MASCO CORP /DE/
Form 10-K
February 09, 2017

UNITED STATES SECURITIES AND EXCHANGE COMMISSION
Washington, DC 20549
FORM 10-K
ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF
THE SECURITIES EXCHANGE ACT OF 1934

For the Fiscal Year Ended December 31, 2016	Commission File Number 1-5794

MASCO CORPORATION
(Exact name of Registrant as Specified in its Charter)

Delaware	38-1794485
(State of Incorporation)	(I.R.S. Employer Identification No.)
21001 Van Born Road, Taylor, Michigan	48180
(Address of Principal Executive Offices)	(Zip Code)

Registrant's telephone number, including area code: 313-274-7400
Securities Registered Pursuant to Section 12(b) of the Act:

Title of Each Class	Name of Each Exchange On Which Registered
Common Stock, $1.00 par value	New York Stock Exchange, Inc.

Securities Registered Pursuant to Section 12(g) of the Act:
None

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

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 o No þ

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

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 during the preceding 12 months (or such shorter period that the registrant was required to submit and post such files). Yes þ No o

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of Registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. o

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

Large accelerated filer þ	Accelerated filer o	Non-accelerated filer o (Do not check if a smaller reporting company)	Smaller reporting company o

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

The aggregate market value of the Registrant's Common Stock held by non-affiliates of the Registrant on June 30, 2016 (based on the closing sale price of $30.94 of the Registrant's Common Stock, as reported by the New York Stock Exchange on such date) was approximately $10,158,793,000.

Number of shares outstanding of the Registrant's Common Stock at January 31, 2017:
320,320,300 shares of Common Stock, par value $1.00 per share

DOCUMENTS INCORPORATED BY REFERENCE
Portions of the Registrant's definitive Proxy Statement to be filed for its 2017 Annual Meeting of Stockholders are incorporated by reference into Part III of this Form 10-K.

Masco Corporation
2016 Annual Report on Form 10-K

TABLE OF CONTENTS

PART I

Item 1. Business.

Masco Corporation is a global leader in the design, manufacture and distribution of branded home improvement and building products. Our portfolio of industry-leading brands includes BEHR® paint; DELTA® and HANSGROHE® faucets, bath and shower fixtures; KRAFTMAID® and MERILLAT® cabinets; MILGARD® windows and doors; and HOT SPRING® spas. We leverage our powerful brands across product categories, sales channels and geographies to create value for our customers and shareholders.

We believe that our solid results of operations and financial position for 2016 resulted from our continued focus on our three strategic pillars: driving the full potential of our core businesses, leveraging opportunities across our businesses, and actively managing our portfolio.

To drive the full potential of our core businesses during 2016, we continued to pursue sales growth opportunities by introducing new products, enhancing services and penetrating adjacent markets. In addition, we continued to reduce costs and capitalize on synergies across our businesses with standardized operating tools, cost saving initiatives and the implementation of lean principles and process improvements in many areas, including production and functional support processes. As a result, we achieved both top and bottom line growth.

We also continued to leverage the collective strength of our enterprise, the second pillar of our strategy. We provided new assignments to selected leaders across our business units to further develop talent and facilitate operational improvements. We continued to realize supply chain efficiencies through strategic sourcing and to share best practices across all of our functional departments to enhance productivity. We believe this contributed to our results of operations improving as compared to the prior year.

We also continued to actively manage our portfolio, the third pillar of our strategy, and remain committed to making selective acquisitions in attractive end markets. In addition, during 2016 we repurchased nearly 15 million shares of our common stock and increased our quarterly dividend by approximately 5 percent, which further enhanced value for our shareholders.

We believe that the actions we have taken over the last few years have positioned our company for further enhancement of shareholder value with strong and consistent growth. We will continue to actively manage our portfolio, identify growth opportunities in key industries and produce new products that differentiate us in the marketplace by combining design and innovation. By focusing on our disciplined execution of our strategy, we believe that our positive momentum will continue.

Our Business Segments

We report our financial results in four business segments aggregated by similarity in products. The following table sets forth the contribution of our segments to net sales and operating profit (loss) for the three years ended December 31, 2016. Additional financial information concerning our operations by segment and by geographic regions, as well as general corporate expense, net, as of and for the three years ended December 31, 2016, is set forth in Note P to the consolidated financial statements included in Item 8 of this Report.

	(In Millions)		
	Net Sales (1)		
	2016	2015	2014
Plumbing Products	$3,526	$3,341	$3,308
Decorative Architectural Products	2,092	2,020	1,998
Cabinetry Products	970	1,025	999
Windows and Other Specialty Products	769	756	701
Total	$7,357	$7,142	$7,006

2

	(In Millions) Operating Profit (Loss) (1)(2)(3)		
	2016	2015	2014
Plumbing Products	$642	$512	$512
Decorative Architectural Products	430	403	360
Cabinetry Products	93	51	(62)
Windows and Other Specialty Products	(3)	57	47
Total	$1,162	$1,023	$857

(1) Amounts exclude discontinued operations.
(2) Operating profit (loss) is before general corporate expense, net.
(3) Operating profit (loss) is before income of $9 million regarding the 2014 litigation settlement in the Decorative Architectural Products segment.

All of our operating segments, except the Plumbing Products segment, normally experience stronger sales during the second and third calendar quarters, corresponding with the peak season for repair and remodel activity and new home construction.

Plumbing Products

The businesses in our Plumbing Products segment sell a wide variety of products that are manufactured or sourced by us.

- The majority of our faucet, bathing and showering products are sold in North America and Europe under the brand names DELTA®, BRIZO®, PEERLESS®, HANSGROHE®, AXOR®, GINGER®, NEWPORT BRASS®, BRASSTECH® and WALTEC®. Our BRISTAN™ and HERITAGE™ products are sold primarily in the United Kingdom. These plumbing products include faucets, showerheads, handheld showers, valves, bathing units, shower enclosures and toilets and are sold to home center retailers and to wholesalers and distributors that, in turn, sell them to plumbers, building contractors, remodelers, smaller retailers and consumers.

- Our acrylic tubs, bath and shower enclosure units and shower trays are manufactured and sold under the DELTA, PEERLESS, and MIROLIN® brand names. These products are sold primarily to home center retailers. Our MIROLIN products are also sold to wholesalers and distributors in Canada. Our HÜPPE® shower enclosures are sold through wholesale channels in Europe and China.

- Our spas and exercise pools and systems are manufactured and sold under HOT SPRING®, CALDERA®, FREEFLOW SPAS®, FANTASY SPAS®, ENDLESS POOLS® and other trademarks. Our spa products are sold to independent specialty retailers or online mass merchant retailers. Our exercise pools are available on a consumer-direct basis, while our fitness systems are sold through independent specialty retailers as well as on a consumer-direct basis.

- Also included in our Plumbing Products segment are brass and copper plumbing system components and other non-decorative plumbing products, which are sold to plumbing, heating and hardware wholesalers, home center retailers, hardware stores, building supply outlets and other mass merchandisers. These products are marketed in North and South America under our BRASSCRAFT®, PLUMB SHOP®, COBRA®, and MASTER PLUMBER® trademarks, and are also sold under private label.

We believe that our plumbing products are among the leaders in sales in North America and Europe. Competitors of our spas and exercise pools and systems include Jacuzzi, Master Spas and Dynasty Spas. Our major competitors of our other products in this segment include Lixil Group Corporation’s American Standard Brands and Grohe products, Kohler Co., Fortune Brands Home & Security Inc.'s Moen brands and Spectrum Brands Holdings, LLC’s Pfister faucets. Foreign manufacturers competing with us are located primarily in Germany and China. We face significant competition from private label products. Many of the faucet and showering products with which our products compete are manufactured by foreign manufacturers that are putting downward pressure on price. The businesses in our Plumbing

Products segment manufacture products in North America, Europe and Asia and source products from Asia and other regions. In addition to price, we believe that brand reputation is an important factor in consumer selection. Competition for our plumbing products is based largely on customer service, product quality, product features and innovation and breadth of product offering.

Many of our plumbing products contain brass, the major components of which are copper and zinc. We have multiple sources, both domestic and foreign, for the raw materials used in this segment, and sufficient raw materials have been available for our needs. We have encountered price volatility for brass, brass components and any components containing copper and zinc. To help reduce the impact of this volatility, from time to time we may enter into long-term agreements with certain significant suppliers or use derivative instruments.

Decorative Architectural Products

We produce architectural coatings, including paints, primers, specialty paints, stains and waterproofing products. These products are sold in North America, South America and China under the brand names BEHR®, KILZ® and other sub-brands to "do it yourself" and professional customers through home center retailers and other retailers. Net sales of architectural coatings comprised approximately 25 percent of our consolidated net sales in 2016, 2015 and 2014. Our BEHR products are sold through The Home Depot, our largest customer and this segment's largest customer. The loss of this segment's sales to The Home Depot would have a material adverse effect on this segment's business and on our consolidated business as a whole.

Our competitors include large national and international brands such as Benjamin Moore, Glidden, Olympic, PPG, Sherwin Williams, Valspar and Zinsser, as well as many regional and other national brands. In addition to price, we believe that brand reputation is an important factor in consumer selection, and that competition in this industry is based largely on product quality, features and innovation, and customer service.

Fluctuations in raw material costs can have a material impact on this segment's results of operations. Significant increases in the cost of crude oil and natural gas, both of which are used to produce the acrylic resins we purchase for our architectural coatings, can adversely affect our costs. The prices of titanium dioxide used in architectural coatings as well as acrylic resins can fluctuate based on global supply and demand dynamics and production capacity limitations. To help assure continued availability of the major raw materials used in this segment we have entered into agreements with certain significant suppliers.

Our Decorative Architectural Products segment also includes branded cabinet hardware, functional hardware, wall plates, hook and rail products, and picture hanging accessories, which are manufactured for us and sold to home center retailers, mass retailers, other specialty retailers, original equipment manufacturers and wholesalers. These products are sold under the LIBERTY®, BRAINERD® and other trademarks, and the key competitors in North America include Amerock, Top Knobs, Richelieu and private label brands. Decorative bath hardware, shower accessories, and shower doors are sold under the brand names DELTA® and FRANKLIN BRASS® to wholesalers, home center retailers, mass retailers and other specialty retailers. Competitors for these products include Moen, Kohler, Gatco and private label brands.

Cabinetry Products

In North America, we manufacture and sell value priced, stock and semi custom assembled cabinetry for kitchen, bath, storage, home office and home entertainment applications in a broad range of styles and price points to address consumer preferences. In the United Kingdom, we manufacture and sell kitchen, bath and storage cabinetry. Our KRAFTMAID® and CARDELL® products are sold primarily to dealers and home center retailers, and our MERILLAT®, QUALITY CABINETS™, and MOORES™ products are sold primarily to dealers and homebuilders for both home improvement and new home construction. Cabinet sales are significantly affected by levels of activity in both retail consumers spending and new home construction, particularly spending for major kitchen and bathroom renovation projects. A significant portion of our sales for home improvement are made through home center retailers. The cabinet manufacturing industry in the United States and the United Kingdom includes several large competitors and numerous local and regional competitors, and in the United Kingdom, foreign manufacturers. Additional local and regional competitors may enter this industry as conditions improve. In addition to price, we believe that competition in this industry is based largely on product quality, responsiveness to customer needs, product features and selection.

Some of our North American competitors include American Woodmark Corporation, Fortune Brands Home & Security, Inc. and Elkay.

The raw materials used in this segment are primarily hardwood lumber, plywood and particleboard, and are available from multiple sources, both domestic and foreign.

Windows and Other Specialty Products

We manufacture and sell vinyl, fiberglass and aluminum windows and patio doors, as well as the ESSENCE SERIES® windows and doors, which combines a wood interior with a fiberglass exterior, under the MILGARD® brand name for home improvement and new home construction, principally in the western United States. MILGARD products are sold primarily through dealers and, to a lesser extent, directly to production homebuilders and through lumber yards and home center retailers. Our North American competitors for these products include national brands, such as Jeld Wen, Marvin, Pella, Ply Gem and Andersen, and numerous regional brands.

In the United Kingdom, we manufacture and sell vinyl windows, composite and panel doors, related products and components under several brand names including DURAFLEX™, GRIFFIN™, PREMIER™ and EVOLUTION™. Sales are primarily through dealers and wholesalers to the repair and remodeling markets, although our DURAFLEX products are also sold to other window fabricators. United Kingdom competitors include many small and mid sized firms and a few large, vertically integrated competitors.

In addition to price, we believe that brand reputation is an important factor in consumer selection and that competition in this industry in both the domestic and foreign markets is based largely on product quality, innovative products and customer and warranty services.

We manufacture and sell a complete line of manual and electric heavy duty staple guns, hammer tackers, glue guns and rivet tools as well as the staples, glue and rivets that complement our products. We sell these products primarily in North America under the brand names ARROW®, POWERSHOT® and EASYSHOT® to professional contractors and do it yourself consumers through various distribution channels, including home center and other retailers and wholesalers. Our principal North American competitor in this product line is Stanley Black & Decker.

The raw materials used in this segment have been available from multiple sources, although our U.S. window business has, at times, experienced allocation of glass from its suppliers.

Additional Information

Intellectual Property

We hold numerous U.S. and foreign patents, patent applications, licenses, trademarks, trade names, trade secrets and proprietary manufacturing processes. As a manufacturer and distributor of brand name products, we view our trademarks and other intellectual property rights as important, but do not believe that there is any reasonable likelihood of a loss of such rights that would have a material adverse effect on our present business as a whole.

Laws and Regulations Affecting Our Business

We are subject to U.S. and foreign government regulations, particularly those pertaining to health and safety (including protection of employees and consumers), climate change and environmental issues. Our businesses are subject to requirements regarding protection of the environment and worker health and safety and have certain responsibilities for environmental remediation.

- Certain products in our Plumbing Products segment are subject to restrictions on lead content and on waterflow.
- Our Decorative Architectural Products segment is subject to the requirements relating to the emission of volatile organic compounds, which may require us to reformulate paint products.
- Our Cabinetry Products segment is also subject to requirements relating to the emission of volatile organic compounds, which may impact our sourcing of particleboard and may require us to install special equipment in manufacturing facilities.

Compliance with these laws and regulations significantly affects product performance as well as our production costs. We monitor applicable laws and regulations relating to the protection of the environment, climate change and worker health and safety, and incur ongoing expense relating to compliance. We do not expect compliance with the federal, state and local regulations relating to the discharge of materials into the environment, or otherwise relating to the protection of the environment and worker health and safety, will result in material capital expenditures or have a material adverse effect on our competitive position or results of operations and financial position.

Backlog

We do not consider backlog orders to be material in any of our segments.

Employees

At December 31, 2016, we employed approximately 26,000 people. We have generally experienced satisfactory relations with our employees.

Available Information

Our website is www.masco.com. Our periodic reports and all amendments to those reports required to be filed or furnished pursuant to Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934 are available free of charge through our website as soon as reasonably practicable after those reports are electronically filed with or furnished to the Securities and Exchange Commission. This Report is being posted on our website concurrently with its filing with the Securities and Exchange Commission. Material contained on our website is not incorporated by reference into this Report.

Item 1A. Risk Factors.

There are a number of business risks and uncertainties that could affect our business. These risks and uncertainties could cause our actual results to differ from past performance or expected results. We consider the following risks and uncertainties to be most relevant to our specific business activities. Additional risks and uncertainties not presently known to us, or that we currently believe to be immaterial, also may adversely impact our business, results of operations and financial position.

Our business relies on home improvement and, to a lesser extent, on new home construction activity, both of which are cyclical.

Our business relies on home improvement activity, including repair and remodeling projects, and, to a lesser extent, on new home construction activity. Macroeconomic conditions in North America and Europe, including consumer confidence levels, fluctuations in home prices, unemployment and underemployment levels, consumer income and debt levels, household formation and the availability of home equity loans and mortgages and the interest rates for such loans, affect both consumers' discretionary spending on home improvement projects as well as new home construction activity. Although credit availability has improved and financing rates remain low, consumer spending for big ticket remodeling projects and new home construction continues to be below historic levels. The fundamentals driving our business are cyclical, and adverse changes or uncertainty regarding macroeconomic conditions, including an economic slowdown or increased interest rates, could result in a decline in spending on home improvement projects and a decline in demand for new home construction, which could adversely affect our results of operations and financial position.

If we do not maintain our strong brands, develop new products or respond to changing purchasing practices and consumer preferences, we could lose market share.

Our competitive advantage is due, in part, to our ability to maintain our strong brands and to develop and introduce innovative new and improved products. While we continue to invest in brand building and brand awareness, these initiatives may not be successful. The uncertainties associated with developing and introducing new and improved products, such as gauging changing consumer preferences and successfully developing, manufacturing, marketing and selling these products, may impact the success of our product introductions. If we do not introduce new or improved products in a timely manner or if these products do not gain widespread acceptance, we could lose market share, which could negatively impact our results of operations and financial position. It is also possible that our competitors may improve their products more rapidly or effectively than we do, which could adversely affect our market share.

In recent years, consumer purchasing practices and preferences have shifted and our customers' business models and strategies have changed. As our customers execute their strategies to reach end consumers through multiple channels, they rely on us to support their efforts with our infrastructure, including maintaining robust and user-friendly websites with sufficient content for consumer research and to provide comprehensive supply chain solutions and differentiated product development. If we are unable to successfully provide this support to our customers, our brands may lose market share.

If we do not timely and effectively identify and respond to these changing purchasing practices and consumer preferences, our relationships with our customers and with consumers could be harmed, the demand for our brands and products could be reduced and our results of operations and financial position could be negatively affected.

We face significant competition.

Our products face significant competition. We believe that brand reputation is an important factor impacting product selection and that we compete on the basis of product features and innovation, product quality, customer service, warranty and price. We sell many of our products through home center retailers, distributors and independent dealers and rely on these customers to market and promote our products to consumers. Our success with our customers is dependent on our ability to provide quality products and timely delivery. In addition, home center retailers, which have historically concentrated their sales efforts on retail consumers and remodelers, are increasingly marketing directly to professional contractors and installers, which may impact our margins on our products that contractors and installers would otherwise buy through our dealers and wholesalers.

We also compete with low cost foreign manufacturers and private label brands in a variety of our product groups. As market dynamics change, we may experience a shift in the mix of some products we sell toward more value priced or opening price point products, which may impact our ability to maintain or gain market share and/or our profitability.

If we are unable to maintain our competitive position in our industries our results of operations and financial position could be adversely affected.

Our sales are concentrated with two significant customers.

Our sales are concentrated with our two largest customers. In 2016, our net sales to The Home Depot were $2.5 billion (approximately 34 percent of our consolidated net sales), and our net sales to Lowe’s were less than ten percent of our consolidated net sales. Our reliance on these significant customers may further increase if the mix of our business operations changes, including as a result of acquisitions or divestitures. These home center retailers can significantly affect the prices we receive for our products and the terms and conditions on which we do business with them. Additionally, these home center retailers may reduce the number of vendors from which they purchase and could make significant changes in their volume of purchases from us. Although other retailers, dealers, distributors and homebuilders represent other channels of distribution for our products and services, we might not be able to quickly replace, if at all, the loss of a substantial portion of our sales to The Home Depot or the loss of all of our sales to Lowe’s, and any such loss would have a material adverse effect on our business, results of operations and financial position.

Further, as these home center retailers expand their markets and targeted customers and as consumer purchasing practices change and e commerce increases, conflicts between our existing distribution channels have and will continue to occur, which could impact our results of operations and financial position. Our relationships with these customers may be impacted if we increase the amount of business we transact directly with consumers. In addition, these home center retailers request product exclusivity from time to time, which may affect our ability to offer products to other customers and may diminish our ability to leverage economies of scale.

We may not achieve all of the anticipated benefits of our strategic initiatives.

We continue to pursue our strategic initiatives of investing in our brands, developing innovative products, and focusing on operational excellence through our continued deployment of the Masco Operating System, our methodology to drive growth and productivity. All of these initiatives are designed to grow revenue, improve profitability and increase shareholder value over the mid to long term. Our business performance and results could be adversely affected if we are unable to successfully execute these initiatives, or if we are unable to execute them in a timely and efficient manner. We could also be adversely affected if we have not appropriately prioritized and balanced our initiatives or if we are unable to effectively manage change throughout our organization.

Pursuing the acquisition of businesses complementary to our portfolio is a component of our strategy for future growth. If we are not able to identify suitable acquisition candidates or consummate potential acquisitions at acceptable terms and prices, our long term competitive positioning may be impacted. Even if we are successful in acquiring businesses, we may experience risks in integrating these businesses into our existing business. Such risks include difficulties realizing expected synergies and economies of scale, diversion of our resources, unforeseen liabilities, issues with the new or existing customers or suppliers, and difficulties in retaining critical employees of the acquired businesses. Future foreign acquisitions may also increase our exposure to foreign currency risks and risks associated with interpretation and enforcement of foreign regulations. Our failure to address these risks could cause us to incur additional costs and/or fail to realize the anticipated benefits of our acquisitions and could adversely affect our results of operations and financial position.

Our actions to improve the results of our U.S. window business may not be successful.

Our U.S. window business, Milgard Manufacturing Incorporated (“Milgard”), is experiencing operational issues and production inefficiencies, including difficulty in hiring and retaining qualified labor. In addition, Milgard has begun a phased deployment of a new Enterprise Resource Planning ("ERP") system to improve its business processes. The implementation of this ERP system is complex and expensive and will require significant oversight and resources. While we have implemented plans to address the operational and ERP issues challenging Milgard, there is no assurance that our plans will be successful. If we experience unanticipated expenses or additional disruptions to Milgard's operations, our results of operations and financial position may be negatively impacted.

Variability in commodity costs or limited availability of commodities could impact us.

We buy various commodities to produce our products, including, among others, brass, resins, titanium dioxide, zinc, wood and glass. In addition, water is a significant component of many of our architectural coatings products and may be subject to restrictions in certain regions. Fluctuations in the availability and prices of these commodities could increase our costs to produce our products. Our production of products could also be impacted if we are unable to procure our requirements for these commodities or if a shortage of these commodities drives their prices to levels that are not commercially feasible. Further, increases in energy costs could increase our production and transportation costs, which could also negatively affect our results of operations and financial position.

It can be difficult for us to pass on to customers cost increases to cover our increased commodity and production costs. Our existing arrangements with customers, competitive considerations and customer resistance to price increases may delay or make us unable to adjust selling prices. If we are not able to increase the prices of our products or achieve cost savings to offset increased commodity and production costs, our results of operations and financial position could be negatively impacted. If we are able to increase our selling prices, sustained price increases for our products may lead to sales declines and loss of market share, particularly if our competitors do not increase their prices. When commodity prices decline, we have experienced and may in the future receive pressure from our customers to reduce our prices. Such reductions could impact our results of operations and financial position.

We have entered into long-term agreements with certain significant suppliers to help ensure continued availability of key commodities and to establish firm pricing, but at times these contractual commitments may result in our paying above market prices for commodities during the term of the contract. From time to time, we also may use derivative instruments, including commodity futures and swaps. This strategy increases the possibility that we may make commitments for these commodities at prices that subsequently exceed their market prices, which has and may continue to adversely affect our results of operations and financial position.

We are dependent on third-party suppliers.

We rely heavily on third party suppliers for many of our products and components, and our ability to offer a wide variety of products depends on our ability to obtain an adequate and/or timely supply of these products and components. Failure of our suppliers to provide us quality products on commercially reasonable terms, or to comply with applicable legal and regulatory requirements, could have a material adverse effect on our results of operations and financial position. Resourcing these products and components to another supplier could take time and involve significant costs. Accordingly, the loss of critical suppliers, or a substantial decrease in the availability of products or components from our suppliers, could disrupt our business and adversely impact our results of operations and financial position.

Many of the suppliers upon whom we rely are located in foreign countries. The differences in business practices, shipping and delivery requirements and laws and regulations, together with the limited number of suppliers, have increased the complexity of our supply chain logistics and the potential for interruptions in our production scheduling. If we are unable to effectively manage our supply chain or if there is a disruption in transporting the products or components, our results of operations and financial position could be negatively affected.

There are risks associated with International operations and global strategies.

Approximately 21 percent of our sales are made outside of North America (principally in Europe) and are transacted in currencies other than the U.S. dollar. In addition to our European operations, we manufacture products in Asia and source products and components from third parties globally. Risks associated with our International operations include changes in political, monetary and social environments, labor conditions and practices, the laws, regulations and policies of foreign governments, social and political unrest, terrorist attacks, cultural differences and differences in enforcement of contract and intellectual property rights.

Our results of operations and financial position are also impacted by international economic conditions, primarily in Europe. We continue to be negatively impacted by currency conversion rates, particularly the Euro, the British pound sterling, the Canadian dollar and the Chinese Yuan Renminbi, due to the strength of the U.S. dollar compared to these currencies. Fluctuations in currency exchange rates may present challenges in comparing operating performance from period to period.

As the situation involving the United Kingdom’s decision to exit from the European Union develops, we could experience volatility in the currency exchange rates and/or a change in the demand for our products and services, particularly in our U.K. and European markets, or there could be disruption of our operations and our customers’ and suppliers’ businesses.

U.S. laws and regulations regarding activities of U.S. companies doing business abroad, including tax laws, laws regulating competition, anti bribery/anti corruption and other business practices, and trade regulations, which may include duties and tariffs, can also affect us. While it is difficult to assess what changes may occur and the relative impact on our international tax structure, it is possible that significant changes in how U.S. and foreign jurisdictions tax cross border transactions could adversely impact our results of operations and financial position.

We may not be able to adequately protect or prevent the unauthorized use of our intellectual property.

Protecting our intellectual property is important to our growth and innovation efforts. We own a number of patents, trade names, brand names and other forms of intellectual property in our products and manufacturing processes throughout the world. There can be no assurance that our efforts to protect our intellectual property rights will prevent violations. Our intellectual property may be challenged or infringed upon by third parties, particularly in countries where property rights are not highly developed or protected. In addition, the global nature of our business increases the risk that we may be unable to obtain or maintain our intellectual property rights on reasonable terms. Furthermore, others may assert intellectual property infringement claims against us. Current and former employees, contractors or suppliers have or may have had access to proprietary or confidential information regarding our business operations that could harm us if used by, or disclosed to others, including our competitors. Protecting and defending our intellectual property could be costly, time consuming and require significant resources. If we are not able to protect our existing intellectual property rights, or prevent unauthorized use of our intellectual property, sales of our products may be affected and we may experience reputational damage to our brand names, increased litigation costs and adverse impact to our competitive position, which could affect our results of operations and financial position.

The long-term performance of our businesses relies on our ability to attract, develop and retain talented personnel.

To be successful, we must attract, develop and retain highly qualified and talented personnel who have the experience, knowledge and expertise to successfully implement our key business strategies. We compete for employees with a broad range of employers in many different industries, including large multinational firms, and we invest significant resources in recruiting, developing, motivating and retaining them. In certain areas of the U.S., we have experienced and may continue to experience difficulty in recruiting, training and retaining sufficient skilled and unskilled labor, resulting in additional costs related to labor inefficiencies. The failure to attract and retain key employees, or to develop effective succession planning to assure smooth transitions of those employees and the knowledge and expertise they possess, could negatively affect our competitive position and our results of operations and financial position.

Claims and litigation could be costly.

We are involved in various claims and litigation, including class actions and regulatory proceedings, that arise in the ordinary course of our business and that could have a material adverse effect on us. The types of matters may include, among others: competition, product liability, employment, warranty, advertising, contract, personal injury and environmental. Given the inherently unpredictable nature of claims and litigation, we cannot predict with certainty the outcome or effect of any such matter. Defending and resolving claims and litigation can be costly and can divert management’s attention. We have and may continue to incur significant costs as a result of claims and litigation.

We are also subject to product safety regulations, recalls and direct claims for product liability that can result in significant costs and, regardless of the ultimate outcome, create adverse publicity and damage the reputation of our brands and business. Also, we rely on other manufacturers to provide products or components for products that we sell. Due to the difficulty of controlling the quality of products and components sourced from other manufacturers, we are exposed to risks relating to the quality of such products and to limitations on our recourse against such suppliers.

We maintain insurance against some, but not all, of the risks of loss resulting from claims and litigation. The levels of insurance we maintain may not be adequate to fully cover any and all losses or liabilities. If any significant accident, judgment, claim or other event is not fully insured or indemnified against, it could have a material adverse impact on our business, results of operations and financial position.

Refer to Note U to the consolidated financial statements included in Item 8 of this Report for additional information about litigation involving our businesses.

Compliance with laws, government regulation and industry standards could impact our results of operations and financial position.

We are subject to a wide variety of federal, state, local and foreign government laws and regulations, including securities laws, tax laws, anti-bribery/anti-corruption laws and employment laws, as well as those pertaining to health and safety (including protection of employees and consumers), product compliance, competition practices, import and export regulations, climate change and environmental issues. In addition to complying with current requirements and requirements that will become effective at a future date, even more stringent requirements could be imposed on us in the future. Additionally, some of our products must be certified by industry organizations. Compliance with these laws, regulations and industry standards may require us to alter our product designs, our manufacturing processes, our packaging or our sourcing. Compliance activities are costly and require significant management attention and resources. If we do not effectively and timely comply with such regulations and industry standards, our results of operations and financial position could be negatively affected.

We rely on information systems and technology, and disruptions to these systems could impact our results of operations and financial position.

We rely on a number of information systems and technology to process, transmit, store and manage information to support our business activities. We may be adversely impacted if our information systems are disrupted, are no longer supported or fail. In addition to the disruptions that may occur from interruptions in our systems, increased global cybersecurity vulnerabilities, threats and more sophisticated and targeted attacks pose a risk to our information technology systems. We have established security policies, processes and layers of defense designed to help identify and protect against intentional and unintentional misappropriation or corruption of our systems and information and disruption of our operations. Despite these efforts, our systems may be damaged, disrupted, or shut down due to attacks by unauthorized access, malicious software, undetected intrusion, hardware failures, or other events, and in these circumstances our disaster recovery plans may be ineffective or inadequate. These breaches or intrusions could lead to business interruption, exposure of proprietary or confidential information, data corruption, damage to our reputation, exposure to litigation, and increased operational costs. Such events could have a material adverse impact on our results of operations and financial position. In addition, we could be adversely affected if any of our significant customers or suppliers experiences any similar events that disrupt their business operations or damage their reputation.

We have plans to make significant investments in new technology systems throughout our company over the next several years. We are also in the process of implementing ERP systems at select business units. While we are leveraging our experience and engaging consultants to assist as we deploy ERP systems, we have experienced, and may continue to experience, unanticipated expenses and disruptions to our operations during these implementations. Our results of operations and financial position could be negatively impacted if we do not appropriately select and implement our new technology systems in a timely manner or if we experience significant unanticipated expenses or disruptions in connection with the implementation of ERP systems.

Restrictive covenants in our credit agreement could limit our financial flexibility.

We must comply with both financial and nonfinancial covenants in our credit agreement, and in order to borrow under it, we cannot be in default with any of those provisions. Our ability to borrow under the credit agreement could be impacted if our earnings significantly decline to a level where we are not in compliance with the financial covenants or if we default on any nonfinancial covenants. In the past, we have been able to amend the covenants in our credit agreement, but there can be no assurance that in the future we would be able to further amend them. If we were unable to borrow under our credit agreement, our financial flexibility would be restricted if we were also unable to obtain alternative financing on acceptable terms and at acceptable rates or if we were not permitted to obtain alternative financing under the terms of our existing financing arrangements.

The TopBuild spin off could result in substantial tax liability to us and our stockholders.

We received an opinion of tax counsel substantially to the effect that, for U.S. Federal income tax purposes, the spin off of TopBuild Corp. ("TopBuild") in 2015 and certain related transactions qualify for tax free treatment under certain sections of the Internal Revenue Code. However, if the factual assumptions or representations made by us in connection with the delivery of the opinion are inaccurate or incomplete in any material respect, including those relating to the past and future conduct of our business, we will not be able to rely on the opinion. Furthermore, the opinion is not binding on the Internal Revenue Service or the courts. If, notwithstanding receipt of the opinion, the spin off transaction and certain related transactions are determined to be taxable, we would be subject to a substantial tax liability. In addition, if the spin off transaction is taxable, each holder of our common stock who received shares of TopBuild in connection with the spin off would generally be treated as receiving a taxable distribution of property in an amount equal to the fair market value of the shares received, thereby potentially increasing such holder's tax liability.

Even if the spin off otherwise qualifies as a tax free transaction, the distribution could be taxable to us (but not to our stockholders) in certain circumstances if future significant acquisitions of our stock or the stock of TopBuild are deemed to be part of a plan or series of related transactions that included the spin off. In this event, the resulting tax liability could be substantial. In connection with the spin off, we entered into a tax matters agreement with TopBuild, pursuant to which TopBuild agreed to not enter into any transaction that could cause any portion of the spin off to be taxable to us without our consent and to indemnify us for any tax liability resulting from any such transaction. These obligations and potential tax liabilities may discourage, delay or prevent a change of control of us.

Item 1B. Unresolved Staff Comments.

None.

Item 2. Properties.

The table below lists our principal North American properties.

Business Segment	Manufacturing	Warehouse and Distribution
Plumbing Products	20	5
Decorative Architectural Products	8	11
Cabinetry Products	8	8
Windows and Other Specialty Products	11	5
Totals	47	29

Most of our North American facilities range from single warehouse buildings to complex manufacturing facilities. We own most of our North American manufacturing facilities, none of which are subject to significant encumbrances. A substantial number of our warehouse and distribution facilities are leased.

The table below lists our principal properties outside of North America.

Business Segment	Manufacturing	Warehouse and Distribution
Plumbing Products	11	22
Decorative Architectural Products	—	—
Cabinetry Products	1	1
Windows and Other Specialty Products	9	—
Totals	21	23

Most of our international facilities are located in China, Germany and the United Kingdom. We own most of our international manufacturing facilities, none of which are subject to significant encumbrances. A substantial number of our international warehouse and distribution facilities are leased.

We own our corporate headquarters in Taylor, Michigan. We own an additional building near our corporate headquarters that is used by our Masco Technical Services (research and development) department. We continue to lease an office facility in Luxembourg, which serves as a headquarters for most of our foreign operations.

We have entered into a contract to lease a new corporate headquarters in Livonia, Michigan, which we expect to occupy in 2017.

Each of our operating divisions assesses the manufacturing, distribution and other facilities needed to meet its operating requirements. Our buildings, machinery and equipment have been generally well maintained and are in good operating condition. We believe our facilities have sufficient capacity and are adequate for our production and distribution requirements.

Item 3. Legal Proceedings.

Information regarding legal proceedings involving us is set forth in Note U to the consolidated financial statements included in Item 8 of this Report and is incorporated herein by reference.

Item 4. Mine Safety Disclosures.

Not applicable.

PART II

Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities.

The New York Stock Exchange is the principal market on which our common stock is traded. The following table indicates the high and low sales prices of our common stock as reported by the New York Stock Exchange and the cash dividends declared per common share for the periods indicated:

	Market Price		Dividends
Quarter	High	Low	Declared
2016			
Fourth	$35.07	$29.38	$ 0.100
Third	37.38	30.31	0.100
Second	32.92	29.11	0.095
First	31.71	23.10	0.095
Total			$ 0.390
2015			
Fourth	$30.61	$24.89	$ 0.095
Third	28.59	22.52	0.095
Second	28.38	25.47	0.090
First	27.40	23.23	0.090
Total			$ 0.370

On January 31, 2017, there were approximately 4,000 holders of record of our common stock.

We expect that our practice of paying quarterly dividends on our common stock will continue, although the payment of future dividends is at the discretion of our Board of Directors and will depend upon our earnings, capital requirements, financial condition and other factors.

In September 2014, our Board of Directors authorized the purchase of up to 50 million shares, for retirement of our common stock in open-market transactions or otherwise, replacing the previous authorization established in 2007. During 2016, we repurchased and retired nearly 15 million shares of our common stock for cash aggregating $459 million. The following table provides information regarding the repurchase of our common stock for the three months ended December 31, 2016.

Period	Total Number of Shares Purchased	Average Price Paid Per Common Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Maximum Number of Shares That May Yet Be Purchased Under the Plans or Programs
10/1/16 - 10/31/16	3,633,200	$ 32.00	3,633,200	15,809,196
11/1/16 - 11/30/16	2,335,200	$ 30.62	2,335,200	13,473,996
12/1/16 - 12/31/16	604,318	$ 30.79	604,318	12,869,678
Total for the quarter	6,572,718		6,572,718	12,869,678

14

Performance Graph

The table below compares the cumulative total shareholder return on our common stock with the cumulative total return of (i) the Standard & Poor's 500 Composite Stock Index ("S&P 500 Index"), (ii) The Standard & Poor's Industrials Index ("S&P Industrials Index") and (iii) the Standard & Poor's Consumer Durables & Apparel Index ("S&P Consumer Durables & Apparel Index"), from December 31, 2011 through December 31, 2016, when the closing price of our common stock was $31.62. The graph assumes investments of $100 on December 31, 2011 in our common stock and in each of the three indices and the reinvestment of dividends.

The table below sets forth the value, as of December 31 for each of the years indicated, of a $100 investment made on December 31, 2011 in each of our common stock, the S&P 500 Index, the S&P Industrials Index and the S&P Consumer Durables & Apparel Index and includes the reinvestment of dividends.

	2012	2013	2014	2015	2016
Masco	$161.83	$224.10	$251.26	$324.95	$367.49
S&P 500 Index	$115.88	$153.01	$173.69	$176.07	$196.78
S&P Industrials Index	$115.17	$161.45	$177.05	$172.56	$204.60
S&P Consumer Durables & Apparel Index	$121.50	$165.04	$180.20	$178.88	$168.67

Item 6. Selected Financial Data.

	Dollars in Millions (Except Per Common Share Data)				
	2016	2015	2014	2013	2012
Net Sales (1)	$7,357	$7,142	$7,006	$6,761	$6,286
Operating profit (1)(3)	1,053	914	721	612	384
Income from continuing operations attributable to Masco Corporation (1)(2)(3)	491	357	821	259	54
Income per common share from continuing operations:					
Basic	$1.49	$1.04	$2.31	$0.72	$0.15
Diluted	1.47	1.03	2.28	0.72	0.15
Dividends declared	0.390	0.370	0.345	0.300	0.300
Dividends paid	0.385	0.365	0.330	0.300	0.300
At December 31:					
Total assets (4)	$5,137	$5,664	$7,208	$6,885	$6,842
Long-term debt (4)	2,995	2,403	2,919	3,421	3,422
Shareholders' (deficit) equity (5)	(103)	58	1,128	787	542

(1) Amounts exclude discontinued operations. Refer to Note B to the consolidated financial statements for additional information.

(2) The year 2014 includes a $529 million tax benefit from the release of the valuation allowance on deferred tax assets. Refer to Note S to the consolidated financial statements for additional information.

(3) The year 2012 includes non-cash impairment charges for other intangible assets aggregating $27 million after tax ($42 million pre-tax).

(4) Total assets and long-term debt for the years 2012-2014 have not been recasted for the impact of the adoption of Accounting Standards Update 2015-03, as amended by Accounting Standards Update 2015-15, which required the reclassification of certain debt issuance costs from an asset to a liability. Refer to Note A to the consolidated financial statements for additional information.

(5) The decrease in shareholder's (deficit) equity from 2014 to 2015 relates primarily to the spin off of TopBuild.

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

The financial and business analysis below provides information which we believe is relevant to an assessment and understanding of our consolidated financial position, results of operations and cash flows. This financial and business analysis should be read in conjunction with the consolidated financial statements and related notes.

The following discussion and certain other sections of this Report contain statements that reflect our views about our future performance and constitute "forward-looking statements" under the Private Securities Litigation Reform Act of 1995. Forward-looking statements can be identified by words such as "believe," "anticipate," "appear," "may," "will," "should," "intend," "plan," "estimate," "expect," "assume," "seek," "forecast" and similar references to future periods. Our views about future performance involve risks and uncertainties that are difficult to predict and, accordingly, our actual results may differ materially from the results discussed in our forward-looking statements. We caution you against relying on any of these forward-looking statements.

In addition to the various factors included in the "Executive Level Overview," "Critical Accounting Policies and Estimates" and "Outlook for the Company" sections, our future performance may be affected by the levels of home improvement activity and new home construction, our ability to maintain our strong brands and to develop and introduce new and improved products, our ability to maintain our competitive position in our industries, our reliance on key customers, our ability to achieve the anticipated benefits of our strategic initiatives, our ability to improve our under-performing U.S. window business, the cost and availability of raw materials, our dependence on third party suppliers, and risks associated with international operations and global strategies. These and other factors are discussed in detail in Item 1A "Risk Factors" of this Report. Any forward-looking statement made by us speaks only as of the date on which it was made. Factors or events that could cause our actual results to differ may emerge from time to time, and it is not possible for us to predict all of them. Unless required by law, we undertake no obligation to update publicly any forward-looking statements as a result of new information, future events or otherwise.

Executive Level Overview

We design, manufacture and distribute branded home improvement and building products. These products are sold for home improvement and new home construction through home center retailers, mass merchandisers, hardware stores, homebuilders, distributors and other outlets for consumers and contractors and direct to the consumer.

2016 Results

Net sales were positively affected by increased sales volume resulting from increased repair and remodel activity and new home construction, and favorable product mix in the U.S. and Europe. Such increases were partially offset by foreign currency translation, primarily due to the stronger U.S. dollar compared to the British Pound and Euro and net selling price decreases in North America. Our results of operations were positively affected by increased sales volume, a more favorable relationship between selling prices and commodity costs, operational efficiencies, and cost savings initiatives. Such increases were partially offset by an increase in warranty costs resulting from a change in our estimate of expected future warranty claim costs and an increase in certain variable expenses, such as strategic growth investments, as well as ERP system implementation and higher insurance costs.

Our Plumbing Products segment benefited from increased sales volume, a favorable relationship between selling prices and commodity costs and benefits associated with cost savings initiatives, and was negatively impacted by an increase in certain variable expenses, such as strategic growth investments and higher insurance costs, as well as unfavorable product mix. The Decorative Architectural Products segment benefited from increased sales volume of paints and other coating products and builder's hardware, partially offset by an unfavorable relationship betwen selling prices and commodity costs of paints and other coating products. Our Cabinetry Products segment benefited from operational efficiencies resulting from business rationalization activities and other cost savings initiatives, a positive product mix and a more favorable relationship between selling prices and commodity costs, and was negatively impacted by decreased sales volume. Our Windows and Other Specialty Products segment was negatively affected by increased warranty costs and certain other expenses, such as higher labor costs and ERP system implementation costs, and was positively impacted by a more favorable relationship between selling prices and commodity costs of windows.

Critical Accounting Policies and Estimates

Our discussion and analysis of our financial condition and results of operations is based upon our consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the

United States of America ("GAAP"). The preparation of these financial statements requires us to make certain estimates and assumptions that affect the reported amounts of assets and liabilities, disclosure of any contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting periods. We regularly review our estimates and assumptions, which are based upon historical experience, as well as current economic conditions and various other factors that we believe to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of certain assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates and assumptions.

Note A to the consolidated financial statements includes our accounting policies, estimates and methods used in the preparation of our consolidated financial statements.

We believe that the following critical accounting policies are affected by significant judgments and estimates used in the preparation of our consolidated financial statements.

Revenue Recognition and Receivables

We recognize revenue as title to products and risk of loss is transferred to customers or when services are rendered. We record estimated reductions to revenue for customer programs and incentive offerings, including special pricing and co-operative advertising arrangements, promotions and other volume-based incentives. We monitor our customer receivable balances and the credit worthiness of our customers on an on-going basis and maintain allowances for doubtful accounts receivable for estimated losses resulting from the inability of customers to make required payments. Allowances are estimated based upon specific customer balances, where a risk of default has been identified, and also include a provision for non-customer specific defaults based upon historical collection, return and write-off activity.

Goodwill and Other Intangible Assets

We record the excess of purchase cost over the fair value of net tangible assets of acquired companies as goodwill or other identifiable intangible assets. In the fourth quarter of each year, or as events occur or circumstances change that would more likely than not reduce the fair value of a reporting unit below its carrying amount, we complete the impairment testing of goodwill utilizing a discounted cash flow method. We selected the discounted cash flow methodology because we believe that it is comparable to what would be used by market participants. We have defined our reporting units and completed the impairment testing of goodwill at the operating segment level, as defined by GAAP.

Determining market values using a discounted cash flow method requires us to make significant estimates and assumptions, including long-term projections of cash flows, market conditions and appropriate discount rates. Our judgments are based upon historical experience, current market trends, consultations with external valuation specialists and other information. While we believe that the estimates and assumptions underlying the valuation methodology are reasonable, different estimates and assumptions could result in different outcomes. In estimating future cash flows, we rely on internally generated five-year forecasts for sales and operating profits, including capital expenditures, and, currently, a one to three percent long-term assumed annual growth rate of cash flows for periods after the five-year forecast. We generally develop these forecasts based upon, among other things, recent sales data for existing products, planned timing of new product launches, estimated repair and remodel activity and estimated housing starts. Our assumptions included a relatively stable U.S. Gross Domestic Product growing at 2.3 percent and a euro zone Gross Domestic Product growing at 1.4 percent annually over the five-year forecast.

We utilize our weighted average cost of capital of approximately 8.5 percent as the basis to determine the discount rate to apply to the estimated future cash flows. Our weighted average cost of capital is unchanged as compared to 2015. In 2016, based upon our assessment of the risks impacting each of our businesses, we applied a risk premium to increase the discount rate to a range of 10.5 percent to 13.5 percent for our reporting units.

If the carrying amount of a reporting unit exceeds its fair value, we measure the possible goodwill impairment based upon an allocation of the estimate of fair value of the reporting unit to all of the underlying assets and liabilities of the reporting unit, including any previously unrecognized intangible assets (Step Two Analysis). The excess of the fair value of a reporting unit over the amounts assigned to its assets and liabilities is the implied fair value of goodwill. An impairment loss is recognized to the extent that a reporting unit's recorded goodwill exceeds the implied fair value of goodwill.

In the fourth quarter of 2016, we estimated that future discounted cash flows projected for all of our reporting units were greater than the carrying values. Accordingly, we did not recognize any impairment charges for goodwill. A 10 percent decrease in the estimated fair value of our reporting units would not have resulted in any additional analysis of goodwill impairment for any reporting unit.

We review our other indefinite-lived intangible assets for impairment annually, in the fourth quarter, or as events occur or circumstances change that indicate the assets may be impaired without regard to the business unit. We consider the implications of both external (e.g., market growth, competition and local economic conditions) and internal (e.g., product sales and expected product growth) factors and their potential impact on cash flows related to the intangible asset in both the near- and long-term. In 2016, we did not recognize any impairment charges for other indefinite-lived intangible assets.

Employee Retirement Plans

We froze all future benefit accruals under substantially all of our domestic and foreign qualified and domestic non-qualified defined-benefit pension plans several years ago.

Accounting for defined-benefit pension plans involves estimating the cost of benefits to be provided in the future, based upon vested years of service, and attributing those costs over the time period each employee works. We develop our pension costs and obligations from actuarial valuations. Inherent in these valuations are key assumptions regarding inflation, expected return on plan assets, mortality rates and discount rates for obligations and expenses. We consider current market conditions, including changes in interest rates, in selecting these assumptions. While we believe that the estimates and assumptions underlying the valuation methodology are reasonable, different estimates and assumptions could result in different reported pension costs and obligations within our consolidated financial statements.

In December 2016, our discount rate decreased for obligations to an average of 3.5 percent from 4.0 percent. The discount rate for obligations is based upon the expected duration of each defined-benefit pension plan's liabilities matched to the December 31, 2016 Towers Watson Rate Link curve. The discount rates we use for our defined-benefit pension plans ranged from 1.5 percent to 4.0 percent, with the most significant portion of the liabilities having a discount rate for obligations of 3.8 percent or higher. The assumed asset return was primarily 7.25 percent, reflecting the expected long-term return on plan assets based upon an analysis of expected and historical rates of return of various asset classes utilizing the current and long-term asset allocation of the plan assets.

Our net underfunded amount for our qualified defined-benefit pension plans, which is the difference between the projected benefit obligation and plan assets, decreased to $338 million at December 31, 2016 from $401 million at December 31, 2015. Our projected benefit obligation for our unfunded, non-qualified, defined-benefit pension plans was $170 million at December 31, 2016 compared with $174 million at December 31, 2015. These unfunded plans are not subject to the funding requirements of the Pension Protection Act of 2006. In accordance with the Pension Protection Act, the Adjusted Funding Target Attainment Percentage for the various defined-benefit pension plans ranges from 76 percent to 109 percent.

The decrease in our projected benefit obligations was partially driven by lump sum payouts of certain long-term qualified pension obligations as well as a change to the MP 2016 Mortality Improvement Scale, which decreased our long-term pension liabilities. The decrease was partially offset by a lower discount rate compared to the prior year.

During 2016, we contributed $100 million to our qualified defined-benefit pension plans, including $51 million to a previously unfunded pension plan. Additionally, our qualified defined-benefit pension plan assets had a net gain of 8.3 percent in 2016. Refer to Note M to the consolidated financial statements for additional information.

We expect pension expense for our qualified defined-benefit pension plans to be $22 million in 2017 compared with $25 million in 2016. If we assumed that the future return on plan assets was one-half percent lower than the assumed asset return and the discount rate decreased by 50 basis points, the 2017 pension expense would increase by $4 million. We expect pension expense for our non-qualified defined-benefit pension plans to be $8 million in 2017, compared to $9 million in 2016.

We anticipate that we will be required to contribute approximately $21 million in 2017 to our qualified and non-qualified defined-benefit plans. Refer to Note M to the consolidated financial statements for further information regarding the funding of our plans.

Income Taxes

Deferred taxes are recognized based on the future tax consequences of differences between the financial statement carrying value of assets and liabilities and their respective tax basis. The future realization of deferred tax assets depends on the existence of sufficient taxable income in future periods. Possible sources of taxable income include taxable income in carryback periods, the future reversal of existing taxable temporary differences recorded as a deferred tax liability, tax-planning strategies that generate future income or gains in excess of anticipated losses in the carryforward period and projected future taxable income.

If, based upon all available evidence, both positive and negative, it is more likely than not (more than 50 percent likely) such deferred tax assets will not be realized, a valuation allowance is recorded. Significant weight is given to positive and negative evidence that is objectively verifiable. A company's three-year cumulative loss position is significant negative evidence in considering whether deferred tax assets are realizable, and the accounting guidance restricts the amount of reliance we can place on projected taxable income to support the recovery of the deferred tax assets.

In the third quarter of 2014, we recorded a $517 million tax benefit from the release of the valuation allowance against our U.S. Federal and certain state deferred tax assets due primarily to a return to sustainable profitability in our U.S. operations. In reaching this conclusion, we considered the continued improvement in both the new home construction market and repair and remodel activity in the U.S. and our progress on strategic initiatives to reduce costs and expand our product leadership positions which contributed to the continued improvement in our U.S. operations over the past few years. In the fourth quarter of 2014, we recorded an additional $12 million tax benefit from the release of the valuation allowances against certain U.K. and Mexican deferred tax assets primarily resulting from a return to sustainable profitability in these jurisdictions.

We continue to maintain a valuation allowance on certain state and foreign deferred tax assets as of December 31, 2016. Should we determine that we would not be able to realize our remaining deferred tax assets in these jurisdictions in the future, an adjustment to the valuation allowance would be recorded in the period such determination is made. The need to maintain a valuation allowance against deferred tax assets may cause greater volatility in our effective tax rate.

The current accounting guidance allows the recognition of only those income tax positions that have a greater than 50 percent likelihood of being sustained upon examination by the taxing authorities. We believe that there is an increased potential for volatility in our effective tax rate because this threshold allows changes in the income tax environment and the inherent complexities of income tax law in a substantial number of jurisdictions to affect the computation of our liability for uncertain tax positions to a greater extent.

While we believe we have adequately provided for our uncertain tax positions, amounts asserted by taxing authorities could vary from our liability for uncertain tax positions. Accordingly, additional provisions for tax-related matters, including interest and penalties, could be recorded in income tax expense in the period revised estimates are made or the underlying matters are settled or otherwise resolved.

The potential for comprehensive tax reform in 2017, if implemented, may have a significant impact on our effective tax rate or taxes paid due to certain business provisions such as the denial of net interest expense deductions or the imposition of a tax on imports.

Warranty

We offer full and limited warranties on certain products with warranty periods ranging up to the lifetime of the product to the original consumer purchaser. At the time of sale, we accrue a warranty liability for the estimated future cost to provide products, parts or services to repair or replace products in satisfaction of warranty obligations. Our estimate of future costs to service our warranty obligations is based upon the information available and includes a number of factors, such as the warranty coverage, the warranty period, historical experience specific to the nature, frequency and average cost to service the claim, along with industry and demographic trends.

Certain factors and related assumptions in determining our warranty liability involve judgments and estimates and are sensitive to changes in the aforementioned factors. We believe that the warranty accrual is appropriate; however, actual claims incurred could differ from the original estimates thereby requiring adjustments to previously established accruals. Refer to Note U to the consolidated financial statements for additional information.

A significant portion of our business is at the consumer retail level through home center retailers and other major retailers. A consumer may return a product to a retail outlet that is a warranty return. However, certain retail outlets do not distinguish between warranty and other types of returns when they claim a return deduction from us. Our revenue recognition policy takes into account this type of return when recognizing revenue, and deductions are recorded at the time of sale.

20

Litigation

We are subject to claims, charges, litigation and other proceedings in the ordinary course of our business. Liabilities and costs associated with these matters require estimates and judgments based upon our professional knowledge and experience and that of our legal counsel. When estimates of our exposure in these matters meet the criteria for recognition under accounting guidance, amounts are recorded as charges to earnings. The ultimate resolution of these exposures may differ due to subsequent developments.

Corporate Development Strategy

We expect to maintain a balanced growth strategy pursuing organic growth by maximizing the full potential of our existing core businesses and complementing our existing business with smaller, strategic acquisitions, particularly in the Plumbing Products and Decorative Architectural Products segment. Longer-term, we may seek larger, strategic acquisitions as our company continues to grow.

In addition, we actively manage our portfolio of companies by divesting of those businesses that do not align with our long-term growth strategy. We will continue to review all of our businesses to determine which businesses may not be core to our long-term growth strategy.

Liquidity and Capital Resources

Historically, we have largely funded our growth through cash provided by our operations, long-term bank debt and the issuance of notes in the financial markets, and by the issuance of our common stock, including issuances for certain mergers and acquisitions. Maintaining high levels of liquidity and focusing on cash generation are among our financial strategies.

Our total debt as a percent of total capitalization was 104 percent and 98 percent at December 31, 2016 and 2015, respectively. Refer to Note K to the consolidated financial statements for additional information.

On March 17, 2016, we issued $400 million of 3.5% Notes due April 1, 2021 and $500 million of 4.375% Notes due April 1, 2026. We received proceeds of $896 million, net of discount, for the issuance of these Notes. The Notes are senior indebtedness and are redeemable at our option at the applicable redemption price. On April 15, 2016, proceeds from the debt issuances, together with cash on hand, were used to repay and early retire all of our $1 billion, 6.125% Notes which were due on October 3, 2016 and all of our $300 million, 5.85% Notes which were due on March 15, 2017. In connection with these early retirements, we incurred $40 million of debt extinguishment costs, which we recorded as interest expense.

On June 15, 2015, we repaid and retired all of our $500 million, 4.8% Notes on the scheduled retirement date.

On March 24, 2015, we issued $500 million of 4.45% Notes due April 1, 2025. These Notes are senior indebtedness and are redeemable at our option.

On March 28, 2013, we entered into a credit agreement (the "Credit Agreement") with a bank group, with an aggregate commitment of $1.25 billion and a maturity date of March 28, 2018. On May 29, 2015 and August 28, 2015, we amended the Credit Agreement with the bank group (the "Amended Credit Agreement"). The Amended Credit Agreement reduces the aggregate commitment to $750 million and extends the maturity date to May 29, 2020. Under the Amended Credit Agreement, at our request and subject to certain conditions, we can increase the aggregate commitment up to an additional $375 million with the current bank group or new lenders. Refer to Note K to the consolidated financial statements for additional information.

The Amended Credit Agreement contains financial covenants requiring us to maintain (A) a maximum net leverage ratio, as adjusted for certain items, of 4.0 to 1.0, and (B) a minimum interest coverage ratio, as adjusted for certain items, equal to or greater than 2.5 to 1.0. We were in compliance with all covenants and had no borrowings under our Amended Credit Agreement at December 31, 2016. We expect to remain in compliance with these covenants through at least the next year.

We had cash, cash investments and short-term bank deposits of approximately $1.2 billion at December 31, 2016. Our cash and cash investments consist of overnight interest bearing money market demand accounts, time deposit accounts, and money market mutual funds containing government securities and treasury obligations. While we attempt to diversify these investments in a prudent manner to minimize risk, it is possible that future changes in the financial markets could affect the security or availability of these investments. Our short-term bank deposits consist of time deposits with maturities of 12 months or less.

21

Of the $1.2 billion and $1.7 billion of cash, cash investments and short-term bank deposits we held at December 31, 2016 and 2015, respectively, $618 million and $630 million, respectively, is held in our foreign subsidiaries. If these funds were needed for our operations in the U.S., their repatriation into the U.S. would not result in significant additional U.S. income tax or foreign withholding tax, as we have recorded such taxes on substantially all undistributed foreign earnings, except for those that are legally restricted.

We utilize derivative and hedging instruments to manage our exposure to currency fluctuations, primarily related to the European euro, British pound and the U.S. dollar; commodity cost fluctuations, primarily zinc and copper; and interest rate fluctuations, primarily related to debt issuances. We review our hedging program, derivative positions and overall risk management on a regular basis. Beginning in 2016, we decided to significantly reduce our utilization of derivative and hedging activity for commodity cost fluctuations by settling positions at their scheduled maturity while not entering into new transactions.

In the third quarter of 2016, we increased our quarterly dividend to $.10 per common share from $.095 per common share. During 2016, we repurchased nearly 15 million shares of our common stock for cash aggregating $459 million.

Our current ratio was 2.0 to 1 and 1.4 to 1 at December 31, 2016 and 2015, respectively. The increase in the current ratio was due to the net debt reduction of $400 million during 2016 resulting from the refinancing of our debt, which reduced current liabilities by approximately $1 billion at December 31, 2016 compared to December 31, 2015.

Cash Flows

Significant sources and (uses) of cash in the past three years are summarized as follows, in millions:

	2016	2015	2014
Net cash from operating activities	$726	$699	$602
Retirement of notes	(1,300)	(500)	—
Purchase of Company common stock	(459)	(456)	(158)
Cash dividends paid	(128)	(126)	(117)
Dividends paid to noncontrolling interest	(31)	(36)	(34)
Capital expenditures	(180)	(158)	(128)
Debt extinguishment costs	(40)	—	—
Acquisition of businesses, net of cash acquired	—	(41)	(2)
Cash distributed to TopBuild Corp.	—	(63)	—
Issuance of TopBuild Corp. debt	—	200	—
Issuance of notes, net of issuance costs	889	497	—
Proceeds from disposition of:			
Property and equipment	—	18	16
Financial investments, net	32	9	63
Decrease in debt, net	(1)	—	(2)
Proceeds (purchases) of short-term bank deposits, net	40	26	(20)
Effect of exchange rate changes on cash and cash investments	(34)	(15)	(45)
Other, net	8	31	(15)
Cash (decrease) increase	$(478)	$85	$160

Our working capital days were as follows:

	At December 31, 2016	At December 31, 2015
Receivable days	49	46
Inventory days	54	52
Accounts Payable days	70	69
Working capital (receivables plus inventories, less accounts payable) as a percentage of net sales	11.3%	11.1%

Net cash provided by operations of $726 million consisted primarily of net income adjusted for non-cash and certain other items, including depreciation and amortization expense of $134 million, deferred income taxes of $130 million and other non-cash items, including stock-based compensation expense and amortization expense related to in-store displays, partially offset by changes in working capital and contributions to our defined-benefit pension plans.

Net cash used for financing activities was $1,046 million, primarily due to the early retirement of all of our $1 billion, 6.125% Notes which were due October 3, 2016 and all of our $300 million, 5.85% Notes which were due March 15, 2017, $459 million for the repurchase and retirement of Company common stock (as part of our strategic initiative to drive shareholder value, and includes 1.1 million shares repurchased to offset the dilutive impact of long-term stock awards granted in 2016), $128 million for cash dividends paid, $40 million for debt extinguishment costs and $31 million for dividends paid to noncontrolling interest. This usage was partially offset by the issuance of $400 million of 3.5% Notes due April 1, 2021 and $500 million of 4.375% Notes due April 1, 2026.

In September 2014, our Board of Directors authorized the repurchase of up to 50 million shares for retirement of our common stock in open-market transactions or otherwise, replacing the previous Board of Directors authorization established in 2007. At December 31, 2016, we had remaining authorization from our Board of Directors to repurchase up to an additional 12.9 million shares of our common stock. Consistent with past practice and as part of our strategic initiative, we expect to repurchase the remainder of these shares in 2017. The timing of these share repurchases will depend on market conditions. Some of these shares will be purchased to offset any dilution from long-term stock awards granted as part of our compensation programs.

Net cash used for investing activities was $124 million, and included $180 million for capital expenditures, partially offset by $40 million net proceeds from the sale of short-term bank deposits and $32 million cash received from financial investments, primarily related to the early redemption of our auction rate securities.

We continue to invest in our manufacturing and distribution operations to increase our productivity, improve customer service and support new product innovation. Capital expenditures for 2016 were $180 million, compared with $158 million for 2015 and $128 million for 2014. For 2017, capital expenditures, excluding any potential 2017 acquisitions, are expected to be approximately $200 million. Depreciation and amortization expense for 2016 totaled $134 million, compared with $133 million for 2015 and $167 million for 2014. For 2017, depreciation and amortization expense, excluding any potential 2017 acquisitions, is expected to be approximately $130 million. Amortization expense totaled $10 million, $11 million and $10 million in 2016, 2015 and 2014, respectively.

Costs of environmental responsibilities and compliance with existing environmental laws and regulations have not had, nor do we expect them to have, a material effect on our capital expenditures, financial position or results of operations.

We believe that our present cash balance and cash flows from operations are sufficient to fund our near-term working capital and other investment needs. We believe that our longer-term working capital and other general corporate requirements will be satisfied through cash flows from operations and, to the extent necessary, from bank borrowings and future financial market activities.

Consolidated Results of Operations

We report our financial results in accordance with GAAP in the United States. However, we believe that certain non-GAAP performance measures and ratios, used in managing the business, may provide users of this financial information with additional meaningful comparisons between current results and results in prior periods. Non-GAAP performance measures and ratios should be viewed in addition to, and not as an alternative for, our reported results under GAAP.

Sales and Operations

Net sales for 2016 were $7.4 billion, which increased three percent compared with 2015. Excluding acquisitions and the unfavorable effect of currency translation, net sales increased four percent compared to 2015. The following table reconciles reported net sales to net sales excluding acquisitions and the effect of currency translation, in millions:

	Year Ended December 31	
	2016	2015
Net sales, as reported	$7,357	$7,142
Acquisitions	(6)	—
Net sales, excluding acquisitions	7,351	7,142
Currency translation	68	—
Net sales, excluding acquisitions and the effect of currency translation	$7,419	$7,142

Net sales for 2016 were positively affected by increased sales volume of plumbing products, paints and other coating products and builders' hardware, which, in aggregate, increased sales by approximately five percent compared to 2015. Net sales for 2016 were also positively affected by favorable product mix of cabinets and windows, and net selling price increases of North American windows and North American and international plumbing products, which, in aggregate, increased sales approximately one percent. Net sales for 2016 were negatively affected by lower sales volume of cabinets and lower net selling prices of paints and other coating products, which, in aggregate, decreased sales by approximately two percent.

Net sales for 2015 were positively affected by increased sales volume of plumbing products, paints and other coating products, windows and builders' hardware, which, in aggregate, increased sales by approximately four percent compared to 2014. Net sales for 2015 were also positively affected by net selling price increases of plumbing products, cabinets and windows, which, in aggregate, increased sales approximately one percent. Product mix of North American cabinets and windows also positively affected 2015 net sales. Net sales for 2015 were negatively affected by lower sales volume of cabinets and lower net selling prices of paints and other coating products.

Net sales for 2014 were positively affected by increased sales volume of North American plumbing products, paints and other coating products, builders' hardware and North American windows. Net sales for 2014 were also positively affected by net selling prices for cabinets, international plumbing products, and windows. Net sales for 2014 were negatively affected by lower sales volume of cabinets and by lower net selling prices of paints and other coating products.

Our gross profit margins were 33.4 percent, 31.5 percent and 29.4 percent in 2016, 2015 and 2014, respectively. The 2016 and 2015 gross profit margins were positively affected by increased sales volume, a more favorable relationship between selling prices and commodity costs, and the benefits associated with business rationalization and other cost savings initiatives. 2016 gross profit margins were negatively impacted by an increase in warranty costs resulting from a change in our estimate of expected future warranty claim costs.

Selling, general and administrative expenses as a percent of sales were 19.1 percent in 2016 compared with 18.7 percent in 2015 and 19.2 percent in 2014. Selling, general and administrative expenses as a percent of sales in 2016 reflect certain variable expenses, such as strategic growth investments, as well as ERP system implementation and higher insurance costs. Selling, general and administrative expenses as a percent of sales in 2015 reflect increased sales and the effect of cost containment measures.

24

The following table reconciles reported operating profit to operating profit, as adjusted to exclude certain items, dollars in millions:

	2016	2015	2014
Operating profit, as reported	$1,053	$914	$721
Rationalization charges	22	18	64
Income from litigation settlements	—	—	(9)
Gain from sale of property and equipment	—	(5)	—
Operating profit, as adjusted	$1,075	$927	$776
Operating profit margins, as reported	14.3 %	12.8 %	10.3 %
Operating profit margins, as adjusted	14.6 %	13.0 %	11.1 %

Operating profit margins in 2016 and 2015 were positively affected by increased sales volume, a more favorable relationship between selling prices and commodity costs and the benefits associated with business rationalizations and other cost savings initiatives. Operating profit margin in 2016 was negatively impacted by an increase in warranty costs resulting from a change in expected future warranty claim costs and certain variable expenses, such as strategic growth investments, as well as ERP system implementation and higher insurance costs. Operating profit in 2015 was negatively affected by foreign currency translation.

Other Income (Expense), Net

Other, net, for 2016 included net gains of $5 million from distributions from private equity funds, $3 million from the redemption of auction rate securities and $2 million of earnings from equity investments. Other, net for 2016 also included losses from the disposition of other investments of $3 million, realized foreign currency losses of $3 million and other miscellaneous items.

Other, net, for 2015 included net gains of $6 million from distributions from private equity funds and $2 million of earnings from equity investments. Other, net, for 2015 also included realized foreign currency losses of $14 million and other miscellaneous items.

Other, net, for 2014 included net gains of $4 million from distributions from private equity funds and realized foreign currency gains of $5 million and other miscellaneous items. Income from financial investments, net, for 2014 included losses from equity investments, net, of $2 million.

Interest expense was $229 million in 2016 and $225 million in 2015 and 2014. Interest expense increased in 2016 due primarily to the $40 million of additional interest expense in connection with the early retirement of debt, partially offset by the interest savings due to the discharge of indebtedness.

Income and Earnings Per Common Share from Continuing Operations (Attributable to Masco Corporation)

Income and diluted income per common share from continuing operations for 2016 were $491 million and $1.47 per common share, respectively. Income and diluted income per common share from continuing operations for 2015 were $357 million and $1.03 per common share, respectively. Income and diluted income per common share from continuing operations for 2014 were $821 million and $2.28 per common share, respectively.

Our effective tax rate on income from continuing operations was 36 percent tax expense, 43 percent tax expense and 71 percent tax benefit in 2016, 2015 and 2014, respectively. The 2016 effective tax rate includes a $14 million charge to tax expense from the elimination of a disproportionate tax effect resulting from our auction rate securities being called by our counterparty during 2016. This charge was offset by a $13 million tax benefit from the recognition of a deferred tax asset on certain German net operating losses primarily resulting from a return to sustainable profitability. Refer to Note S to the consolidated financial statements for additional information.

Compared to our normalized tax rate of 36 percent, the variance in 2015 is due primarily to a $21 million valuation allowance against certain deferred tax assets of TopBuild recorded as a non-cash charge to income tax expense. The TopBuild deferred tax assets have been impaired by our decision to spin off TopBuild into a separate company that on a stand-alone basis as of June 30, 2015, the spin off date, was unlikely to be able to realize the value of such deferred tax assets as a result of its history of losses.

The 2015 effective tax rate also includes a $19 million charge to income tax expense to recognize the required taxes on substantially all undistributed foreign earnings, except for those that are legally restricted. This charge was

the result of our determination that we may need to repatriate earnings from certain foreign subsidiaries that were previously considered permanently reinvested in order to provide greater flexibility in the execution of our capital management strategy.

The variance from our normalized tax rate in 2014 is due primarily to changes in the U.S. Federal valuation allowance and reversal of an accrual for uncertain tax positions.

Outlook for the Company

We continue to successfully execute against our long-term growth strategies by leveraging our brand portfolio, industry-leading positions, and Masco Operating System, our methodology to drive growth and productivity. We believe we will continue to see strong demand for our market-leading products, as the fundamentals for long-term demand in both repair and remodel and new home construction continue to be positive. We believe that our strong financial position, together with our current strategy of investing in our industry-leading branded building products, our continued focus on innovation and our commitment to operational excellence and disciplined capital allocation will allow us to drive long-term growth and create value for our shareholders.

Business Segment and Geographic Area Results

The following table sets forth our net sales and operating profit (loss) information by business segment and geographic area, dollars in millions.

	2016	2015	2014	Percent Change 2016 vs. 2015	Percent Change 2015 vs. 2014
Net Sales:					
Plumbing Products	$3,526	$3,341	$3,308	6 %	1 %
Decorative Architectural Products	2,092	2,020	1,998	4 %	1 %
Cabinetry Products	970	1,025	999	(5)%	3 %
Windows and Other Specialty Products	769	756	701	2 %	8 %
Total	$7,357	$7,142	$7,006	3 %	2 %
North America	$5,834	$5,645			