2017.

The following table summarizes the allocation of fair value of the assets acquired and liabilities assumed at the date of acquisition of Aquasana. The \$30.0 million of acquired intangible assets was comprised of \$21.5 million of trade names that are not subject to amortization, \$8.3 million of customer lists being amortized over ten years and \$0.2 million of patents being amortized over five years.

August 8, 2016 (dollars in millions)	
Current assets, net of cash acquired	\$ 7.3
Property, plant and equipment	2.7
Intangible assets	30.0
Goodwill	60.4
Total assets acquired	100.4
Current liabilities	(7.1)
Long-term liabilities	(8.2)
Total liabilities assumed	(15.3)
Net assets acquired	<u>\$ 85.1</u>

The acquisition was accounted for using the purchase method of accounting, and accordingly, the results of operations have been included in the Company's financial statements from August 8, 2016, the date of acquisition.

### 3. Statement of Cash Flows

Supplemental cash flow information is as follows:

Years ended December 31 (dollars in millions)	2017	2016	2015
Net change in current assets and liabilities, net of acquisitions:			
Receivables	\$ (75.8)	\$ (15.1)	\$(25.9)
Inventories	(37.5)	(23.4)	(14.7)
Other current assets	(9.0)	(3.2)	(4.6)
Trade payables	(5.1)	101.5	31.0
Accrued liabilities, including payroll and benefits	12.2	6.0	19.8
Income taxes (refundable) payable	(12.6)	2.7	11.2
	<u>\$(127.8)</u>	<u>\$ 68.5</u>	<u>\$ 16.8</u>

**4. Inventories**

December 31 (dollars in millions)	2017	2016
Finished products	\$134.6	\$114.1
Work in process	18.3	13.0
Raw materials	160.5	142.4
Inventories, at FIFO cost	313.4	269.5
LIFO reserve	(22.2)	(18.4)
	<u>\$291.2</u>	<u>\$251.1</u>

The Company recognized after-tax LIFO (income) expense of \$(0.3) million, \$0.3 million and \$1.1 million in 2017, 2016 and 2015, respectively.

**5. Property, Plant and Equipment**

December 31 (dollars in millions)	2017	2016
Land	\$ 11.2	\$ 11.0
Buildings	329.9	286.4
Equipment	608.4	533.7
Software	110.6	101.4
	<u>1,060.1</u>	<u>932.5</u>
Less accumulated depreciation and amortization	531.2	470.6
	<u>\$ 528.9</u>	<u>\$461.9</u>

**6. Goodwill and Other Intangible Assets**

Changes in the carrying amount of goodwill during the years ended December 31, 2017 and 2016 consisted of the following:

(dollars in millions)	North America	Rest of World	Total
Balance at December 31, 2015	\$ 361.0	\$ 59.9	\$420.9
Acquisitions	70.0	—	70.0
Currency translation adjustment	1.2	(0.6)	0.6
Balance at December 31, 2016	432.2	59.3	491.5
Acquisitions	22.2	—	22.2
Currency translation adjustment	2.8	0.2	3.0
Balance at December 31, 2017	<u>\$ 457.2</u>	<u>\$ 59.5</u>	<u>\$516.7</u>

The carrying amount of other intangible assets consisted of the following:

December 31 (dollars in millions)	2017			2016		
	Gross Carrying Amount	Accumulated Amortization	Net	Gross Carrying Amount	Accumulated Amortization	Net
<b>Amortizable intangible assets:</b>						
Patents	\$ 3.7	\$ (2.7)	\$ 1.0	\$ 3.7	\$ (2.2)	\$ 1.5
Customer lists	235.8	(93.3)	142.5	224.0	(80.3)	143.7
Total amortizable intangible assets	239.5	(96.0)	143.5	227.7	(82.5)	145.2
<b>Indefinite-lived intangible assets:</b>						
Trade names	165.2	—	165.2	163.1	—	163.1
Total intangible assets	<u>\$404.7</u>	<u>\$ (96.0)</u>	<u>\$308.7</u>	<u>\$390.8</u>	<u>\$ (82.5)</u>	<u>\$308.3</u>

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### 6. Goodwill and Other Intangible Assets (continued)

Amortization expenses of other intangible assets of \$13.7 million, \$13.4 million, and \$14.2 million were recorded in 2017, 2016 and 2015, respectively. In the future, excluding the impact of any future acquisitions, the Company expects amortization expense of approximately \$14.5 million annually and the intangible assets will be amortized over a weighted average period of 12 years.

The Company concluded that no goodwill impairment existed at the time of the annual impairment tests which were performed in the fourth quarters of 2017, 2016 and 2015. No impairments of other intangible assets were recorded in 2017, 2016 and 2015.

### 7. Debt and Lease Commitments

December 31 (dollars in millions)	2017	2016
Bank credit lines, average year-end interest rates of 2.5% for 2017 and 2.4% for 2016	\$ 15.9	\$ 23.6
Revolving credit agreement borrowings, average year-end interest rates of 2.5% for 2017 and 1.7% for 2016	190.0	80.0
Commercial paper, average year-end interest rates of 1.7% for 2017 and 1.1% for 2016	77.0	85.6
Term notes with insurance companies, expiring 2029-2034, average year-end interest rates of 3.4% for 2017 and 3.5% for 2016	122.7	125.5
Canadian term notes with insurance companies, expiring through 2018, average year-end interest rates of 5.3% for 2017 and 2016	4.8	8.9
	<u>410.4</u>	<u>323.6</u>
Less long-term debt due within one year	7.5	7.2
Long-term debt	<u>\$402.9</u>	<u>\$316.4</u>

In December 2016, the Company completed a \$500 million multi-year multi-currency revolving credit agreement with a group of nine banks, which expires on December 15, 2021. The facility has an accordion provision which allows it to be increased up to \$700 million if certain conditions (including lender approval) are satisfied. Borrowings under the Company's bank credit lines and commercial paper borrowings are supported by the revolving credit agreement. As a result of the long-term nature of this facility, the commercial paper and credit line borrowings are classified as long-term debt at December 31, 2017 and 2016. At its option, the Company either maintains cash balances or pays fees for bank credit and services.

On November 28, 2016, the Company issued \$45 million in term notes in two tranches to two insurance companies. Principal payments commence in 2023 and 2028 and the notes mature in 2029 and 2034. The notes have interest rates of 2.87 percent and 3.10 percent. Proceeds of the notes were used to pay down borrowings under the Company's revolving credit facility.

On January 15, 2015, the Company issued \$75 million in term notes to an insurance company. Principle payments commence in 2020 and the notes mature in 2030. The notes have an interest rate of 3.52 percent. Proceeds of the notes were used to pay down borrowings under the Company's revolving credit facility.

Scheduled maturities of long-term debt within each of the five years subsequent to December 31, 2017 are as follows:

Years ending December 31 (dollars in millions)	Amount
2018	\$ 7.5
2019	—
2020	6.8
2021	290.0
2022	6.8

## 7. Debt and Lease Commitments (continued)

Future minimum payments under non-cancelable operating leases relating mostly to office, manufacturing and warehouse facilities total \$47.5 million and are due as follows:

Years ending December 31 (dollars in millions)	Amount
2018	\$ 20.2
2019	4.9
2020	3.6
2021	3.1
2022	2.5
Thereafter	13.2

Rent expense, including payments under operating leases, was \$29.4 million, \$29.8 million and \$28.8 million in 2017, 2016 and 2015, respectively.

Interest paid by the Company was \$10.0 million, \$7.2 million and \$6.4 million in 2017, 2016 and 2015, respectively. The Company capitalized interest expense of \$0.7 million, \$0.2 million and \$0.2 million in 2017, 2016 and 2015, respectively.

## 8. Stockholders' Equity

The Company's authorized capital consists of three million shares of Preferred Stock \$1 par value, 27 million shares of Class A Common Stock \$5 par value, and 240 million shares of Common Stock \$1 par value. The Common Stock has equal dividend rights with Class A Common Stock and is entitled, as a class, to elect one-third of the Board of Directors and has 1/10th vote per share on all other matters. Class A Common Stock is convertible to Common Stock on a one for one basis.

There were 73,792 shares during 2017, 60,045 shares during 2016 and 67,544 shares during 2015, of Class A Common Stock converted into Common Stock. Regular dividends paid on the A. O. Smith Corporation Class A Common Stock and Common Stock amounted to \$0.56, \$0.48 and \$0.38 per share in 2017, 2016 and 2015, respectively.

The Company completed a two-for-one stock split on October 5, 2016. Amounts have been adjusted to reflect the stock split.

In 2015, the Company's Board of Directors authorized the purchase of an additional 4,000,000 shares of the Company's Common Stock. In 2016, the Company's Board of Directors authorized the purchase of an additional 3,000,000 shares of the Company's Common Stock. Under the share repurchase program, the Company's Common Stock may be purchased through a combination of a Rule 10b5-1 automatic trading plan and discretionary purchases in accordance with applicable securities laws. The number of shares purchased and the timing of the purchase will depend on a number of factors, including share price, trading volume and general market conditions, as well as on working capital requirements, general business conditions and other factors, including alternative investment opportunities. The share repurchase authorization remains effective until terminated by the Board of Directors which may occur at any time, subject to the parameters of any Rule 10b5-1 automatic trading plan that the Company may then have in effect. In 2017, the Company purchased 2,533,350 shares at a total cost of \$139.1 million. As of December 31, 2017, there were 2,373,053 shares remaining on the existing repurchase authorization. In 2016, the Company purchased 3,273,109 shares at a cost of \$135.2 million. In 2015, the Company purchased 3,816,474 shares at a cost of \$128.1 million.

At December 31, 2017, a total of 130,380 and 18,914,082 shares of Class A Common Stock and Common Stock, respectively, were held as treasury stock. At December 31, 2016, a total of 130,380 and 17,135,628 shares of Class A Common Stock and Common Stock, respectively, were held as treasury stock.

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**8. Stockholders' Equity (continued)**

Accumulated other comprehensive loss is as follows:

December 31 (dollars in millions)	2017	2016
Cumulative foreign currency translation adjustments	\$ (26.5)	\$ (79.2)
Unrealized net (loss) gain on cash flow derivative instruments less related income tax benefit (provision) of \$0.6 in 2017 and \$(0.1) in 2016	(0.9)	0.2
Pension liability less related income tax benefit of \$175.9 in 2017 and \$183.4 in 2016	(272.1)	(284.2)
	<u>\$ (299.5)</u>	<u>\$ (363.2)</u>

Changes to accumulated other comprehensive loss by component are as follows:

	Years ended December 31,	
	2017	2016
<b>Cumulative foreign currency translation</b>		
Balance at beginning of period	\$ (79.2)	\$ (39.4)
Other comprehensive gain (loss) before reclassifications	52.7	(39.8)
Balance at end of period	<u>(26.5)</u>	<u>(79.2)</u>
<b>Unrealized net gain on cash flow derivatives</b>		
Balance at beginning of period	0.2	1.2
Other comprehensive losses before reclassifications	(0.5)	(0.9)
Realized gains on derivatives reclassified to cost of products sold (net of tax provision of \$0.4 and \$0.1 in 2017 and 2016, respectively) <sup>(1)</sup>	(0.6)	(0.1)
Balance at end of period	<u>(0.9)</u>	<u>0.2</u>
<b>Pension liability</b>		
Balance at beginning of period	(284.2)	(275.2)
Other comprehensive gain (loss) before reclassifications	1.4	(18.8)
Amounts reclassified from accumulated other comprehensive loss <sup>(1)</sup>	10.7	9.8
Balance at end of period	<u>(272.1)</u>	<u>(284.2)</u>
<b>Total accumulated other comprehensive loss, end of period</b>	<u>\$ (299.5)</u>	<u>\$ (363.2)</u>
(1) Amounts reclassified from accumulated other comprehensive loss:		
Realized gains on derivatives reclassified to cost of products sold	(1.0)	(0.2)
Tax provision	0.4	0.1
Reclassification net of tax	<u>\$ (0.6)</u>	<u>\$ (0.1)</u>
Amortization of pension items:		
Actuarial losses	\$ 17.9 <sup>(2)</sup>	\$ 17.5 <sup>(2)</sup>
Prior year service cost	(0.4) <sup>(2)</sup>	(1.5) <sup>(2)</sup>
	17.5	16.0
Tax benefit	(6.8)	(6.2)
Reclassification net of tax	<u>\$ 10.7</u>	<u>\$ 9.8</u>

(2) These accumulated other comprehensive loss components are included in the computation of net periodic benefit cost. See Note 10 - Pensions and Other Post-retirement Benefits for additional details

## 9. Stock Based Compensation

The Company adopted the A. O. Smith Combined Incentive Compensation Plan (the “Plan”) effective January 1, 2007. The Plan was reapproved by stockholders on April 16, 2012. The Plan is a continuation of the A. O. Smith Combined Executive Incentive Compensation Plan which was originally approved by shareholders in 2002. The number of shares available for granting of options or share units at December 31, 2017, was 2,885,001. Upon stock option exercise or share unit vesting, shares are issued from treasury stock.

Total stock based compensation expense recognized in 2017, 2016 and 2015 was \$9.9 million, \$9.4 million and \$8.8 million, respectively.

### Stock options

The stock options granted in 2017, 2016 and 2015 have three year pro rata vesting from the dates of grant. Stock options are issued at exercise prices equal to the fair value of Common Stock on the date of grant. For active employees, all options granted in 2017, 2016 and 2015 expire ten years after date of grant. Stock option compensation expense recognized in 2017, 2016 and 2015 was \$4.7 million, \$4.5 million and \$4.0 million, respectively. Included in the stock option expense recognized in 2017, 2016 and 2015 is expense associated with the accelerated vesting of stock option awards for certain employees who either are retirement eligible or become retirement eligible during the vesting period.

Changes in option shares, all of which are Common Stock, were as follows:

	Weighted-Avg. Per Share Exercise Price	Years Ended December 31			(dollars in millions) Aggregate Intrinsic Value
		2017	2016	2015	
<b>Outstanding at beginning of year</b>	\$ 21.69	2,664,333	2,653,558	3,154,006	
<b>Granted</b>					
2017—\$50.16 to \$50.16 per share		358,150			
2016—\$31.49 to \$46.93 per share			553,370		
2015—\$23.24 to \$25.34 per share				484,990	
<b>Exercised</b>					
2017—\$4.75 to \$31.67 per share		(752,603)			\$ 12.7
2016—\$4.75 to \$30.77 per share			(531,933)		7.5
2015—\$4.10 to \$17.46 per share				(978,208)	10.2
<b>Forfeited</b>					
2017—\$30.77 to \$50.16 per share		(6,754)			
2016—\$23.24 to \$46.93 per share			(10,662)		
2015—\$17.46 to \$23.24 per share				(7,230)	
<b>Outstanding at end of year</b>					
(2017—\$4.75 to \$50.16 per share)	27.73	<u>2,263,126</u>	<u>2,664,333</u>	<u>2,653,558</u>	
<b>Exercisable at end of year</b>	20.48	<u>1,387,259</u>	<u>1,602,651</u>	<u>1,544,186</u>	

The aggregate intrinsic value for the outstanding and exercisable options as of December 31, 2017 is \$75.9 million and \$56.6 million, respectively. The average remaining contractual life for outstanding and exercisable options is seven years and six years, respectively.

**9. Stock Based Compensation (continued)**

The following table summarizes weighted-average information by range of exercise prices for stock options outstanding and exercisable at December 31, 2017:

Range of Exercise Prices	Options Outstanding at December 31, 2017	Weighted-Average Exercise Price	Options Exercisable at December 31, 2017	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Life
\$4.75 to \$11.50	414,134	\$ 9.56	414,134	\$ 9.56	4 years
\$17.46 to \$25.34	556,847	20.58	556,847	20.58	7 years
\$26.47 to \$50.16	1,292,145	36.63	416,278	31.20	8 years
	<u>2,263,126</u>		<u>1,387,259</u>		

The weighted-average fair value per option at the date of grant during 2017, 2016 and 2015, using the Black-Scholes option-pricing model, was \$13.04, \$8.03 and \$8.59, respectively. Assumptions were as follows:

	2017	2016	2015
Expected life (years)	5.7	5.8	5.9
Risk-free interest rate	2.4%	1.7%	2.0%
Dividend yield	1.0%	1.3%	1.0%
Expected volatility	26.5%	27.7%	29.3%

The expected life of options for purposes of these models is based on historical exercise behaviors. The risk free interest rates for purposes of these models are based on the U.S. Treasury yield curve in effect on the date of grant for the respective expected lives of the option. The expected dividend yields for purposes of these models are based on the dividends paid in the preceding four quarters divided by the grant date market value of the Common Stock. The expected volatility for purposes of these models is based on the historical volatility of the Common Stock.

*Stock Appreciations Rights (SARs)*

Certain non-U.S.-based employees were granted SARs. Each SAR award grants the employee the right to receive cash equal to the excess of the share price of the Company's Common Stock on the date that a participant exercises such right over the grant date value of the SAR. SARs granted have three year pro rata vesting from the date of grant. SARs were issued at exercise prices equal to the fair value of the Company's Common Stock on the date of grant and expire ten years from the date of grant. The fair value and compensation expense for SARs are remeasured at each reporting period using the Black-Scholes option-pricing model, using assumptions similar to stock option awards. No SARs were granted in 2017 or 2016. As of December 31, 2017, there were 23,660 SARs outstanding and 15,774 were exercisable. In 2016, there were 24,940 SARs outstanding and 8,320 were exercisable. In 2015, the Company granted 26,230 SARs and no SARs were exercisable. Stock based compensation expense attributable to SARs was not material in 2017, 2016 and 2015.

*Restricted stock and share units*

Participants may also be awarded shares of restricted stock or share units under the Plan. The Company granted 107,853, 160,465 and 152,192 share units under the plan in 2017, 2016 and 2015, respectively.

The share units were valued at \$5.4 million, \$5.2 million and \$4.7 million at the date of issuance in 2017, 2016 and 2015, respectively, and will be recognized as compensation expense ratably over the three-year vesting period; however, included in share based compensation is expense associated with the accelerated vesting of share unit awards for certain employees who either are retirement eligible or become retirement eligible during the vesting period. Compensation expense of \$5.2 million, \$4.9 million and \$4.8 million was recognized in 2017, 2016 and 2015, respectively. Certain non-U.S.-based employees receive the cash value of vested shares at the vesting date in lieu of shares.

## 9. Stock Based Compensation (continued)

A summary of share unit activity under the plan is as follows:

	Number of Units	Weighted-Average Grant Date Value
Outstanding at January 1, 2017	544,055	\$ 27.35
Granted	107,853	50.17
Vested	(213,863)	23.25
Forfeited/cancelled	(4,755)	34.25
Outstanding at December 31, 2017	<u>433,290</u>	<u>34.96</u>

Total compensation expense for share units not yet recognized is \$2.2 million at December 31, 2017. The weighted average period over which the expense is expected to be recognized is 11 months.

## 10. Pension and Other Post-retirement Benefits

The Company provides retirement benefits for all U.S. employees including benefits for employees of previously owned businesses which were earned up to the date of sale. The Company also has two foreign pension plans, neither of which is material to the Company's financial position.

The Company has a defined contribution plan which matches 100 percent of the first one percent of contributions made by participating employees and matches 50 percent of the next five percent of employee contributions. The Company also has defined contribution plans for certain hourly employees which provide for matching Company contributions.

The Company also has a defined benefit plan for salaried employees and its non-union hourly workforce. In 2009, the Company announced U.S. employees hired after January 1, 2010, would not participate in the defined benefit plan, and benefit accruals for the majority of current salaried and hourly employees sunset on December 31, 2014. Beginning in 2015, an additional Company contribution is being made to the defined contribution plan in lieu of benefits earned in a defined benefit plan. The Company also has defined benefit and contribution plans for certain union hourly employees.

The Company has unfunded defined-benefit post-retirement plans covering certain hourly and salaried employees that provide medical and life insurance benefits from retirement to age 65. Certain hourly employees retiring after January 1, 1996, are subject to a maximum annual benefit and salaried employees hired after December 31, 1993, are not eligible for post-retirement medical benefits.

As of December 31, 2015, the Company changed the method used to estimate the service and interest components of net periodic benefit cost for its pension plan and its post-retirement benefit plan. This change compared to the previous method resulted in a \$7.7 million and \$7.1 million decrease in the service and interest components for pension cost in 2017 and 2016, respectively compared to 2015. Historically, the Company estimated the service and interest cost components utilizing a single weighted-average discount rate derived from the yield curve used to measure the benefit obligation at the beginning of the period. The Company has elected to utilize an approach that discounts the individual expected cash flows underlying the service cost and interest cost using the applicable spot rates derived from the yield curve used in the determination of the benefit obligation to the relevant projected cash flows. This change was made to provide a more precise measurement of service and interest costs by improving the correlation between the projected benefit cash flows to the corresponding spot yield curve rates.

This change did not affect the measurement of the total benefit obligations but reduced the service and interest cost for the pension plan. The Company accounted for this change as a change in accounting estimate that is inseparable from a change in accounting principle and accordingly accounted for it prospectively beginning January 1, 2016.

**10. Pension and Other Post-retirement Benefits (continued)**
**Obligations and Funded Status**
**Pension and Post-Retirement Disclosure Information under ASC 715, Compensation – Retirement Benefits (ASC 715)**

The following tables present the changes in benefit obligations, plan assets and funded status for domestic pension and post-retirement plans and the components of net periodic benefit costs.

Years ended December 31 (dollars in millions)	Pension Benefits		Post-retirement Benefits	
	2017	2016	2017	2016
<b>Accumulated benefit obligation (ABO) at December 31</b>	\$ 921.8	\$ 894.3	N/A	N/A
<b>Change in projected benefit obligations (PBO)</b>				
PBO at beginning of year	\$(895.8)	\$(892.9)	\$ (6.6)	\$ (6.6)
Service cost	(1.8)	(1.8)	(0.1)	(0.1)
Interest cost	(30.0)	(30.6)	(0.3)	(0.2)
Participant contributions	—	—	(0.1)	—
Plan amendments	—	(0.7)	—	—
Actuarial loss including assumption changes	(54.3)	(31.0)	(1.1)	(0.2)
Benefits paid	59.2	61.2	0.6	0.5
PBO at end of year	<u>\$(922.7)</u>	<u>\$(895.8)</u>	<u>\$ (7.6)</u>	<u>\$ (6.6)</u>
<b>Change in fair value of plan assets</b>				
Plan assets at beginning of year	\$ 787.0	\$ 759.0	\$ —	\$ —
Actual return on plan assets	116.5	57.0	—	—
Contribution by the company	30.5	32.2	0.4	0.5
Participant contributions	—	—	0.1	—
Benefits paid	(59.2)	(61.2)	(0.5)	(0.5)
Plan assets at end of year	<u>\$ 874.8</u>	<u>\$ 787.0</u>	<u>\$ —</u>	<u>\$ —</u>
<b>Funded status</b>	<u>\$ (47.9)</u>	<u>\$(108.8)</u>	<u>\$ (7.6)</u>	<u>\$ (6.6)</u>
<b>Amount recognized in the balance sheet</b>				
Current liabilities	\$ (0.5)	\$ (0.5)	\$ (0.3)	\$ (0.4)
Non-current liabilities	(47.4)	(108.3)	(7.3)	(6.2)
Net pension liability at end of year	<u>\$ (47.9)*</u>	<u>\$(108.8)*</u>	<u>\$ (7.6)</u>	<u>\$ (6.6)</u>
<b>Amounts recognized in accumulated other comprehensive loss before tax</b>				
Net actuarial loss (gain)	\$ 451.8	\$ 473.5	\$ (0.8)	\$ (2.0)
Prior service cost	(0.5)	(0.9)	(2.6)	(2.9)
Total recognized in accumulated other comprehensive loss	<u>\$ 451.3</u>	<u>\$ 472.6</u>	<u>\$ (3.4)</u>	<u>\$ (4.9)</u>

\* In addition, the Company has a liability for a foreign pension plan of \$0.2 million and \$0.2 million at December 31, 2017 and 2016, respectively.

**10. Pension and Other Post-retirement Benefits (continued)**

Years ended December 31 (dollars in millions)	Pension Benefits			Post-retirement Benefits		
	2017	2016	2015	2017	2016	2015
<b>Net periodic benefit cost</b>						
Service cost	\$ 1.8	\$ 1.8	\$ 1.9	\$ 0.1	\$ 0.1	\$ 0.1
Interest cost	30.0	30.6	37.6	0.3	0.2	0.3
Expected return on plan assets	(58.4)	(55.9)	(57.5)	—	—	—
Amortization of unrecognized:						
Net actuarial loss (gain)	17.9	17.7	19.1	(0.1)	(0.2)	(0.1)
Prior service cost	(0.4)	(1.1)	(1.0)	(0.4)	(0.4)	(0.4)
Curtailement and other one-time charges	—	—	—	—	—	—
Defined-benefit plan (income) cost	(9.1)	(6.9)	0.1	<u>\$(0.1)</u>	<u>\$(0.3)</u>	<u>\$(0.1)</u>
Various U.S. defined contribution plans cost	12.0	11.6	10.8			
	<u>\$ 2.9</u>	<u>\$ 4.7</u>	<u>\$ 10.9</u>			
<b>Other changes in plan assets and projected benefit obligation recognized in other comprehensive loss</b>						
Net actuarial (gain) loss	\$ (3.8)	\$ 29.9	\$ 17.2	\$ 1.1	\$ 0.2	\$ —
Amortization of net actuarial (loss) gain	(17.9)	(17.7)	(19.1)	0.1	0.2	0.1
Prior service cost	—	0.6	2.5	—	—	(3.7)
Amortization of prior service cost	0.5	1.1	1.0	0.4	0.4	0.4
Total recognized in other comprehensive loss	<u>(21.2)</u>	<u>13.9</u>	<u>1.6</u>	<u>1.6</u>	<u>0.8</u>	<u>(3.2)</u>
<b>Total recognized in net periodic (benefit) cost and other comprehensive loss</b>	<u>\$(30.3)</u>	<u>\$ 7.0</u>	<u>\$ 1.7</u>	<u>\$ 1.5</u>	<u>\$ 0.5</u>	<u>\$(3.3)</u>

The estimated net actuarial loss and prior service cost for the pension plans that will be amortized from accumulated other comprehensive loss into net periodic benefit cost during 2018 are \$18.7 million and \$(0.4) million, respectively. The estimated net actuarial loss and prior year service cost for the post-retirement benefit plans that will be amortized from accumulated other comprehensive loss into net periodic benefit cost during 2018 are \$(0.1) million and \$(0.4) million, respectively. As permitted under ASC 715, the amortization of any prior service cost was previously determined using a straight-line amortization of the cost over the average remaining service period of employees expected to receive benefits under the plan. Beginning in 2015 the amortization occurs over the average remaining life expectancy of participants expected to receive benefits under the plan as permitted under ASC 715.

The 2017 and 2016 after tax adjustments for additional minimum pension liability resulted in other comprehensive gain (loss) of \$12.1 million and \$(9.0) million, respectively.

Actuarial assumptions used to determine benefit obligations at December 31 are as follows:

	Pension Benefits		Post-retirement Benefits	
	2017	2016	2017	2016
Discount rate	3.65%	4.15%	3.79%	4.33%
Average salary increases	n/a	4.00%	n/a	n/a

Actuarial assumptions used to determine net periodic benefit cost for the year ended December 31 are as follows:

Years ended December 31	Pension Benefits			Post-retirement Benefits		
	2017	2016	2015	2017	2016	2015
Discount rate	4.15%	4.40%	4.05%	4.40%	4.55%	4.00%
Expected long-term return on plan assets	7.50%	7.50%	7.75%	n/a	n/a	n/a
Rate of compensation increase	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%

**10. Pension and Other Post-retirement Benefits (continued)****Assumptions**

In developing the expected long-term rate of return on plan assets assumption, the Company evaluated its pension plan's target and actual asset allocation and expected long-term rates of return of equity and bond indices. The Company also considered its pension plan's historical ten-year and 25-year compounded annualized returns of 6.3 percent and 9.2 percent, respectively.

**Assumed health care cost trend rates**

Assumed health care cost trend rates as of December 31 are as follows:

	<u>2017</u>	<u>2016</u>
Health care cost trend rate assumed for next year	6.50%	6.50%
Rate to which the cost trend rate is assumed to decline (the ultimate trend rate)	5.00%	5.00%
Year that the rate reaches the ultimate trend rate	2021	2021

A one-percentage-point change in the assumed health care cost trend rates would not result in a material impact on the Company's consolidated financial statements.

**Plan Assets**

The Company's pension plan weighted asset allocations as of December 31 by asset category are as follows:

<u>Asset Category</u>	<u>2017</u>	<u>2016</u>
Equity securities	45%	48%
Debt securities	43	37
Real estate	9	10
Private equity	2	4
Other	1	1
	<u>100%</u>	<u>100%</u>

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**10. Pension and Other Post-retirement Benefits (continued)**

The following tables present the fair value measurement of the Company's plan assets as of December 31, 2017 and 2016 (dollars in millions):

Asset Category	Total	December 31, 2017		
		Quoted Prices in Active Markets for Identical Contracts (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Non-observable Inputs (Level 3)
Short-term investments	\$ 15.8	\$ 2.0	\$ 13.8	\$ —
Equity securities				
Common stocks	220.3	220.3	—	—
Commingled equity funds	121.5	—	121.5	—
Fixed income securities				
U.S. treasury securities	46.0	46.0	—	—
Other fixed income securities	219.9	—	219.9	—
Commingled fixed income funds	99.8	—	99.8	—
Other types of investments				
Mutual funds	51.8	—	51.8	—
Real estate funds	77.8	—	—	77.8
Private equity	20.9	—	—	20.9
Total fair value of plan asset investments	\$873.8	\$ 268.3	\$ 506.8	\$ 98.7
Non-investment plan assets	1.0			
Total plan assets	\$874.8			

Asset Category	Total	December 31, 2016		
		Quoted Prices in Active Markets for Identical Contracts (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Non-observable Inputs (Level 3)
Short-term investments	\$ 28.7	\$ 1.1	\$ 7.9	\$ 19.7
Equity securities				
Common stocks	254.0	254.0	—	—
Commingled equity funds	105.6	—	105.6	—
Fixed income securities				
U.S. treasury securities	97.6	97.6	—	—
Other fixed income securities	102.6	—	102.6	—
Commingled fixed income funds	90.3	—	90.3	—
Other types of investments				
Mutual funds	4.5	—	4.5	—
Real estate funds	74.3	—	—	74.3
Private equity	28.0	—	—	28.0
Total fair value of plan asset investments	\$785.6	\$ 352.7	\$ 310.9	\$ 122.0
Non-investment plan assets	1.4			
Total plan assets	\$787.0			

**10. Pension and Other Post-retirement Benefits (continued)**

The short-term investments included in the Company's plan assets consist of cash and cash equivalents. The fair value of the remaining categories of the Company's plan assets are valued as follows: equity securities are valued using the closing stock price on a national securities exchange, which reflects the last reported sales price on the last business day of the year; fixed income securities are valued using institutional bond quotes, which are based on various market and industry inputs; mutual funds and real estate funds are valued using the net asset value of the fund, which is based on the fair value of the underlying securities; and private equity investments are valued at the estimated fair value at the previous quarter end, which is based on the proportionate share of the underlying portfolio investments.

The following table presents a reconciliation of the fair value measurements using significant unobservable inputs (Level 3) as of December 31, 2017 and 2016 (dollars in millions):

	Short term investments	Real estate funds	Private equity	Total
Balance at December 31, 2015	\$ 12.4	\$70.9	\$ 34.3	\$117.6
Actual return (loss) on plan assets:				
Relating to assets still held at the reporting date	—	3.4	(5.5)	(2.1)
Relating to assets sold during the period	—	—	9.3	9.3
Purchases, sales and settlements	7.3	—	(10.1)	(2.8)
Balance at December 31, 2016	19.7	74.3	28.0	122.0
Actual return (loss) on plan assets:				
Relating to assets still held at the reporting date	—	3.5	(5.6)	(2.1)
Relating to assets sold during the period	—	—	7.8	7.8
Purchases, sales and settlements	(19.7)	—	(9.3)	(29.0)
Balance at December 31, 2017	<u>\$ —</u>	<u>\$77.8</u>	<u>\$ 20.9</u>	<u>\$ 98.7</u>

The Company's investment policies employ an approach whereby a diversified blend of equity and bond investments is used to maximize the long-term return of plan assets for a prudent level of risk. Equity investments are diversified across domestic and non-domestic stocks, as well as growth, value, and small to large capitalizations. Bond investments include corporate and government issues, with short-, mid- and long-term maturities, with a focus on investment grade when purchased. The Company's target allocation to equity managers is between 45 to 55 percent with the remainder allocated primarily to bonds, real estate, private equity managers and cash. Investment and market risks are measured and monitored on an ongoing basis through regular investment portfolio reviews, annual liability measurements and periodic asset/liability studies.

The Company's actual asset allocations are in line with target allocations. The Company regularly reviews its actual asset allocation and periodically rebalances its investments to the targeted allocation when considered appropriate.

There was no Company stock included in plan assets at December 31, 2017.

**Cash Flows**

The Company was not required to make a contribution in 2017 but elected to make a \$30 million voluntary contribution. The Company is not required to make a contribution in 2018.

## 10. Pension and Other Post-retirement Benefits (continued)

### Estimated Future Payments

The following benefit payments, which reflect expected future service, as appropriate, are expected to be paid:

Years ending December 31 (dollars in millions)	Pension Benefits	Post-retirement Benefits
2018	\$ 60.5	\$ 0.3
2019	66.6	0.4
2020	68.5	0.4
2021	59.3	0.4
2022	58.6	0.4
2023 – 2027	285.6	2.2

## 11. Derivative instruments

ASC 815 *Derivatives and Hedging*, as amended, requires that all derivative instruments be recorded on the balance sheet at fair value and establishes criteria for designation and effectiveness of the hedging relationships. The accounting for changes in the fair value of a derivative instrument depends on whether it has been designated and qualifies as a part of a hedging relationship and, further, on the type of hedging relationship. For those derivative instruments that are designated and qualify as hedging instruments, the Company must designate the hedging instrument, based upon the exposure hedged, as a fair value hedge, cash flow hedge, or a hedge of a net investment in a foreign operation.

The Company designates that all of its hedging instruments are cash flow hedges. For derivative instruments that are designated and qualify as a cash flow hedge (i.e., hedging the exposure to variability in expected future cash flows that is attributable to a particular risk), gains or losses on the derivative instrument is reported as a component of other comprehensive loss, net of tax, and is reclassified into earnings in the same line item associated with the forecasted transaction and in the same period or periods during which the hedged transaction affects earnings.

The Company utilizes certain derivative instruments to enhance its ability to manage currency exposure as well as raw materials price risk. Derivative instruments are entered into for periods consistent with the related underlying exposures and do not constitute positions independent of those exposures. The Company does not enter into contracts for speculative purposes. The contracts are executed with major financial institutions with no credit loss anticipated for failure of the counterparties to perform.

### *Foreign Currency Forward Contracts*

The Company is exposed to foreign currency exchange risk as a result of transactions in currencies other than the functional currency of certain subsidiaries. The Company utilizes foreign currency forward purchase and sale contracts to manage the volatility associated with foreign currency purchases, sales and certain intercompany transactions in the normal course of business. Principal currencies for which the Company utilizes foreign currency forward contracts include the British pound, Canadian dollar, Euro and Mexican peso.

Gains and losses on these instruments are recorded in accumulated other comprehensive loss, net of tax, until the underlying transaction is recorded in earnings. When the hedged item is realized, gains or losses are reclassified from accumulated other comprehensive loss to the consolidated statement of earnings. The assessment of effectiveness for forward contracts is based on changes in the forward rates. These hedges have been determined to be effective.

The amounts in accumulated other comprehensive loss for cash flow hedges will be reclassified into earnings no later than December 31, 2018.

**11. Derivative instruments (continued)**

The following table summarizes, by currency, the contractual amounts of the Company's foreign currency forward contracts:

December 31 (dollars in millions)	2017		2016	
	Buy	Sell	Buy	Sell
British pound	\$ —	\$ 1.2	\$ —	\$ 1.2
Canadian dollar	—	48.1	—	56.9
Euro	29.3	—	25.4	1.8
Mexican peso	16.3	—	16.9	—
Total	<u>\$45.6</u>	<u>\$49.3</u>	<u>\$42.3</u>	<u>\$59.9</u>

*Commodity Futures Contracts*

In addition to entering into supply arrangements in the normal course of business, the Company also enters into futures contracts to fix the cost of certain raw material purchases, principally steel, with the objective of minimizing changes in cost due to market price fluctuations. The hedging strategy for achieving this objective is to purchase steel futures contracts on the New York Metals Exchange (NYMEX) and copper futures contracts on the open market of the London Metals Exchange (LME) or over the counter contracts based on the LME.

With NYMEX, the Company is required to make cash deposits on unrealized losses on steel derivative contracts.

The after-tax gains and losses of the contracts as of December 31, 2017 were recorded in accumulated other comprehensive loss and will be reclassified into cost of products sold in the periods in which the underlying transactions are recorded in earnings. The after-tax gains and losses of the contracts will be reclassified within one year. Contractual amounts of the Company's commodities futures contracts were immaterial as of December 31, 2017.

The impact of derivative contracts on the Company's financial statements is as follows:

Fair value of derivative instruments designated as hedging instruments under ASC 815:

December 31 (dollars in millions)	Balance Sheet Location	Fair Value	
		2017	2016
Foreign currency contracts	Other current assets	\$ 0.2	\$ 1.9
	Accrued liabilities	(1.8)	(2.0)
Commodities contracts	Other current assets	0.2	0.8
	Accrued liabilities	—	(0.3)
Total derivatives designated as hedging instruments		<u>\$(1.4)</u>	<u>\$ 0.4</u>

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**11. Derivative instruments (continued)**

The effect of derivative instruments on the consolidated statement of earnings is as follows.

Years ended December 31 (dollars in millions)

	Amount of gain (loss) recognized in other comprehensive loss on derivative		Location of gain (loss) reclassified from accumulated other comprehensive loss into earnings	Amount of gain (loss) reclassified from accumulated other comprehensive loss into earnings	
	2017	2016		2017	2016
Derivatives in ASC 815 cash flow hedging relationships					
Foreign currency contracts	\$ (1.1)	\$ (3.8)	Cost of products sold	\$ 0.4	\$ (1.4)
Commodities contracts	0.5	2.4	Cost of products sold	0.6	1.6
	<u>\$ (0.6)</u>	<u>\$ (1.4)</u>		<u>\$ 1.0</u>	<u>\$ 0.2</u>

**12. Income Taxes**

The components of the provision (benefit) for income taxes consisted of the following:

Years ended December 31 (dollars in millions)	2017	2016	2015
<b>Current:</b>			
Federal	\$148.0	\$ 71.6	\$ 82.9
State	9.4	14.5	13.9
International	43.8	34.9	23.6
<b>Deferred:</b>			
Federal	23.5	11.0	(4.2)
State	5.8	5.2	2.2
International	(6.2)	(1.2)	1.2
	<u>\$224.3</u>	<u>\$136.0</u>	<u>\$119.6</u>

The provision for income taxes differs from the U.S. federal statutory rate due to the following items:

Years ended December 31	2017	2016	2015
Provision at U.S. federal statutory rate	35.0%	35.0%	35.0%
State taxes, net of federal benefit	1.9	2.8	2.6
International income tax rate differential - China	(6.5)	(6.2)	(6.8)
International income tax rate differential - other	0.1	0.3	0.2
U.S. manufacturing credit	(1.4)	(1.5)	(1.3)
Research tax credits	(0.3)	(0.3)	(0.3)
Excess tax benefit on stock compensation	(2.2)	(1.1)	—
Other	0.8	0.4	0.3
	<u>27.4%</u>	<u>29.4%</u>	<u>29.7%</u>
U.S. Tax Cuts & Jobs Act (U.S. Tax Reform)	15.7	—	—
	<u>43.1%</u>	<u>29.4%</u>	<u>29.7%</u>

U.S. Tax Reform was enacted on December 22, 2017 and significantly changed U.S. corporate income tax laws. Among other things, U.S. Tax Reform reduced the U.S. corporate income tax rate to 21 percent commencing on January 1, 2018, implemented a territorial tax system and levied a one-time mandatory tax on undistributed earnings of foreign subsidiaries of U.S. companies.

**12. Income Taxes (continued)**

As a result of U.S. Tax Reform, the Company recorded provisional income tax expense of \$81.8 million in the fourth quarter of 2017. The provisional income tax expense resulting from U.S. Tax Reform is included in the provision for income taxes on the Company's consolidated statement of earnings and consisted of two components: \$83.5 million of income tax expense related to the one-time mandatory tax on undistributed foreign earnings and a \$1.7 million income tax benefit resulting from the remeasurement of the Company's U.S. deferred tax assets and liabilities based on the new lower U.S. corporate income tax rate. As permitted under the SEC Staff Accounting Bulletin 118, these amounts may be subject to revisions in 2018. Future revisions may include adjustments to the measurement of accumulated foreign earnings included in the one-time mandatory tax calculation. The ultimate impact of U.S. Tax Reform may differ from the provisional amounts recorded due to future changes in interpretation of the guidance issued.

Components of earnings before income taxes were as follows:

<u>Years ended December 31 (dollars in millions)</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>
U.S.	\$329.9	\$300.9	\$255.7
International	190.9	161.6	146.8
	<u>\$520.8</u>	<u>\$462.5</u>	<u>\$402.5</u>

Total income taxes paid by the Company amounted to \$131.1 million, \$117.4 million, and \$97.5 million in 2017, 2016 and 2015, respectively.

As of December 31, 2017, the Company has \$38.6 million accrued for its estimate of withholding taxes due upon repatriation of undistributed foreign earnings it considers to be not permanently reinvested. As of December 31, 2017, \$815.2 million of cash and cash equivalents and marketable securities were held by its foreign subsidiaries.

The tax effects of temporary differences of assets and liabilities between income tax and financial reporting are as follows:

<u>December 31 (dollars in millions)</u>	<u>2017</u>		<u>2016</u>	
	<u>Assets</u>	<u>Liabilities</u>	<u>Assets</u>	<u>Liabilities</u>
Employee benefits	\$ 30.4	\$ —	\$ 67.5	\$ —
Product liability and warranties	43.4	—	67.1	—
Inventories	—	2.0	—	3.4
Accounts receivable	16.5	—	14.9	—
Property, plant and equipment	—	31.1	—	34.3
Intangibles	—	54.3	—	77.4
Environmental liabilities	2.4	—	2.9	—
Undistributed foreign earnings	—	38.6	—	42.3
Tax loss and credit carryovers	19.8	—	18.2	—
All other	5.5	—	4.3	—
Valuation allowance	(15.0)	—	(13.1)	—
	<u>\$103.0</u>	<u>\$ 126.0</u>	<u>\$161.8</u>	<u>\$ 157.4</u>
Net asset		<u>\$ 23.0</u>	<u>\$ 4.4</u>	

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### 12. Income Taxes (continued)

The Company believes it is more likely than not that it will realize its deferred tax assets through the reduction of future taxable income. The Company considered historical operating results in determining the probability of the realization of the deferred tax assets.

A reconciliation of the beginning and ending amounts of tax loss carryovers, credit carryovers and valuation allowances is as follows:

December 31 (dollars in millions)	Net Operating Losses and Tax Credits		Valuation Allowances	
	2017	2016	2017	2016
Beginning balance	\$ 18.2	\$ 14.6	\$ 13.1	\$ 11.0
Additions	1.6	3.7	1.9	2.1
Reductions	—	(0.1)	—	—
Ending balance	<u>\$ 19.8</u>	<u>\$ 18.2</u>	<u>\$ 15.0</u>	<u>\$ 13.1</u>

The Company has foreign net operating loss carryovers that expire in 2018 through 2025 and state and local net operating loss carryovers that expire between 2018 and 2034.

A reconciliation of the beginning and ending amount of unrecognized benefits is as follows:

(Dollars in millions)	2017	2016
Balance at January 1	\$4.2	\$2.6
Additions for tax positions of prior years	2.0	1.6
Balance at December 31	<u>\$6.2</u>	<u>\$4.2</u>

The amount of unrecognized tax benefits that, if recognized, would affect the effective income tax rate is \$0.6 million. The Company recognizes potential interest and penalties related to unrecognized tax benefits as a component of income tax expense. At December 31, 2017, there was an immaterial amount of interest and penalties accrued. The Company anticipates that there will not be a decrease in the total amount of unrecognized tax benefits in 2018. The Company's U.S. federal income tax returns and its U.S. state and local income tax returns are subject to audit for the years 2015-2017 and 2001-2017, respectively. The Company is subject to non-U.S. income tax audits for the years 2009-2017.

### 13. Commitments and Contingencies

The Company is a potentially responsible party in judicial and administrative proceedings seeking to clean up sites which have been environmentally impacted. In each case the Company has established reserves, insurance proceeds and/or a potential recovery from third parties. The Company believes any environmental claims will not have a material effect on its financial position or results of operations.

The Company is subject to various claims and pending lawsuits for product liability and other matters arising out of the conduct of the Company's business. With respect to product liability claims, the Company has self-insured a portion of its product liability loss exposure for many years. The Company has established reserves and has insurance coverage, which it believes are adequate to cover incurred claims. For the years ended December 31, 2017 and 2016, the Company had \$125 million of product liability insurance for individual losses in excess of \$7.5 million. The Company periodically reevaluates its exposure on claims and lawsuits and makes adjustments to its reserves as appropriate. The Company believes, based on current knowledge, consultation with counsel, adequate reserves and insurance coverage that the outcome of such claims and lawsuits will not have a material adverse effect on the Company's financial position, results of operations or cash flows.

#### 14. Operations by Segment

The Company is comprised of two reporting segments: North America and Rest of World. The Rest of World segment is primarily comprised of China, Europe and India. Both segments manufacture and market comprehensive lines of residential and commercial gas and electric water heaters, boilers and water treatment products. Both segments primarily manufacture and market in their respective regions of the world. The North America segment also manufactures and markets water system tanks. Our Rest of World segment also manufactures and markets in-home air purification products in China.

The accounting policies of the reportable segments are the same as those described in the “Summary of Significant Accounting Policies” outlined in Note 1. Segment earnings, defined by the Company as earnings before interest, taxes, general corporate and corporate research and development expenses, were used to measure the performance of the segments.

Years ended December 31 (dollars in millions)	Net Sales			Earnings		
	2017	2016	2015	2017	2016	2015
North America	\$1,904.8	\$1,743.2	\$1,703.0	\$ 428.6	\$ 385.9	\$ 339.9
Rest of World	1,116.3	965.6	866.1	149.3	129.1	113.0
Inter-segment	(24.4)	(22.9)	(32.6)	—	—	—
Total segments – sales, segment earnings	<u>\$2,996.7</u>	<u>\$2,685.9</u>	<u>\$2,536.5</u>	\$ 577.9	\$ 515.0	\$ 452.9
Corporate expenses				(47.0)	(45.2)	(43.0)
Interest expense				(10.1)	(7.3)	(7.4)
Earnings before income taxes				520.8	462.5	402.5
Provision for income taxes				(224.3)	(136.0)	(119.6)
Net earnings				<u>\$ 296.5</u>	<u>\$ 326.5</u>	<u>\$ 282.9</u>

In 2017, the Company recorded provisional one-time charges of \$81.8 million associated with U.S. Tax Reform, primarily related to the repatriation of undistributed foreign earnings.

In 2017, sales to the North America segment’s two largest customers were \$361.4 million and \$335.2 million which represented 12 percent and 11 percent of the Company’s net sales, respectively. In 2016, sales to the North America segment’s two largest customers were \$311.5 million and \$280.8 million which represented 12 percent and 11 percent of the Company’s net sales, respectively. In 2015, sales to the North America segment’s two largest customers were \$301.7 million and \$287.0 million which represented 12 percent and 11 percent of the Company’s net sales, respectively.

#### Assets, depreciation and capital expenditures by segment

(dollars in millions)	Total Assets (December 31)			Depreciation and Amortization (Years Ended December 31)			Capital Expenditures (Years Ended December 31)		
	2017	2016	2015	2017	2016	2015	2017	2016	2015
North America	\$1,592.5	\$1,515.9	\$1,381.1	\$45.1	\$42.9	\$ 41.9	\$38.5	\$45.9	\$43.5
Rest of World	741.4	584.3	544.2	23.8	21.0	19.8	55.2	34.3	28.4
Corporate	863.4	790.8	703.9	1.2	1.2	1.3	0.5	0.5	0.8
Total	<u>\$3,197.3</u>	<u>\$2,891.0</u>	<u>\$2,629.2</u>	<u>\$70.1</u>	<u>\$65.1</u>	<u>\$ 63.0</u>	<u>\$94.2</u>	<u>\$80.7</u>	<u>\$72.7</u>

The majority of corporate assets consist of cash, cash equivalents, marketable securities and deferred income taxes.

[Table of Contents](#)**14. Operations by Segment (continued)****Net sales and long-lived assets by geographic location**

The following data by geographic area includes net sales based on product shipment destination and long-lived assets based on physical location. Long-lived assets include net property, plant and equipment and other long-term assets.

(dollars in millions)	Long-lived Assets (December 31)				Net Sales (Years Ended December 31)		
	2017	2016	2015		2017	2016	2015
United States	\$303.0	\$292.4	\$297.8	United States	\$1,698.1	\$1,570.7	\$1,531.4
China	250.8	184.3	157.3	China	1,034.9	887.1	787.1
Canada	3.2	3.1	2.7	Canada	163.7	138.7	129.9
Other Foreign	47.1	48.4	55.2	Other Foreign	100.0	89.4	88.1
Total	<u>\$604.1</u>	<u>\$528.2</u>	<u>\$513.0</u>	Total	<u>\$2,996.7</u>	<u>\$2,685.9</u>	<u>\$2,536.5</u>

**15. Quarterly Results of Operations (Unaudited)**

(dollars in millions, except per share amounts)

	1st Quarter		2nd Quarter		3rd Quarter		4th Quarter	
	2017	2016	2017	2016	2017	2016	2017	2016
Net sales	\$740.0	\$636.9	\$738.2	\$667.0	\$749.9	\$683.9	\$768.6	\$698.1
Gross profit	302.3	262.7	305.9	283.7	306.7	283.3	323.8	289.6
Net earnings	87.7	73.5	92.4	87.1	93.7	83.2	22.7	82.7
Basic earnings per share	0.51	0.42	0.53	0.50	0.54	0.48	0.13	0.48
Diluted earnings per share	0.50	0.41	0.53	0.49	0.54	0.47	0.13	0.47
Common dividends declared	0.14	0.12	0.14	0.12	0.14	0.12	0.14	0.12

Net earnings per share are computed separately for each period, and therefore, the sum of such quarterly per share amounts may differ from the total for the year.

In the fourth quarter of 2017, the Company recorded provisional one-time charges of \$81.8 million associated with U.S. Tax Reform, primarily related to the repatriation of undistributed foreign earnings. These charges reduced earnings per share by \$0.47.

**ITEM 9 – CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE**

None.

**ITEM 9A – CONTROLS AND PROCEDURES****Evaluation of Disclosure Controls and Procedures**

Our management, with the participation of our Chief Executive Officer and Chief Financial Officer, has evaluated the effectiveness of our disclosure controls and procedures (as such term is defined in Rules 13a-15(e) under the Securities Exchange Act of 1934, as amended (“the Exchange Act”) as of the end of the period covered by this report. Based on such evaluations, our Chief Executive Officer and Chief Financial Officer have concluded that, as of the end of such period our disclosure controls and procedures are effective in recording, processing, summarizing, and reporting, on a timely basis, information required to be disclosed by us in the reports that we file or submit under the Exchange Act, and that information is accumulated and communicated to the Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely discussions regarding required disclosure.

### **Management Report on Internal Control Over Financial Reporting**

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Exchange Act Rule 13a-15(f). Our management, with the participation of our Chief Executive Officer and Chief Financial Officer, has evaluated the effectiveness of our internal control over financial reporting based on the Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework). As allowed by Securities and Exchange Commission guidance, management excluded from its assessment Hague, which was acquired in 2017 and constituted 1.6 percent and 2.9 percent of total assets and net assets, respectively, as of December 31, 2017 and 0.3 percent and 0.5 percent of net sales and net earnings, respectively, for the year then ended. Based on this evaluation, our management has concluded that, as of December 31, 2017, our internal control over financial reporting was effective.

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 risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Ernst & Young LLP, an independent registered public accounting firm, has audited our consolidated financial statements and the effectiveness of internal controls over financial reporting as of December 31, 2017 as stated in their report which is included herein.

### **Changes in Internal Control Over Financial Reporting**

There have not been any change in the company's internal control over financial reporting (as such term is defined in Rules 13a-15(f) and 15d-15(f) under the Securities and Exchange Act) during the year ended December 31, 2017 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

### **ITEM 9B - OTHER INFORMATION**

None

## **REPORT OF INDEPENDENT REGISTERED ACCOUNTING FIRM**

The Board of Directors and Stockholders  
A. O. Smith Corporation

### **Opinion on Internal Control over Financial Reporting**

We have audited A. O. Smith Corporation's internal control over financial reporting as of December 31, 2017, based on criteria established in Internal Control —Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the COSO criteria). In our opinion, A. O. Smith Corporation (the Company) maintained, in all material respects, effective internal control over financial reporting as of December 31, 2017, based on the COSO criteria.

As indicated in the accompanying Management Report on Internal Control Over Financial Reporting, management's assessment of and conclusion on the effectiveness of internal control over financial reporting did not include the internal controls of Hague Quality Water International, which is included in the 2017 consolidated financial statements of the Company and constituted 1.6 percent and 2.9 percent of total assets and net assets, respectively, as of December 31, 2017 and .3 percent and .5 percent of net sales and net earnings, respectively, for the year then ended. Our audit of internal control over financial reporting of the Company also did not include an evaluation of the internal control over financial reporting of Hague Quality Water International.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated balance sheets of A. O. Smith Corporation as of December 31, 2017 and 2016, and the related consolidated statements of earnings, comprehensive earnings, stockholders' equity, and cash flows for each of the three years in the period ended December 31, 2017 and our report dated February 16, 2018 expressed an unqualified opinion thereon.

### **Basis for Opinion**

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying Management Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects.

Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

### **Definition and Limitations of Internal Control Over Financial Reporting**

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

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

/s/ Ernst & Young LLP

Milwaukee, Wisconsin  
February 16, 2018

**PART III**

**ITEM 10- DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE**

The information included under the headings “Election of Directors” and “Board Committees” in our definitive Proxy Statement for the 2018 Annual Meeting of Stockholders (to be filed with the Securities and Exchange Commission (SEC) under Regulation 14A within 120 days after the end of the registrant’s fiscal year) is incorporated herein by reference. The information required regarding Executive Officers of the company is included in Part I of this Annual Report on Form 10-K under the caption “Executive Officers of the Company.”

We have a separately designated Audit Committee on which Gene C. Wulf, Gloster B. Current, Jr., Dr. Ilham Kadri, Mark D. Smith and Idelle K. Wolf serve, with Mr. Wulf, as Chairperson. All members are independent under applicable SEC and New York Stock Exchange rules; the Board of Directors of the company has concluded that Ms. Wolf and Mr. Wulf are “audit committee financial experts” in accordance with SEC rules. Mr. Current will serve on the Audit Committee until his planned retirement just prior to the 2018 Annual Meeting of Stockholders.

We have adopted a Financial Code of Ethics applicable to our principal executive officer, principal financial officer and principal accounting officer. As a best practice, this code has been executed by key financial and accounting personnel as well. In addition, we have adopted a general code of business conduct for our directors, officers and all employees, which is known as the A. O. Smith Guiding Principles. The Financial Code of Ethics, the A. O. Smith Guiding Principles and other company corporate governance matters are available on our website at [www.aosmith.com](http://www.aosmith.com). We are not including the information contained on our website as a part of or incorporating it by reference into, this Form 10-K. We intend to disclose on this website any amendments to, or waivers from, the Financial Code of Ethics or the A. O. Smith Guiding Principles that are required to be disclosed pursuant to SEC rules. There have been no waivers of the Financial Code of Ethics or the A. O. Smith Guiding Principles. Stockholders may obtain copies of any of these corporate governance documents free of charge by writing to the Corporate Secretary at the address on the cover page of this Form 10-K.

The information included under the heading “Compliance with Section 16(a) of the Securities Exchange Act” in our definitive Proxy Statement for the 2018 Annual Meeting of Stockholders (to be filed with the SEC under Regulation 14A within 120 days after the end of the registrant’s fiscal year) is incorporated herein by reference.

**ITEM 11 - EXECUTIVE COMPENSATION**

The information included under the headings “Executive Compensation,” “Director Compensation,” “Report of the Personnel and Compensation Committee” and “Compensation Committee Interlocks and Insider Participation” in the company’s definitive Proxy Statement for the 2018 Annual Meeting of Stockholders (to be filed with the SEC under Regulation 14A within 120 days after the end of the registrant’s fiscal year) is incorporated herein by reference.

**ITEM 12 - SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS**

The information included under the headings “Principal Stockholders” and “Security Ownership of Directors and Management” in our definitive Proxy Statement for the 2018 Annual Meeting of Stockholders (to be filed with the SEC under Regulation 14A within 120 days after the end of the registrant’s fiscal year) is incorporated herein by reference.

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### Equity Compensation Plan Information

The following table provides information about our equity compensation plans as of December 31, 2017.

Plan Category	Number of securities to be issued upon the exercise of outstanding options, warrants and rights	Weighted-average exercise price of outstanding options, warrants and rights	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in the first column)
Equity compensation plans approved by security holders	2,943,263 <sup>(1)</sup>	\$ 27.73 <sup>(2)</sup>	2,885,001 <sup>(3)</sup>
Equity compensation plans not approved by security holders	—	—	—
<b>Total</b>	<b>2,943,263</b>	<b>\$ 27.73</b>	<b>2,885,001</b>

- (1) Consists of 2,263,126 shares subject to stock options, 399,270 shares subject to employee share units and 280,867 shares subject to director share units.
- (2) Represents the weighted average exercise price of outstanding options and does not take into account outstanding share units.
- (3) Represents securities remaining available for issuance under the A. O. Smith Combined Incentive Compensation Plan. If any awards lapse, expire, terminate or are cancelled without issuance of shares, or shares are forfeited under any award, then such shares will become available for issuance under the A. O. Smith Combined Incentive Compensation Plan, hereby increasing the number of securities remaining available.

### **ITEM 13 - CERTAIN RELATIONSHIPS, RELATED TRANSACTIONS AND DIRECTOR INDEPENDENCE**

The information included under the headings “Director Independence and Financial Literacy”, “Compensation Committee Interlocks and Insider Participation” and “Procedure for Review of Related Party Transactions” in our definitive Proxy Statement for the 2018 Annual Meeting of Stockholders (to be filed with the SEC under Regulation 14A within 120 days after the end of the registrant’s fiscal year) is incorporated herein by reference.

### **ITEM 14 - PRINCIPAL ACCOUNTANT FEES AND SERVICES**

The information included under the heading “Report of the Audit Committee” in our definitive Proxy Statement for the 2018 Annual Meeting of Stockholders (to be filed with the SEC under Regulation 14A within 120 days after the end of the registrant’s fiscal year) required by this Item 14 is incorporated herein by reference.

**PART IV**

**ITEM 15- EXHIBITS, FINANCIAL STATEMENT SCHEDULES**

(a) The following documents are filed as part of this Annual Report on Form 10-K:

1. Financial Statements of the Company

Form 10-K  
Page Number

The following consolidated financial statements of A. O. Smith Corporation are included in Item 8:

Consolidated Balance Sheets at December 31, 2017 and 2016 27

For each of the three years in the period ended December 31, 2017:

- Consolidated Statement of Earnings 28

- Consolidated Statement of Comprehensive Earnings 28

- Consolidated Statement of Cash Flows 29

- Consolidated Statement of Stockholders' Equity 30

Notes to Consolidated Financial Statements 31 - 56

2. Financial Statement Schedules

Schedule II - Valuation and Qualifying Accounts 66

Schedules not included have been omitted because they are not applicable.

3. Exhibits - see the Index to Exhibits on pages 63 - 64 of this report. Each management contract or compensatory plan or arrangement required to be filed as an exhibit to this report on Form 10-K are listed as Exhibits 10(a) through 10(m) in the Index to Exhibits.

Pursuant to the requirements of Rule 14a-3(b)(10) of the Securities Exchange Act of 1934, as amended, we will, upon request and upon payment of a reasonable fee not to exceed the rate at which such copies are available from the SEC, furnish copies to our security holders of any exhibits listed in the Index to Exhibits.

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### INDEX TO EXHIBITS

<u>Exhibit Number</u>	<u>Description</u>
(3)(i)	<a href="#"><u>Restated Certificate of Incorporation of A. O. Smith Corporation as amended through April 11, 2016, incorporated by reference to the quarterly report on Form 10-Q for the quarter ended March 31, 2016.</u></a>
(3)(ii)	<a href="#"><u>By-laws of A. O. Smith Corporation as amended October 13, 2015, incorporated by reference to the current report on Form 8-K dated October 16, 2015.</u></a>
(4)	(a) <a href="#"><u>Restated Certificate of Incorporation of A. O. Smith Corporation as amended through April 11, 2016, incorporated by reference to the quarterly report on Form 10-Q for the quarter ended March 31, 2016.</u></a>
	(b) <a href="#"><u>Amended and Restated Credit Agreement, dated as of December 12, 2012, among A. O. Smith Corporation, A. O. Smith Enterprises Ltd., A. O. Smith International Holdings B.V., and the financial institutions and agents party thereto, incorporated by reference to the current report on Form 8-K dated December 12, 2012.</u></a>
	(c) <a href="#"><u>Amendment No. 1 dated as of December 15, 2016, to the Amended and Restated Credit Agreement, dated as of December 12, 2012, among A. O. Smith Corporation, A. O. Smith Enterprises Ltd., A. O. Smith International Holdings B.V., and the financial institutions and agents party thereto, incorporated by reference to the annual report on Form 10-K for the fiscal year ended December 31, 2016.</u></a>
	(d) The corporation has instruments that define the rights of holders of long-term debt that are not being filed with this Registration Statement in reliance upon Item 601(b)(4)(iii) of Regulation S-K. The Registrant agrees to furnish to the SEC, upon request, copies of these instruments.
(10)	Material Contracts
	(a) <a href="#"><u>A. O. Smith Combined Incentive Compensation Plan, incorporated by reference as Exhibit A to the Proxy Statement filed on March 5, 2012 for the 2012 Annual Meeting of Stockholders.</u></a>
	(b) <a href="#"><u>A. O. Smith Corporation Executive Life Insurance Plan, as amended January 1, 2009, incorporated by reference to the annual report on Form 10-K for the fiscal year ended December 31, 2008.</u></a>
	(c) <a href="#"><u>A. O. Smith Nonqualified Deferred Compensation Plan, adopted December 1, 2008, incorporated by reference to the annual report on Form 10-K for the fiscal year ended December 31, 2008.</u></a>
	(d) <a href="#"><u>A. O. Smith Corporation Executive Supplemental Pension Plan, as amended January 1, 2009, incorporated by reference to the annual report on Form 10-K for the fiscal year ended December 31, 2008.</u></a>
	(e) <a href="#"><u>A. O. Smith Corporation Executive Incentive Compensation Award Agreement, incorporated by reference to the Form S-8 Registration Statement filed by the corporation on July 30, 2007 (Reg. No. 333-144950).</u></a>
	(f) <a href="#"><u>A. O. Smith Corporation Executive Incentive Compensation Award Agreement, incorporated by reference to the quarterly report on Form 10-Q for the quarter ended March 31, 2012.</u></a>
	(g) <a href="#"><u>A. O. Smith Corporation Executive Incentive Compensation Award Agreement, incorporated by reference to the quarterly report on Form 10-Q for the quarter ended March 31, 2016.</u></a>
	(h) <a href="#"><u>Offer Letter to Ajita G. Rajendra, dated September 20, 2004, incorporated by reference to the annual report on Form 10-K for the fiscal year ended December 31, 2007.</u></a>
	(i) <a href="#"><u>Amendment to Offer Letter to Ajita G. Rajendra dated December 10, 2015, incorporated by reference to the annual report on Form 10-K for the fiscal year ended December 31, 2015.</u></a>

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### **INDEX TO EXHIBITS (continued)**

<u>Exhibit Number</u>	<u>Description</u>
(j)	<a href="#">Summary of Directors' Compensation incorporated by reference to the quarterly report on Form 10-Q for the quarter ended June 30, 2015.</a>
(k)	<a href="#">A. O. Smith Corporation Senior Leadership Severance Plan, incorporated by Reference to the quarterly report for Form 10-Q for the quarter ended June 30, 2009.</a>
(l)	<a href="#">Form of A. O. Smith Corporation Special Retention Award Agreement, incorporated by reference to the quarterly report on Form 10-Q for the quarter ended March 31, 2011.</a>
(m)	<a href="#">Stockholder Agreement dated as of December 9, 2008, between A. O. Smith Corporation and each Smith Investment Company stockholder who becomes a signatory thereto, incorporated by reference to the current report on Form 8-K dated December 9, 2008.</a>
(n)	<a href="#">Summary of Directors' Compensation</a>
(21)	<a href="#">Subsidiaries.</a>
(23)	<a href="#">Consent of Independent Registered Public Accounting Firm.</a>
(31.1)	<a href="#">Certification by the Chief Executive Officer, pursuant to Section 302 of the Sarbanes-Oxley Act, dated February 16, 2018.</a>
(31.2)	<a href="#">Certification by the Executive Vice-President and Chief Financial Officer, pursuant to Section 302 of the Sarbanes-Oxley Act, dated February 16, 2018.</a>
(32.1)	<a href="#">Written Statement of the Chief Executive Officer Pursuant to 18 U.S.C. Section 1350.</a>
(32.2)	<a href="#">Written Statement of the Chief Financial Officer Pursuant to 18 U.S.C. Section 1350.</a>
(101)	The following materials from A. O. Smith Corporation's Annual Report on Form 10-K for the fiscal year ended December 31, 2017 are filed herewith, formatted in XBRL (Extensive Business Reporting Language): (i) the Consolidated Balance Sheets as of December 31, 2017 and 2016, (ii) the Consolidated Statement of Earnings for the three years ended December 31, 2017, (iii) the Consolidated Statement of Comprehensive Earnings for the three years ended December 31, 2017, (iv) the Consolidated Statement of Cash Flows for the three years ended December 31, 2017, (v) the Consolidated Statement of Stockholders' Equity for the three years ended December 31, 2017 and (vi) the Notes to Consolidated Financial Statements.



**A. O. SMITH CORPORATION****SCHEDULE II - VALUATION AND QUALIFYING ACCOUNTS**

(Dollars in millions)

Years ended December 31, 2017, 2016 and 2015

Description	Balance at Beginning of Year	Charged to Costs and Expenses	Acquisition of Businesses	Deductions	Balance at End of Year
2017:					
Valuation allowance for trade and notes receivable	\$ 6.3	\$ —	\$ 0.2	\$ (1.2)	\$ 5.3
Valuation allowance for deferred tax assets	13.1	1.9	—	—	15.0
2016:					
Valuation allowance for trade and notes receivable	\$ 6.0	\$ 1.1	\$ 0.2	\$ (1.0)	\$ 6.3
Valuation allowance for deferred tax assets	11.0	2.1	—	—	13.1
2015:					
Valuation allowance for trade and notes receivable	\$ 3.7	\$ 2.6	—	\$ (0.3)	\$ 6.0
Valuation allowance for deferred tax assets	9.8	1.4	—	(0.2)	11.0

## SUMMARY OF DIRECTORS' COMPENSATION

Effective January 1, 2018, compensation paid to non-employee directors of A. O. Smith Corporation is as follows: Directors will receive a cash annual retainer of \$65,000, paid in quarterly amounts of \$16,250. The lead director retainer of \$20,000 annually remains unchanged. Each Personnel and Compensation Committee and Investment Policy Committee member receives an annual retainer of \$13,000, paid quarterly, and each member of the Nominating and Governance Committee receives \$10,500 annually, with the Chairperson of each of these Committees receiving an additional \$7,000 annual retainer. Each Audit committee member receives an annual retainer of \$22,000, paid quarterly with the Chairperson receiving an additional \$5,000 annual retainer. The award of shares of Common Stock to each director remained unchanged. Each director receives Common Stock with a market value of \$125,000 on the date of the award. The retainers were calculated to be comparable to the directors' total compensation under the previous system, while simplifying record keeping and reporting.

**SUBSIDIARIES:** The following lists all subsidiaries and affiliates of A. O. Smith Corporation.

<u>Name of Subsidiary</u>	<u>Jurisdiction in Which Incorporated</u>
AOS Holding Company	Delaware
A. O. Smith International Corporation	Delaware
A. O. Smith Water Treatment (North America), Inc.	Delaware
Aquaboss LLC	Delaware
SICO Acquisition, LLC	Delaware
Takagi—A. O. Smith Tankless Water Heater Company LLC	Delaware
American Water Heater Company	Nevada
Hague Europe, LLC	Ohio
William R. Hague, Inc.	Ohio
Lochinvar, LLC	Tennessee
State Industries, LLC.	Tennessee
Aquasana, Inc.	Texas
A. O. Smith Holdings (Barbados) SRL	Barbados
A. O. Smith Enterprises Ltd.	Canada
A. O. Smith (China) Investment Co., Ltd.	China
A. O. Smith (China) Water Heater Co., Ltd.	China
A. O. Smith (China) Water Products Co., Ltd.	China
A. O. Smith (Nanjing) Water Treatment Products Co., Ltd.	China
A. O. Smith L'eau chaude S.a.r.l.	France
Waterboss Europe, SRL	France
A. O. Smith (Hong Kong) Limited	Hong Kong SAR
A. O. Smith India Water Products Private Limited	India
Products de Agua, S. de R.L. de C.V.	Mexico
A.O. Smith Holdings I B.V.	The Netherlands
A.O. Smith Holdings II B.V.	The Netherlands
A.O. Smith Holdings III B.V.	The Netherlands
A.O. Smith International Holdings B.V.	The Netherlands
A.O. Smith Products v.o.f.	The Netherlands
A.O. Smith Water Products Company B.V.	The Netherlands
AO Smith Su Teknolojileri Anonim Sirketi	Turkey
A. O. Smith Water FZE	United Arab Emirates
Lochinvar Limited	United Kingdom
A. O. Smith Vietnam Company Limited	Vietnam

**CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

We consent to the incorporation by reference in the Registration Statements (Form S-8 Nos. 333-144950 and 333-170436) pertaining to the A. O. Smith Combined Incentive Compensation Plan of our reports dated February 16, 2018, with respect to the consolidated financial statements and schedule of A. O. Smith Corporation, and the effectiveness of internal control over financial reporting of A. O. Smith Corporation, included in this Annual Report (Form 10-K) for the year ended December 31, 2017.

/s/ Ernst & Young LLP

Milwaukee, Wisconsin  
February 16, 2018

**CERTIFICATION OF CHIEF EXECUTIVE OFFICER**

I, Ajita G. Rajendra, certify that:

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

Date: February 16, 2018

/s/ Ajita G. Rajendra

Ajita G. Rajendra

Chairman and Chief Executive Officer

**CERTIFICATION OF CHIEF FINANCIAL OFFICER**

I, John J. Kita, certify that;

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

Date: February 16, 2018

/s/ John J. Kita

John J. Kita

Executive Vice President and Chief Financial Officer

Certification Pursuant to 18 U.S.C. Section 1350,  
As Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

In connection with the Annual Report of A. O. Smith Corporation (the "Company") on Form 10-K for the fiscal year ended December 31, 2017, as filed with the Securities and Exchange Commission on the date hereof (the "Report"). I, Ajita G. Rajendra, President and Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. §1350, as adopted pursuant to §906 of the Sarbanes-Oxley Act of 2002, that to the best of my knowledge:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: February 16, 2018

/s/ Ajita G. Rajendra

Ajita G. Rajendra

Chairman and Chief Executive Officer

This certification accompanies this Report pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 and shall not be deemed filed by the Company for purposes of Section 18 of the Securities Exchange Act of 1934, as amended.

A signed original of this written statement required by Section 906 has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.

Certification Pursuant to 18 U.S.C. Section 1350,  
As Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

In connection with the Annual Report of A. O. Smith Corporation (the "Company") on Form 10-K for the fiscal year ended December 31, 2017, as filed with the Securities and Exchange Commission on the date hereof (the "Report"). I, John J. Kita, Executive Vice President and Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. §1350, as adopted pursuant to §906 of the Sarbanes-Oxley Act of 2002, that to the best of my knowledge:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: February 16, 2018

/s/ John J. Kita

John J. Kita

Executive Vice President and Chief Financial Officer

This certification accompanies this Report pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 and shall not be deemed filed by the Company for purposes of Section 18 of the Securities Exchange Act of 1934, as amended.

A signed original of this written statement required by Section 906 has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.