

OWENS ILLINOIS INC /DE/  
Form 10-K  
February 16, 2016  
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UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
Washington, D. C. 20549

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FORM 10 K

(Mark One)

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

For the fiscal year ended  
December 31, 2015

or

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

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Commission file number 1-9576

OWENS-ILLINOIS, INC.

(Exact name of registrant as specified in its charter)

Delaware	22 2781933
(State or other jurisdiction of incorporation or organization)	(IRS Employer Identification No.)
One Michael Owens Way, Perrysburg, Ohio	43551
(Address of principal executive offices)	(Zip Code)

Registrant's telephone number, including area code: (567) 336-5000

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

Title of each class	Name of each exchange on which registered
Common Stock, \$.01 par value	New York Stock Exchange

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

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

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes  No

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the

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registrant was required to file such reports) and (2) has been subject to such filing requirements for the past 90 days. Yes No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S K (§229.405 of this chapter) is not contained herein, and will not be contained, to the best of registrant’s knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10 K or any amendment to this Form 10 K.

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

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

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

The aggregate market value (based on the consolidated tape closing price on June 30, 2015) of the voting and non-voting common equity held by non-affiliates of Owens-Illinois, Inc. was approximately \$4,238,712,000. For the sole purpose of making this calculation, the term “non-affiliate” has been interpreted to exclude directors and executive officers of the Company. Such interpretation is not intended to be, and should not be construed to be, an admission by Owens-Illinois, Inc. or such directors or executive officers of the Company that such directors and executive officers of the Company are “affiliates” of Owens-Illinois, Inc., as that term is defined under the Securities Act of 1934.

The number of shares of common stock, \$.01 par value of Owens-Illinois, Inc. outstanding as of January 31, 2016 was 160,982,234.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the Owens-Illinois, Inc. Proxy Statement for The Annual Meeting of Share Owners To Be Held Thursday, May 12, 2016 (“Proxy Statement”) are incorporated by reference into Part III hereof.

TABLE OF GUARANTORS

Exact Name of Registrant As Specified In Its Charter	State/Country of Incorporation or Organization	Primary	
		Standard Industrial Classification Code Number	I.R.S Employee Identification Number
Owens Illinois Group, Inc	Delaware	6719	341559348
Owens Brockway Packaging, Inc	Delaware	6719	341559346

The address, including zip code, and telephone number, of each additional registrant’s principal executive office is One Michael Owens Way, Perrysburg, Ohio 43551; (567) 336 5000. These companies are listed as guarantors of the debt securities of the registrant. The consolidating condensed financial statements of the Company depicting separately its guarantor and non guarantor subsidiaries are presented in the notes to the consolidated financial statements. All of the

equity securities of each of the guarantors set forth in the table above are owned, either directly or indirectly, by Owens Illinois, Inc.

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### PART I

#### ITEM 1. BUSINESS

##### General Development of Business

Owens Illinois, Inc. (the “Company”), through its subsidiaries, is the successor to a business established in 1903. The Company is the largest manufacturer of glass containers in the world with 80 glass manufacturing plants in 23 countries. It competes in the glass container segment of the rigid packaging market and is the leading glass container manufacturer in most of the countries where it has manufacturing facilities.

##### Company Strategy

The Company’s strategy is to be the premier rigid packaging producer most admired for its people, performance, customer satisfaction, innovation and shareholder value creation. To accomplish this strategy, the Company is focused on the following objectives:

- Establish stability and drive improved performance by acting in line with market dynamics and market trends while unlocking the value in the Company’s operations and commercial activities;
- Develop integrated solutions that deliver higher performance and grow our business by leveraging the capabilities of the manufacturing, commercial, and supply chain disciplines to reduce costs and inventory while providing solutions that help the Company’s customers build, develop and expand their markets;
- Create breakthroughs that include truly innovative products for our customers, as well as step change improvements to our cost structure through focused research and development;
- Integrate the Vitro acquisition to capture the value generated in this business while preserving the high operating standards; and
- Operate as one enterprise, aligning our organization, processes and talent by creating the right structure, processes and capabilities to drive for performance and meet investor expectations.

##### Reportable Segments

The Company has four reportable segments based on its geographic locations: Europe, North America, Latin America and Asia Pacific. In connection with the Company’s acquisition (the “Vitro Acquisition”) of the food and beverage glass container business of Vitro S.A.B. de C.V. and its subsidiaries as conducted in the United States, Mexico and Bolivia (the “Vitro Business”) on September 1, 2015, the Company has renamed the former South America segment to the Latin America segment. Information as to sales, earnings from continuing operations before interest income, interest expense, and provision for income taxes and excluding amounts related to certain items that management considers not representative of ongoing operations (“segment operating profit”), and total assets by reportable segment is included in Note 2 to the Consolidated Financial Statements.

##### Products and Services

The Company produces glass containers for alcoholic beverages, including beer, flavored malt beverages, spirits and wine. The Company also produces glass packaging for a variety of food items, soft drinks, teas, juices and pharmaceuticals. The Company manufactures glass containers in a wide range of sizes, shapes and colors and is active in new product development and glass container innovation.

##### Customers

In most of the countries where the Company competes, it has the leading position in the glass container segment of the rigid packaging market based on sales revenue. The Company's largest customers consist mainly

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of the leading global food and beverage manufacturers, including (in alphabetical order) Anheuser Busch InBev, Brown Forman, Carlsberg, Diageo, Heineken, Kirin, MillerCoors, Nestle, PepsiCo, Pernod Ricard, SABMiller, and Saxco International. No customer represents more than 10% of the Company's consolidated net sales.

The Company sells most of its glass container products directly to customers under annual or multi year supply agreements. Multi year contracts typically provide for price adjustments based on cost changes. The Company also sells some of its products through distributors. Many customers provide the Company with regular estimates of their product needs, which enables the Company to schedule glass container production to maintain reasonable levels of inventory. Glass container manufacturing facilities are generally located in close proximity to customers.

### Markets and Competitive Conditions

The Company's principal markets for glass container products are in Europe, North America, Latin America and Asia Pacific.

**Europe.** The Company has a leading share of the glass container segment of the rigid packaging market in the European countries in which it operates, with 35 glass container manufacturing plants located in the Czech Republic, Estonia, France, Germany, Hungary, Italy, the Netherlands, Poland, Spain and the United Kingdom. These plants primarily produce glass containers for the beer, wine, champagne, spirits and food markets in these countries. The Company also has interests in two joint ventures that manufacture glass containers in Italy. Throughout Europe, the Company competes directly with a variety of glass container manufacturers including Verallia, Ardagh Group, Vetropack and Vidrala.

**North America.** The Company has 19 glass container manufacturing plants and one distribution facility in the U.S. and Canada, and also has an interest in a joint venture that manufactures glass containers in the U.S. The Company has the leading share of the glass container segment of the U.S. rigid packaging market, based on sales revenue by domestic producers. The principal glass container competitors in the U.S. are the Ardagh Group and Anchor Glass Container. Imports from China, Mexico, Taiwan and other countries also compete in U.S. glass container segments. Additionally, there are several major consumer packaged goods companies that self manufacture glass containers.

**Latin America.** The Company has 18 glass manufacturing plants in Latin America, located in Argentina, Bolivia, Brazil, Colombia, Ecuador, Mexico, and Peru. In 2015, the Company's acquisition of the Vitro Business included six additional plants. In Latin America, the Company maintains a diversified portfolio serving several markets, including beer, non alcoholic beverages, spirits, flavored malt beverages, wine, food and pharmaceuticals. The region also has a large infrastructure for returnable/refillable glass containers. The Company competes directly with Verallia in Brazil and Argentina, and does not believe that it competes with any other large, multinational glass container manufacturers in the rest of the region.

**Asia Pacific.** The Company has 8 glass container manufacturing plants in the Asia Pacific region, located in Australia, China, Indonesia and New Zealand. It also has interests in joint venture operations in China, Malaysia and Vietnam. In Asia Pacific, the Company primarily produces glass containers for the beer, wine, food and non alcoholic beverage markets. The Company competes directly with Orora Limited in Australia, and does not believe that it competes with any other large, multinational glass container manufacturers in the rest of the region. In China, the glass container segments of the packaging market are regional and highly fragmented with a large number of local competitors.

In addition to competing with other large and well established manufacturers in the glass container segment, the Company competes in all regions with manufacturers of other forms of rigid packaging, principally aluminum cans and plastic containers. Competition is based on quality, price, service, innovation and the marketing attributes of the container. The principal competitors producing metal containers include Ball Corporation, Crown Holdings, Inc.,



Rexam plc, and Silgan Holdings Inc. The principal competitors producing plastic containers include Amcor, Consolidated Container Holdings, LLC, Reynolds Group Holdings Limited, Plastipak Packaging, Inc. and Silgan Holdings Inc. The Company also competes with manufacturers of non rigid packaging alternatives, including flexible pouches, aseptic cartons and bag in box containers.

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The Company seeks to provide products and services to customers ranging from large multinationals to small local breweries and wineries in a way that creates a competitive advantage for the Company. The Company believes that it is often the glass container partner of choice because of its innovation and branding capabilities, its global footprint and its expertise in manufacturing know how and process technology.

### Seasonality

Sales of many glass container products such as beer, beverages and food are seasonal. Shipments in the U.S. and Europe are typically greater in the second and third quarters of the year, while shipments in the Asia Pacific region are typically greater in the first and fourth quarters of the year, and shipments in Latin America are typically greater in the third and fourth quarters of the year.

### Manufacturing

The Company has 80 glass manufacturing plants. It constantly seeks to improve the productivity of these operations through the systematic upgrading of production capabilities, sharing of best practices among plants and effective training of employees.

The Company also provides engineering support for its glass manufacturing operations through facilities located in the U.S., Australia, France, Poland, Colombia and Peru.

### Suppliers and Raw Materials

The primary raw materials used in the Company's glass container operations are sand, soda ash, limestone and recycled glass. Each of these materials, as well as the other raw materials used to manufacture glass containers, has historically been available in adequate supply from multiple sources. One of the sources is a soda ash mining operation in Wyoming in which the Company has a 25% interest.

### Energy

The Company's glass container operations require a continuous supply of significant amounts of energy, principally natural gas, fuel oil and electrical power. Adequate supplies of energy are generally available at all of the Company's manufacturing locations. Energy costs typically account for 10-25% of the Company's total manufacturing costs, depending on the cost of energy, the type of energy available, the factory location and the particular energy requirements. The percentage of total cost related to energy can vary significantly because of volatility in market prices, particularly for natural gas and fuel oil in volatile markets such as North America and Europe.

In North America, approximately 97% of the sales volume is represented by customer contracts that contain provisions that pass the commodity price of natural gas to the customer, effectively reducing the North America segment's exposure to changing natural gas market prices. Also, in order to limit the effects of fluctuations in market prices for natural gas, the Company uses commodity forward contracts related to its forecasted requirements in North America. The objective of these forward contracts is to reduce potential volatility in cash flows and expense due to changing market prices. The Company continually evaluates the energy markets with respect to its forecasted energy requirements to optimize its use of commodity forward contracts.

In Europe and Asia Pacific, the Company enters into fixed price contracts for a significant amount of its energy requirements. These contracts typically have terms of one to three years. In Latin America, the Company primarily enters into fixed price contracts for its energy requirements in most of the countries in which it operates and the remaining energy requirements are subject to changing natural gas market prices. These fixed price contracts typically

have terms of one to three years, and generally include annual price adjustments for inflation and for certain contracts price adjustments for foreign currency variation.

#### Technical Assistance License Agreements

The Company has agreements to license its proprietary glass container technology and to provide technical assistance to a limited number of companies around the world. These agreements cover areas related to

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manufacturing and engineering assistance. The worldwide licensee network provides a stream of revenue to help support the Company's development activities. In the years 2015, 2014 and 2013, the Company earned \$12 million, \$13 million and \$16 million, respectively, in royalties and net technical assistance revenue.

### Research, Development and Engineering

Research, development and engineering constitute important parts of the Company's technical activities. Expenditures for these activities were \$64 million, \$63 million and \$62 million for 2015, 2014 and 2013, respectively. The Company primarily focuses on advancements in the areas of product innovation, manufacturing process control, melting technology, automatic inspection, light weighting and further automation of manufacturing activities. The Company's research and development activities are conducted at its corporate facilities in Perrysburg, Ohio. During 2013, the Company completed the construction of a new research and development facility at this location. This new facility has enabled the Company to expand its research and development capabilities.

The Company holds a large number of patents related to a wide variety of products and processes and has a substantial number of patent applications pending. While the aggregate of the Company's patents are of material importance to its businesses, the Company does not consider that any patent or group of patents relating to a particular product or process is of material importance when judged from the standpoint of any individual segment or its businesses as a whole.

### Sustainability and the Environment

The Company is committed to reducing the impact its products and operations have on the environment. As part of this commitment, the Company has set targets for increasing the use of recycled glass in its manufacturing process, while reducing energy consumption and carbon dioxide equivalent ("CO<sub>2</sub>e") emissions. Specific actions taken by the Company include working with governments and other organizations to establish and financially support recycling initiatives, partnering with other entities throughout the supply chain to improve the effectiveness of recycling efforts, reducing the weight of glass packaging and investing in research and development to reduce energy consumption in its manufacturing process. The Company invests in technology and training to improve safety, reduce energy use, decrease emissions and increase the amount of cullet, or recycled glass, used in the production process.

The Company's worldwide operations, in addition to other companies within the industry, are subject to extensive laws, ordinances, regulations and other legal requirements relating to environmental protection, including legal requirements governing investigation and clean up of contaminated properties as well as water discharges, air emissions, waste management and workplace health and safety. The Company strives to abide by and uphold such laws and regulations.

### Glass Recycling and Bottle Deposits

The Company is an important contributor to recycling efforts worldwide and is among the largest users of recycled glass containers. If sufficient high quality recycled glass were available on a consistent basis, the Company has the technology to make glass containers containing a high proportion of recycled glass. Using recycled glass in the manufacturing process reduces energy costs and impacts the operating life and efficiency of the glass melting furnaces.

In the U.S., Canada, Europe and elsewhere, government authorities have adopted or are considering legal requirements that would mandate certain recycling rates, the use of recycled materials, or limitations on or preferences for certain types of packaging. The Company believes that governments worldwide will continue to develop and enact legal requirements around guiding customer and end consumer packaging choices.

Sales of beverage containers are affected by governmental regulation of packaging, including deposit laws and extended producer responsibility regulations. As of December 31, 2015, there were a number of U.S. states, Canadian provinces and territories, European countries and Australian states with some form of incentive for consumer returns of glass bottles in their law. The structure and enforcement of such laws and regulations can

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impact the sales of beverage containers in a given jurisdiction. Such laws and regulations also impact the availability of post consumer recycled glass for the Company to use in container production.

A number of states and provinces have recently considered or are now considering laws and regulations to encourage curbside, deposit and on premise glass recycling. Although there is no clear trend in the direction of these state and provincial laws and proposals, the Company believes that states and provinces, as well as municipalities within those jurisdictions, will continue to adopt recycling laws, which will impact supplies of recycled glass. As a large user of recycled glass for making new glass containers, the Company has an interest in laws and regulations impacting supplies of such material in its markets.

### Air Emissions

In Europe, the European Union Emissions Trading Scheme (“EUETS”) is in effect to facilitate emissions reduction. The Company’s manufacturing facilities which operate in EU countries must restrict the volume of their CO<sub>2</sub> emissions to the level of their individually allocated emissions allowances as set by country regulators. If the actual level of emissions for any facility exceeds its allocated allowance, additional allowances can be bought to cover deficits; conversely, if the actual level of emissions for any facility is less than its allocation, the excess allowances can be sold. The EUETS has not had a material effect on the Company’s results to date. However, should the regulators significantly restrict the number of emissions allowances available, it could have a material effect in the future.

In North America, the U.S. and Canada are engaged in significant legislative and regulatory activity relating to CO<sub>2</sub> emissions, at the federal, state and provincial levels of government. The U.S. Environmental Protection Agency (“EPA”) regulates emissions of hazardous air pollutants under the Clean Air Act, which grants the EPA authority to establish limits for certain air pollutants and to require compliance, levy penalties and bring civil judicial action against violators. The structure and scope of the EPA’s CO<sub>2</sub> regulations are currently the subject of litigation and are expected to be the subject of federal legislative activity. The EPA regulations, if preserved as proposed, could have a significant long term impact on the Company’s U.S. operations. The EPA also implemented the Cross State Air Pollution Rule, which set stringent emissions limits in many states starting in 2012. The state of California in the U.S. and the province of Quebec in Canada adopted cap and trade legislation aimed at reducing greenhouse gas emissions starting in 2013.

In Asia Pacific, the National Greenhouse and Energy Reporting Act 2007 commenced on July 1, 2008 in Australia. This act established a mandatory reporting system for corporate greenhouse gas emissions and energy production and consumption. In 2011, the Australian government adopted a carbon pricing mechanism that took effect in 2012, which required certain manufacturers to pay a tax based on their carbon equivalent emissions. In July 2014 the carbon pricing mechanism was repealed by the Australian government and replaced by the Emissions Reduction Fund (“ERF”) which comprises an element to credit emissions reductions, a fund to purchase emissions reductions and a safeguard mechanism. The ERF purchases the lowest cost abatement (in the form of Australian carbon credit units) from a wide range of sources, providing an incentive to businesses, households and landowners to proactively reduce their emissions, while the safeguard mechanism (which is effective from July 1, 2016) ensures that emissions reductions paid for through the crediting and purchasing elements of the ERF are not displaced by significant increases in emissions above business-as-usual levels elsewhere in the economy. An emissions trading scheme has also been in effect in New Zealand since 2008.

In Latin America, the Brazilian government passed a law in 2009 requiring companies to reduce the level of greenhouse gas emissions by the year 2025. In the other Latin American countries, national and local governments are considering proposals that would impose regulations to reduce CO<sub>2</sub> emissions.

The Company is unable to predict what environmental legal requirements may be adopted in the future. However, the Company continually monitors its operations in relation to environmental impacts and invests in environmentally friendly and emissions reducing projects. As such, the Company has made significant expenditures for environmental improvements at certain of its facilities over the last several years; however, these expenditures did not have a material adverse effect on the Company's results of operations or cash flows. The Company is unable to predict the impact of future environmental legal requirements on its results of operations or cash flows.

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Employees

The Company's worldwide operations employed approximately 27,000 persons as of December 31, 2015. Approximately 75% of North American employees are hourly workers covered by collective bargaining agreements. The principal collective bargaining agreement, which at December 31, 2015, covered approximately 76% of the Company's union affiliated employees in North America, will expire on March 31, 2016. Approximately 85% of employees in Latin America are covered by collective bargaining agreements. The majority of the hourly workers in Australia and New Zealand are also covered by collective bargaining agreements. The collective bargaining agreements in Latin America, Australia and New Zealand have varying terms and expiration dates. In Europe, a large number of the Company's employees are employed in countries in which employment laws provide greater bargaining or other rights to employees than the laws of the U.S. Such employment rights require the Company to work collaboratively with the legal representatives of the employees to effect any changes to labor arrangements. The Company considers its employee relations to be good and does not anticipate any material work stoppages in the near term.

Available Information

The Company's website is [www.owi.com](http://www.owi.com). The Company's annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934 can be obtained from this site at no cost. The Company's SEC filings are also available for reading and copying at the SEC's Public Reference Room at 100 F Street, NE, Washington, D.C. 20549. Information on the operation of the Public Reference Room may be obtained by calling the SEC at 1-800-SEC-0330. The SEC also maintains a website at [www.sec.gov](http://www.sec.gov) that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC.

The Company's Corporate Governance Guidelines, Code of Business Conduct and Ethics and the charters of the Audit, Compensation, Nominating/Corporate Governance and Risk Oversight Committees are also available on the Investor Relations section of the Company's website. Copies of these documents are available in print to share owners upon request, addressed to the Corporate Secretary at the address above.



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## Executive Officers of the Registrant

In the following table we set forth certain information regarding those persons currently serving as executive officers of Owens-Illinois, Inc. as of February 16, 2016.

Name and Age	Position
Andres A. Lopez (53)	Chief Executive Officer since January 1, 2016; President, Glass Containers and Chief Operating Officer 2015; Vice President and President of O I Americas 2014 - 2015; Vice President and President of O I South America 2009 - 2014; Vice President of Global Manufacturing and Engineering 2006 - 2009.
Albert P. L. Stroucken (68)	Executive Chairman of the Board since January 1, 2016; Chairman and Chief Executive Officer 2006 - 2015. Previously Chief Executive Officer of HB Fuller Company, a manufacturer of adhesives, sealants, coatings, paints and other specialty chemical products 1998 - 2006; Chairman of HB Fuller Company 1999 - 2006.
Miguel Alvarez (51)	President, O-I Latin America since 2014; President, O-I Brazil 2010 - 2014. Previously held leadership positions in Chile, Argentina and Ecuador for Belcorp, a leading global beauty products company 2005 - 2010.
James W. Baehren (65)	Senior Vice President and General Counsel since 2003; Senior Vice President Strategic Planning 2006 - 2012; Chief Administrative Officer 2004 - 2006; Corporate Secretary 1998 - 2010; Vice President and Director of Finance 2001 - 2003.
Jan A. Bertsch (59)	Chief Financial Officer and Senior Vice President since November 23, 2015. Previously Executive Vice President and Chief Financial Officer for Sigma-Aldrich, a life science and technology company, 2012 - 2015. Vice President, Controller and Principal Accounting Officer at BorgWarner 2011 - 2012; Vice President and Treasurer, 2009 - 2011.
Tim Connors (41)	President, O-I Asia Pacific since June 1, 2015; General Manager of O-I Australia 2013 - 2015; Vice President of Finance, Asia Pacific 2011 - 2013; Vice President of Strategic Planning and Business Development, North America 2010 - 2011.
Sergio B. O. Galindo (48)	President, O-I North America since June 1, 2015; Vice President and President of O I Asia Pacific 2012 - 2015; General Manager of O I Colombia 2009 - 2012.
John A. Haudrich (48)	Senior Vice President and Chief Strategy and Integration Officer since November 20, 2015; Vice President and Acting Chief Financial Officer 2015; Vice President Finance and Corporate Controller 2011 - 2015; Vice President of Investor Relations 2009 - 2011.
Paul A. Jarrell (53)	Senior Vice President since 2011; Chief Administrative Officer since 2013; Chief Human Resources Officer 2011 - 2012. Previously Executive Vice President and Chief Human Resources Officer for DSM, a life sciences and materials company based in The Netherlands, 2009 - 2011; Vice President and Director of Human Resources for ITT, a fluid technologies and engineered products company, 2006 - 2009.
Vitaliano Torno (57)	President, O-I Europe since January 1, 2016; Managing Director, O-I Europe 2015; Vice President, European countries 2013 - 2015; Vice President, Marketing and sales, Europe 2010 - 2013.

## Financial Information about Foreign and Domestic Operations

Information as to net sales, segment operating profit, and assets of the Company's reportable segments is included in Note 2 to the Consolidated Financial Statements.



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ITEM 1A. RISK FACTORS

**Asbestos Related Liability**—The Company has made, and will continue to make, substantial payments to resolve claims of persons alleging exposure to asbestos containing products and may need to record additional charges in the future for estimated asbestos related costs. These substantial payments have affected and may continue to affect the Company's cost of borrowing and the ability to pursue acquisitions.

The Company is a defendant in numerous lawsuits alleging bodily injury and death as a result of exposure to asbestos. From 1948 to 1958, one of the Company's former business units commercially produced and sold approximately \$40 million of a high temperature, calcium silicate based pipe and block insulation material containing asbestos. The Company exited the insulation business in April 1958. The typical asbestos personal injury lawsuit alleges various theories of liability, including negligence, gross negligence and strict liability and seeks compensatory, and in some cases, punitive damages, in various amounts (herein referred to as "asbestos claims").

The Company believes that its ultimate asbestos related liability (i.e., its indemnity payments or other claim disposition costs plus related legal fees) cannot reasonably be estimated. Beginning with the initial liability of \$975 million established in 1993, the Company has accrued a total of approximately \$4.6 billion through 2015, before insurance recoveries, for its asbestos related liability. The Company's ability to reasonably estimate its liability has been significantly affected by, among other factors, the volatility of asbestos related litigation in the United States, the significant number of co defendants that have filed for bankruptcy, the inherent uncertainty of future disease incidence and claiming patterns against the Company, the significant expansion of the defendants that are now sued in this litigation, and the continuing changes in the extent to which these defendants participate in the resolution of cases in which the Company is also a defendant.

The Company conducted a comprehensive legal review of its asbestos related liabilities and costs in connection with finalizing and reporting its results of operations for the year ended December 31, 2015 and concluded that an increase in its accrual for future asbestos related costs in the amount of \$225 million (pretax and after tax) was required.

The significant assumptions underlying the material components of the Company's accrual are:

- a) settlements will continue to be limited almost exclusively to claimants who were exposed to the Company's asbestos containing insulation prior to its exit from that business in 1958;
- b) claims will continue to be resolved primarily under the Company's administrative claims agreements or on terms comparable to those set forth in those agreements;
- c) the incidence of serious asbestos related disease cases and claiming patterns against the Company for such cases do not change materially;
- d) the Company is substantially able to defend itself successfully at trial and on appeal;
- e) the number and timing of additional co defendant bankruptcies do not change significantly the assets available to participate in the resolution of cases in which the Company is a defendant; and
- f) co defendants with substantial resources and assets continue to participate significantly in the resolution of future asbestos lawsuits and claims.

The ultimate amount of distributions that may be required to fund the Company's asbestos related payments cannot reasonably be estimated. The Company's reported results of operations for 2015 were materially affected by the \$225 million (pretax and after tax) fourth quarter charge and asbestos related payments continue to be substantial. Any future additional charge may likewise materially affect the Company's results of operations for the period in which it is recorded. Also, the continued use of significant amounts of cash for asbestos related costs has affected and may continue to affect the Company's cost of borrowing, its ability to pursue global or domestic acquisitions, its ability to reinvest in its operations, and its ability to pay dividends.



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Substantial Leverage—The Company's indebtedness could adversely affect the Company's financial health.

The Company has a significant amount of debt. As of December 31, 2015, the Company had approximately \$5.6 billion of total debt outstanding, an increase from \$3.4 billion at December 31, 2014, due to additional debt incurred as a result of the Vitro Acquisition.

The Company's indebtedness could result in the following consequences:

- Increased vulnerability to general adverse economic and industry conditions;
- Increased vulnerability to interest rate increases for the portion of the debt under the secured credit agreement;
- Require the Company to dedicate a substantial portion of cash flow from operations to payments on indebtedness, thereby reducing the availability of cash flow to fund working capital, capital expenditures, acquisitions, share repurchases, development efforts and other general corporate purposes;
- Limit flexibility in planning for, or reacting to, changes in the Company's business and the rigid packaging market;
- Place the Company at a competitive disadvantage relative to its competitors that have less debt; and
- Limit, along with the financial and other restrictive covenants in the documents governing indebtedness, among other things, the Company's ability to borrow additional funds

Ability to Service Debt—To service its indebtedness, the Company will require a significant amount of cash. The Company's ability to generate cash and refinance certain indebtedness depends on many factors beyond its control.

The Company's ability to make payments on and to refinance its indebtedness and to fund working capital, capital expenditures, acquisitions, development efforts and other general corporate purposes depends on its ability to generate cash in the future. The Company has no assurance that it will generate sufficient cash flow from operations, or that future borrowings will be available under the secured credit agreement, in an amount sufficient to enable the Company to pay its indebtedness, or to fund other liquidity needs. If short term interest rates increase, the Company's debt service cost will increase because some of its debt is subject to short term variable interest rates. At December 31, 2015, the Company's debt subject to variable interest rates represented approximately 46% of total debt.

The Company may need to refinance all or a portion of its indebtedness on or before maturity. If the Company is unable to generate sufficient cash flow and is unable to refinance or extend outstanding borrowings on commercially reasonable terms or at all, it may have to take one or more of the following actions:

- Reduce or delay capital expenditures planned for replacements, improvements and expansions;
- Sell assets;
- Restructure debt; and/or
- Obtain additional debt or equity financing.

The Company can provide no assurance that it could affect or implement any of these alternatives on satisfactory terms, if at all.

Debt Restrictions—The Company may not be able to finance future needs or adapt its business plans to changes because of restrictions placed on it by the secured credit agreement and the indentures and instruments governing other indebtedness.

The secured credit agreement, the indentures governing the senior debentures and notes, and certain of the agreements governing other indebtedness contain affirmative and negative covenants that limit the ability of the

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Company to take certain actions. For example, these indentures restrict, among other things, the ability of the Company and its restricted subsidiaries to borrow money, pay dividends on, or redeem or repurchase its stock, make investments, create liens, enter into certain transactions with affiliates and sell certain assets or merge with or into other companies. These restrictions could adversely affect the Company's ability to operate its businesses and may limit its ability to take advantage of potential business opportunities as they arise.

Failure to comply with these or other covenants and restrictions contained in the secured credit agreement, the indentures or agreements governing other indebtedness could result in a default under those agreements, and the debt under those agreements, together with accrued interest, could then be declared immediately due and payable. If a default occurs under the secured credit agreement, the Company could no longer request borrowings under the secured credit agreement, and the lenders could cause all of the outstanding debt obligations under such secured credit agreement to become due and payable, which would result in a default under a number of other outstanding debt securities and could lead to an acceleration of obligations related to these debt securities. A default under the secured credit agreement, indentures or agreements governing other indebtedness could also lead to an acceleration of debt under other debt instruments that contain cross acceleration or cross default provisions.

Foreign Currency Exchange Rates—The Company is subject to the effects of fluctuations in foreign currency exchange rates, which could adversely impact the Company's financial results.

The Company's reporting currency is the U.S. dollar. A significant portion of the Company's net sales, costs, assets and liabilities are denominated in currencies other than the U.S. dollar, primarily the Euro, Brazilian real, Colombian peso, Mexican peso and Australian dollar. In its consolidated financial statements, the Company remeasures transactions denominated in a currency other than the functional currency of the reporting entity (e.g. soda ash purchases) and translates local currency financial results into U.S. dollars based on the exchange rates prevailing during the reporting period. During times of a strengthening U.S. dollar, the reported revenues and earnings of the Company's international operations will be reduced because the local currencies will translate into fewer U.S. dollars. This could have a material adverse effect on the Company's financial condition, results of operations and cash flows.

International Operations—The Company is subject to risks associated with operating in foreign countries.

The Company operates manufacturing and other facilities throughout the world. Net sales from non U.S. operations totaled approximately \$4.2 billion, representing approximately 69% of the Company's net sales for the year ended December 31, 2015. As a result of its non U.S. operations, the Company is subject to risks associated with operating in foreign countries, including:

- Political, social and economic instability;
- War, civil disturbance or acts of terrorism;
- Taking of property by nationalization or expropriation without fair compensation;
- Changes in governmental policies and regulations;
- Devaluations and fluctuations in currency exchange rates;
- Imposition of limitations on conversions of foreign currencies into dollars or remittance of dividends and other payments by foreign subsidiaries;
- Imposition or increase of withholding and other taxes on remittances and other payments by foreign subsidiaries;
- Hyperinflation in certain foreign countries;
- Impositions or increase of investment and other restrictions or requirements by foreign governments;
- Loss or non renewal of treaties or other agreements with foreign tax authorities;



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- Changes in tax laws, or the interpretation thereof, affecting foreign tax credits or tax deductions relating to our non U.S. earnings or operations; and
- Complying with the U.S. Foreign Corrupt Practices Act, which prohibits companies and their intermediaries from engaging in bribery or other prohibited payments to foreign officials for the purposes of obtaining or retaining business or gaining an unfair business advantage and requires companies to maintain accurate books and records and internal controls.

The risks associated with operating in foreign countries may have a material adverse effect on operations.

**Competition**—The Company faces intense competition from other glass container producers, as well as from makers of alternative forms of packaging. Competitive pressures could adversely affect the Company's financial health.

The Company is subject to significant competition from other glass container producers, as well as from makers of alternative forms of packaging, such as aluminum cans and plastic containers. The Company also competes with manufacturers of non rigid packaging alternatives, including flexible pouches and aseptic cartons, in serving the packaging needs of certain end use markets, including juice customers. The Company competes with each rigid packaging competitor on the basis of price, quality, service and the marketing and functional attributes of the container. Advantages or disadvantages in any of these competitive factors may be sufficient to cause the customer to consider changing suppliers and/or using an alternative form of packaging. The adverse effects of consumer purchasing decisions may be more significant in periods of economic downturn and may lead to longer term reductions in consumer spending on glass packaged products.

Pressures from competitors and producers of alternative forms of packaging have resulted in excess capacity in certain countries in the past and have led to capacity adjustments and significant pricing pressures in the rigid packaging market.

**Lower Demand Levels**—Changes in consumer preferences may have a material adverse effect on the Company's financial results.

Changes in consumer preferences for the food and beverages they consume can reduce demand for the Company's products. Because many of the Company's products are used to package consumer goods, the Company's sales and profitability could be negatively impacted by changes in consumer preferences for those products. Examples of changes in consumer preferences include, but are not limited to, lower sales of major domestic beer brands and shifts from beer to wine or spirits that results in the use of fewer glass containers. In periods of lower demand, the Company's sales and production levels may decrease causing a material adverse effect on the Company's profitability.

**High Energy Costs**—Higher energy costs worldwide and interrupted power supplies may have a material adverse effect on operations.

Electrical power, natural gas, and fuel oil are vital to the Company's operations as it relies on a continuous energy supply to conduct its business. Depending on the location and mix of energy sources, energy accounts for 10% to 25% of total production costs. Substantial increases and volatility in energy costs could cause the Company to experience a significant increase in operating costs, which may have a material adverse effect on operations.

**Global Economic Environment**—The global credit, financial and economic environment could have a material adverse effect on operations and financial condition.

The global credit, financial and economic environment could have a material adverse effect on operations, including the following:



- Downturns in the business or financial condition of any of the Company's customers or suppliers could result in a loss of revenues or a disruption in the supply of raw materials;

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- Tightening of credit in financial markets could reduce the Company's ability, as well as the ability of the Company's customers and suppliers, to obtain future financing;
- Volatile market performance could affect the fair value of the Company's pension assets and liabilities, potentially requiring the Company to make significant additional contributions to its pension plans to maintain prescribed funding levels;
- The deterioration of any of the lending parties under the Company's revolving credit facility or the creditworthiness of the counterparties to the Company's derivative transactions could result in such parties' failure to satisfy their obligations under their arrangements with the Company; and
- A significant weakening of the Company's financial position or results of operations could result in noncompliance with the covenants under the Company's indebtedness.

Business Integration Risks—The Company may not be able to effectively integrate additional businesses it has acquired or will acquire in the future.

The Company's ability to realize the anticipated benefits of the Vitro Acquisition will depend, to a large extent, on its ability to integrate the two businesses. The combination of two independent businesses is a complex, costly and time consuming process and there can be no assurance that the Company will be able to successfully integrate the Vitro Business into its business, or if such integration is successfully accomplished, that such integration will not be more costly or take longer than presently contemplated. Integration of the Vitro Acquisition may include various risks and uncertainties, including the factors discussed in the paragraph below. If the Company cannot successfully integrate and manage the Vitro Business within a reasonable time following the Vitro Acquisition, the Company may not be able to realize the potential and anticipated benefits of the Vitro Acquisition, which could have a material adverse effect on the Company's share price, business, cash flows, results of operations and financial position.

The Company may also consider other strategic transactions, including acquisitions that will complement, strengthen and enhance growth in its worldwide glass operations. The Company evaluates opportunities on a preliminary basis from time to time, but these transactions may not advance beyond the preliminary stages or be completed. Such acquisitions are subject to various risks and uncertainties, including:

- The inability to integrate effectively the operations, products, technologies and personnel of the acquired companies (some of which are located in diverse geographic regions) and achieve expected synergies;
- The potential disruption of existing business and diversion of management's attention from day to day operations;
- The inability to maintain uniform standards, controls, procedures and policies;
- The need or obligation to divest portions of the acquired companies;
- The potential impairment of relationships with customers;
- The potential failure to identify material problems and liabilities during due diligence review of acquisition targets;
- The potential failure to obtain sufficient indemnification rights to fully offset possible liabilities associated with acquired businesses; and
- The challenges associated with operating in new geographic regions.

In addition, the Company cannot make assurances that the integration and consolidation of newly acquired businesses will achieve any anticipated cost savings and operating synergies.

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**Customer Consolidation**—The continuing consolidation of the Company’s customer base may intensify pricing pressures and have a material adverse effect on operations.

Many of the Company’s largest customers have acquired companies with similar or complementary product lines. This consolidation has increased the concentration of the Company’s business with its largest customers. In many cases, such consolidation has been accompanied by pressure from customers for lower prices, reflecting the increase in the total volume of products purchased or the elimination of a price differential between the acquiring customer and the company acquired. Increased pricing pressures from the Company’s customers may have a material adverse effect on operations.

**Operational Disruptions**—Profitability could be affected by unanticipated operational disruptions.

The Company’s glass container manufacturing process is asset intensive and includes the use of large furnaces and machines. The Company periodically experiences unanticipated disruptions to its assets and these events can have an adverse effect on its business operations and profitability. The impacts of these operational disruptions include, but are not limited to, higher maintenance, production changeover and shipping costs, higher capital spending, as well as lower absorption of fixed costs during periods of extended downtime. The Company maintains insurance policies in amounts and with coverage and deductibles that are reasonable and in line with industry standards; however, this insurance coverage may not be adequate to protect the Company from all liabilities and expenses that may arise.

**Seasonality**—Profitability could be affected by varied seasonal demands.

Due principally to the seasonal nature of the consumption of beer and other beverages, for which demand is stronger during the summer months, sales of the Company’s products have varied and are expected to vary by quarter. Shipments in the U.S. and Europe are typically greater in the second and third quarters of the year, while shipments in the Asia Pacific region are typically greater in the first and fourth quarters of the year, and shipments in Latin America are typically greater in the third and fourth quarters of the year. Unseasonably cool weather during peak demand periods can reduce demand for certain beverages packaged in the Company’s containers.

**Raw Materials**—Profitability could be affected by the availability of raw materials.

The raw materials that the Company uses have historically been available in adequate supply from multiple sources. For certain raw materials, however, there may be temporary shortages due to weather or other factors, including disruptions in supply caused by raw material transportation or production delays. These shortages, as well as material volatility in the cost of any of the principal raw materials that the Company uses, may have a material adverse effect on operations.

**Environmental Risks**—The Company is subject to various environmental legal requirements and may be subject to new legal requirements in the future. These requirements may have a material adverse effect on operations.

The Company’s operations and properties are subject to extensive laws, ordinances, regulations and other legal requirements relating to environmental protection, including legal requirements governing investigation and clean up of contaminated properties as well as water discharges, air emissions, waste management and workplace health and safety. Such legal requirements frequently change and vary among jurisdictions. The Company’s operations and properties must comply with these legal requirements. These requirements may have a material adverse effect on operations.

The Company has incurred, and expects to incur, costs for its operations to comply with environmental legal requirements, and these costs could increase in the future. Many environmental legal requirements provide for

substantial fines, orders (including orders to cease operations), and criminal sanctions for violations. These legal requirements may apply to conditions at properties that the Company presently or formerly owned or operated, as well as at other properties for which the Company may be responsible, including those at which wastes attributable to the Company were disposed. A significant order or judgment against the Company, the loss of a

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significant permit or license or the imposition of a significant fine may have a material adverse effect on operations.

A number of governmental authorities have enacted, or are considering enacting, legal requirements that would mandate certain rates of recycling, the use of recycled materials and/or limitations on certain kinds of packaging materials. In addition, some companies with packaging needs have responded to such developments and/or perceived environmental concerns of consumers by using containers made in whole or in part of recycled materials. Such developments may reduce the demand for some of the Company's products and/or increase the Company's costs, which may have a material adverse effect on operations.

**Taxes**—Potential tax law changes could adversely affect net income and cash flow.

The Company is subject to income tax in the numerous jurisdictions in which it operates. Increases in income tax rates or other tax law changes, as well as ongoing audits by domestic and international authorities, could reduce the Company's net income and cash flow from affected jurisdictions. In particular, potential tax law changes in the U.S. regarding the treatment of the Company's unrepatriated non U.S. earnings could have a material adverse effect on net income and cash flow. In addition, the Company's products are subject to import and excise duties and/or sales or value added taxes in many jurisdictions in which it operates. Increases in these indirect taxes could affect the affordability of the Company's products and, therefore, reduce demand.

**Labor Relations**—Some of the Company's employees are unionized or represented by workers' councils.

The Company is party to a number of collective bargaining agreements with labor unions which at December 31, 2015, covered approximately 75% of the Company's employees in North America. The principal collective bargaining agreement, which at December 31, 2015 covered approximately 76% of the Company's union affiliated employees in North America, will expire on March 31, 2016. Approximately 85% of employees in Latin America are covered by collective bargaining agreements. The majority of the hourly workers in Australia and New Zealand are also covered by collective bargaining agreements. The collective bargaining agreements in Latin America, Australia and New Zealand have varying terms and expiration dates. Upon the expiration of any collective bargaining agreement, if the Company is unable to negotiate acceptable contracts with labor unions, it could result in strikes by the affected workers and increased operating costs as a result of higher wages or benefits paid to union members. In Europe, a large number of the Company's employees are employed in countries in which employment laws provide greater bargaining or other rights to employees than the laws of the U.S. Such employment rights require the Company to work collaboratively with the legal representatives of the employees to effect any changes to labor arrangements. For example, most of the Company's employees in Europe are represented by workers' councils that must approve any changes in conditions of employment, including salaries and benefits and staff changes, and may impede efforts to restructure the Company's workforce. In addition, if the Company's employees were to engage in a strike or other work stoppage, the Company could experience a significant disruption of operations and/or higher ongoing labor costs, which may have a material adverse effect on operations.

**Key Management and Personnel Retention**—Failure to retain key management and personnel could have a material adverse effect on operations.

The Company believes that its future success depends, in part, on its experienced management team and certain key personnel. The loss of certain key management and personnel could limit the Company's ability to implement its business plans and meet its objectives.

**Joint Ventures**—Failure by joint venture partners to observe their obligations could have a material adverse effect on operations.

A portion of the Company's operations is conducted through joint ventures, including joint ventures in the Europe, North America, Asia Pacific segments and in retained corporate costs and other. If the Company's joint venture partners do not observe their obligations or are unable to commit additional capital to the joint ventures, it

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is possible that the affected joint venture would not be able to operate in accordance with its business plans, which could have a material adverse effect on the Company's financial condition and results of operations.

Cybersecurity and Information Technology—Security threats and the failure or disruption of the integrity of the Company's information technology, or those of third parties with which it does business, could have a material adverse effect on its business and the results of operations.

The Company relies on information technology to operate its plants, to communicate with its employees, customers and suppliers, to store sensitive business information and intellectual property, and to report financial and operating results. As with all large systems, the Company's information technology systems could fail on their own accord or may be vulnerable to a variety of interruptions due to events, including, but not limited to, natural disasters, terrorist attacks, telecommunications failures, computer viruses, hackers or other security issues. The Company's disaster recovery programs and other preventative measures may be unable to prevent the failure or disruption of the Company's information technology systems, which could result in transaction errors, loss of customers, business disruptions, or loss of or damage to intellectual property and could have a material adverse effect on operations.

As cyberattacks on various organizations have increased, the Company's information technology systems may be subject to increased security issues. The Company has measures in place to prevent and detect global security threats, but may be unable to prevent certain security breaches. This may result in the loss of customers and business opportunities, regulatory fines, penalties or intervention, reputational damage, reimbursement or other compensatory costs, and additional compliance costs. Failure or disruption of these systems, or the back up systems, for any reason could disrupt the Company's operations and negatively impact the Company's cash flows or financial condition.

Accounting Estimates—The Company's financial results are based upon estimates and assumptions that may differ from actual results.

In preparing the Company's consolidated financial statements in accordance with U.S. generally accepted accounting principles, several estimates and assumptions are made that affect the accounting for and recognition of assets, liabilities, revenues and expenses. These estimates and assumptions must be made due to certain information used in the preparation of the Company's financial statements which is dependent on future events, cannot be calculated with a high degree of precision from data available or is not capable of being readily calculated based on generally accepted methodologies. The Company believes that accounting for long lived assets, pension benefit plans, contingencies and litigation, and income taxes involves the more significant judgments and estimates used in the preparation of its consolidated financial statements. Actual results for all estimates could differ materially from the estimates and assumptions that the Company uses, which could have a material adverse effect on the Company's financial condition and results of operations.

Accounting Standards—The adoption of new accounting standards or interpretations could adversely impact the Company's financial results.

New accounting standards or pronouncements could adversely affect the Company's operating results or cause unanticipated fluctuations in its results in future periods. The accounting rules and regulations that the Company must comply with are complex and continually changing. In addition, many companies' accounting policies are being subjected to heightened scrutiny by regulators and the public. While the Company believes that its financial statements have been prepared in accordance with U.S. generally accepted accounting principles, the Company cannot predict the impact of future changes to accounting principles or its accounting policies on its financial statements going forward.

Goodwill—A significant write down of goodwill would have a material adverse effect on the Company's reported results of operations and net worth.

Goodwill at December 31, 2015 totaled \$2.5 billion. The Company evaluates goodwill annually (or more frequently if impairment indicators arise) for impairment using the required business valuation methods. These

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methods include the use of a weighted average cost of capital to calculate the present value of the expected future cash flows of the Company's reporting units. Future changes in the cost of capital, expected cash flows, or other factors may cause the Company's goodwill to be impaired, resulting in a non-cash charge against results of operations to write down goodwill for the amount of the impairment. If a significant write down is required, the charge would have a material adverse effect on the Company's reported results of operations and net worth.

**Pension Funding**—An increase in the underfunded status of the Company's pension plans could adversely impact the Company's operations, financial condition and liquidity.

The Company contributed \$17 million, \$28 million and \$96 million to its defined benefit pension plans in 2015, 2014 and 2013, respectively. The amount the Company is required to contribute to these plans is determined by the laws and regulations governing each plan, and is generally related to the funded status of the plans. A deterioration in the value of the plans' investments or a decrease in the discount rate used to calculate plan liabilities generally would increase the underfunded status of the plans. An increase in the underfunded status of the plans could result in an increase in the Company's obligation to make contributions to the plans, thereby reducing the cash available for working capital and other corporate uses, and may have an adverse impact on the Company's operations, financial condition and liquidity.

**ITEM 1B. UNRESOLVED STAFF COMMENTS**

On October 9, 2015, the Company received a comment letter from the staff of the SEC's Division of Corporation Finance as part of its review of the Company's Form 10-K for the year ended December 31, 2014 that commenced in June 2015. The staff requested additional information and provided comments relating to the Company's process for determining the appropriate charge for estimated future asbestos-related costs. The Company responded to the October 9, 2015 letter on December 21, 2015 and believes that it has addressed the staff's comments. As of the date of this annual report, the Company has not received confirmation from the staff that its review process is complete. The Company intends to continue to work with the staff and respond to any remaining comments.

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ITEM 2. PROPERTIES

The principal manufacturing facilities and other material important physical properties of the Company at December 31, 2015 are listed below. All properties are glass container plants and are owned in fee, except where otherwise noted.

North American Operations

United States

Atlanta, GA	Portland, OR
Auburn, NY	Streator, IL
Brockway, PA	Toano, VA
Crenshaw, PA	Tracy, CA
Danville, VA	Waco, TX
Kalama, WA	Windsor, CO
Lapel, IN	Winston Salem, NC
Los Angeles, CA	Zanesville, OH
Muskogee, OK	

Canada

Brampton, Ontario	Montreal, Quebec
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Asia Pacific Operations

Australia

Adelaide	Melbourne
Brisbane	Sydney

China

Tianjin	Zhaoqing
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Indonesia

Jakarta

New Zealand

Auckland

European Operations

Czech Republic

Dubi	Nove Sedlo
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Estonia

Jarvakandi

France

Beziers	Vayres
Gironcourt	Veauche
Labegude	Vergeze
Puy Guillaume	Wingles
Reims	



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Germany	
Bernsdorf	Rinteln
Holzminden	
Hungary	
Oroshaza	
Italy	
Asti	Origgio
Aprilia	Ottaviano
Bari	San Gemini
Marsala	San Polo
Mezzocorona	Villotta
The Netherlands	
Leerdam	Schiedam
Maastricht	
Poland	
Jaroslaw	Poznan
Spain	
Barcelona	Sevilla
United Kingdom	
Alloa	Harlow
Latin American Operations	
Argentina	
Rosario	
Bolivia	
Cochabamba	
Brazil	
Recife	Vitoria de Santo Antao (glass container
Rio de Janeiro (glass container	and tableware)
and tableware)	
Sao Paulo	
Colombia	
Buga (tableware)	Soacha
Envigado	Zipaquira
Ecuador	
Guayaquil	



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Mexico	
Guadalajara	Queretaro
Los Reyes	Toluca
Monterrey	
Peru	
Callao	Lurin(1)
Other Operations	
Engineering Support Centers	
Brockway, Pennsylvania	Lurin, Peru
Cali, Colombia	Perrysburg, Ohio
Hawthorn, Australia	Villeurbanne, France
Jaroslaw, Poland	
Shared Service Centers	
Medellin, Colombia	Perrysburg, Ohio
Monterrey, Mexico	Poznan, Poland(1)
Distribution Center	
Laredo, TX(1)	
Corporate Facilities	
Hawthorn, Australia(1)	Perrysburg, Ohio(1)
Miami, Florida(1)	Vufflens la Ville, Switzerland(1)

(1) This facility is leased in whole or in part. The Company believes that its facilities are well maintained and currently adequate for its planned production requirements over the next three to five years.

ITEM 3. LEGAL PROCEEDINGS

For further information on legal proceedings, see Note 12 to the Consolidated Financial Statements.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

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## PART II

## ITEM 5. MARKET FOR REGISTRANT'S COMMON STOCK AND RELATED SHARE OWNER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

The price range for the Company's common stock on the New York Stock Exchange, as reported by the Financial Industry Regulatory Authority, Inc., was as follows:

	2015		2014	
	High	Low	High	Low
First Quarter	\$ 26.99	\$ 22.85	\$ 35.53	\$ 30.88
Second Quarter	25.98	22.94	34.73	31.17
Third Quarter	22.93	19.42	35.16	26.05
Fourth Quarter	23.83	16.94	27.29	23.53

The number of share owners of record on December 31, 2015 was 1,131. Approximately 99% of the outstanding shares were registered in the name of Depository Trust Company, or CEDE, which held such shares on behalf of a number of brokerage firms, banks, and other financial institutions. The shares attributed to these financial institutions, in turn, represented the interests of more than 25,597 unidentified beneficial owners. No dividends have been declared or paid since the Company's initial public offering in December 1991 and the Company does not anticipate paying any dividends in the near future. For restrictions on payment of dividends on the Company's common stock, see Management's Discussion and Analysis of Financial Condition and Results of Operations—Capital Resources and Liquidity—Current and Long Term Debt and Note 11 to the Consolidated Financial Statements.

Information with respect to securities authorized for issuance under equity compensation plans is included herein under Item 12.

The Company did not purchase any shares of its common stock for the three months ended December 31, 2015 (4.1 million shares purchased for the twelve months ended December 31, 2015). The Company has \$380 million remaining for repurchases as of December 31, 2015 pursuant to authorization by its Board of Directors in October 2014 to purchase up to \$500 million of the Company's common stock until December 31, 2017.

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PERFORMANCE GRAPH

COMPARISON OF CUMULATIVE TOTAL RETURN

AMONG OWENS ILLINOIS, INC., S&P 500, AND PACKAGING GROUP

	Years Ending December 31,					
	2010	2011	2012	2013	2014	2015
Owens-Illinois, Inc.	\$ 100.00	\$ 63.13	\$ 69.28	\$ 116.55	\$ 87.92	\$ 56.74
S&P 500	100.00	102.11	118.45	156.82	178.28	180.75
Packaging Group	100.00	93.26	101.84	141.03	157.64	157.85

The above graph compares the performance of the Company's Common Stock with that of a broad market index (the S&P 500 Composite Index) and a packaging group consisting of companies with lines of business or product end uses comparable to those of the Company for which market quotations are available.

The packaging group consists of: AptarGroup, Inc., Ball Corp., Bemis Company, Inc., Crown Holdings, Inc., Owens Illinois, Inc., Sealed Air Corp., Silgan Holdings Inc., and Sonoco Products Co.

The comparison of total return on investment for each period is based on the investment of \$100 on December 31, 2010 and the change in market value of the stock, including additional shares assumed purchased through reinvestment of dividends, if any.



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## ITEM 6. SELECTED FINANCIAL DATA

The selected consolidated financial data presented below relates to each of the five years in the period ended December 31, 2015. The financial data for each of the five years in the period ended December 31, 2015 was derived from the audited consolidated financial statements of the Company.

	Year ended December 31,				
	2015	2014	2013	2012	2011
	(Dollars in millions)				
Consolidated operating results(a):					
Net sales	\$ 6,156	\$ 6,784	\$ 6,967	\$ 7,000	\$ 7,358
Cost of goods sold(b)	(5,046)	(5,531)	(5,636)	(5,626)	(5,969)
Gross profit	1,110	1,253	1,331	1,374	1,389
Selling and administrative, research, development and engineering(b)	(540)	(586)	(568)	(617)	(627)
Other expense, net(b)	(260)	(219)	(199)	(190)	(855)
Earnings (loss) before interest expense and items below	310	448	564	567	(93)
Interest expense, net(b)	(251)	(230)	(229)	(239)	(303)
Earnings (loss) from continuing operations before income taxes	59	218	335	328	(396)
Provision for income taxes(b)	(106)	(92)	(120)	(108)	(85)
Earnings (loss) from continuing operations	(47)	126	215	220	(481)
Gain (loss) from discontinued operations	(4)	(23)	(18)	(2)	1
Net earnings (loss)	(51)	103	197	218	(480)
Net (earnings) attributable to noncontrolling interests	(23)	(28)	(13)	(34)	(20)
Net earnings (loss) attributable to the Company	\$ (74)	\$ 75	\$ 184	\$ 184	\$ (500)

	Year ended December 31,				
	2015	2014	2013	2012	2011
Basic earnings (loss) per share of common stock:					
Earnings (loss) from continuing operations	\$ (0.44)	\$ 0.60	\$ 1.22	\$ 1.13	\$ (3.06)
Gain (loss) on disposal of discontinued operations	(0.03)	(0.14)	(0.11)	(0.01)	0.01
Net earnings (loss)	\$ (0.47)	\$ 0.46	\$ 1.11	\$ 1.12	\$ (3.05)
Weighted average shares outstanding (in thousands)	161,169	164,720	164,425	164,474	163,691
Diluted earnings (loss) per share of common stock:					
Earnings (loss) from continuing operations	\$ (0.44)	\$ 0.59	\$ 1.22	\$ 1.12	\$ (3.06)
Gain (loss) on disposal of discontinued operations	(0.03)	(0.14)	(0.11)	(0.01)	0.01

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Net earnings (loss)	\$ (0.47)	\$ 0.45	\$ 1.11	\$ 1.11	\$ (3.05)
Diluted average shares (in thousands)	161,169	166,047	165,828	165,768	163,691

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For the year ended December 31, 2015 and 2011, diluted earnings per share of common stock was equal to basic earnings per share of common stock due to the loss from continuing operations.

	Year ended December 31,				
	2015	2014	2013	2012	2011
	(Dollars in millions)				
Other data:					
The following are included in earnings from continuing operations:					
Depreciation	\$ 323	\$ 335	\$ 350	\$ 378	\$ 405
Amortization of intangibles	86	83	47	34	17
Amortization of deferred finance fees (included in interest expense)	15	30	32	33	32
Balance sheet data (at end of period):					
Working capital (current assets less current liabilities)	\$ 212	\$ 43	\$ 296	\$ 486	\$ 498
Total assets	9,421	7,843	8,393	8,567	8,935
Total debt	5,573	3,445	3,541	3,742	3,993
Share owners' equity	574	1,275	1,603	1,055	1,041
Free cash flow(c)	\$ 210	\$ 329	\$ 339	\$ 290	\$ 220

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(a) Amounts for 2011 have been adjusted to reflect the retrospective application of a change in the method of valuing U.S. inventories to average cost from last in, first out.

(b) Note that the items below relate to items management considers not representative of ongoing operations.

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	Year ended December 31,				
	2015	2014	2013	2012	2011
	(Dollars in millions)				
Cost of goods sold					
Restructuring, asset impairment and related charges	\$ —	\$ 8	\$ —	\$ —	\$ —
Pension settlement charges		50			
Acquisition-related fair value inventory adjustments	22				
Selling and administrative, research, development and engineering					
Pension settlement charges		15			
Other expense, net					
Accrual for estimated future asbestos-related costs	225	135	145	155	165
Restructuring, asset impairment and other charges	75	78	119	168	112
Non-income tax charge		69			
Equity earnings related charges	5	5			
Gain related to cash received from the Chinese government as compensation for land in China that the Company was required to return to the government				(61)	
Write-down of goodwill in the Asia Pacific segment					641
Acquisition-related fair value intangible adjustments	10				
Strategic transaction costs	23				
Interest expense, net					
Note repurchase premiums and additional interest charges for the write-off of unamortized deferred financing fees related to the early extinguishment of debt	42	20	11		25
Provision for income taxes					
Tax expense (benefit) recorded for certain tax adjustments	8	(8)		(14)	(15)
Net tax (benefit) expense for income tax on items above	(15)	(34)	(14)	(8)	(18)
Net earnings attributable to noncontrolling interest					
Net impact of noncontrolling interests on items above			(13)	12	(5)
	\$ 395	\$ 338	\$ 248	\$ 252	\$ 905

(c) The Company defines free cash flow as cash provided by continuing operating activities less additions to property, plant and equipment from continuing operations. Free cash flow does not conform to U.S. GAAP and should not be construed as an alternative to the cash flow measures reported in accordance with

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U.S. GAAP. The Company uses free cash flow for internal reporting, forecasting and budgeting and believes this information allows the board of directors, management, investors and analysts to better understand the Company's financial performance. Free cash flow is calculated as follows (dollars in millions):

(d)

Year ended December 31,	2015	2014	2013	2012	2011
Cash provided by continuing operating activities	\$ 612	\$ 698	\$ 700	\$ 580	\$ 505
Additions to property, plant and equipment	(402)	(369)	(361)	(290)	(285)
Free cash flow	\$ 210	\$ 329	\$ 339	\$ 290	\$ 220

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

In connection with the Vitro Acquisition on September 1, 2015 (see Note 19 to the Consolidated Financial Statements), the Company has renamed the former South America segment to the Latin America segment. This change in segment name was made to reflect the addition of the Mexican and Bolivian operations from the Vitro Acquisition into the former South America segment. The acquired Vitro food and beverage glass container distribution business located in the United States is included in the North American operating segment.

The Company's measure of profit for its reportable segments is segment operating profit, which consists of consolidated earnings from continuing operations before interest income, interest expense, and provision for income taxes and excludes amounts related to certain items that management considers not representative of ongoing operations as well as certain retained corporate costs. The segment data presented below is prepared in accordance with general accounting principles for segment reporting. The line titled "reportable segment totals", however, is a non GAAP measure when presented outside of the financial statement footnotes. Management has included reportable segment totals below to facilitate the discussion and analysis of financial condition and results of operations. The Company's management uses segment operating profit, in combination with selected cash flow information, to evaluate performance and to allocate resources.

Financial information regarding the Company's reportable segments is as follows (dollars in millions):

	2015	2014	2013
Net Sales:			
Europe	\$ 2,324	\$ 2,794	\$ 2,787
North America	2,039	2,003	2,002
Latin America	1,064	1,159	1,186
Asia Pacific	671	793	966
Reportable segment totals	6,098	6,749	6,941
Other	58	35	26
Net Sales	\$ 6,156	\$ 6,784	\$ 6,967

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	2015	2014	2013
Segment operating profit:			
Europe	\$ 209	\$ 353	\$ 305
North America	265	240	307
Latin America	183	227	204
Asia Pacific	83	88	131
Reportable segment totals	740	908	947
Items excluded from segment operating profit:			
Retained corporate costs and other	(70)	(100)	(119)
Charge for asbestos-related costs	(225)	(135)	(145)
Restructuring, asset impairment and other related charges	(80)	(91)	(119)
Strategic transaction costs	(23)		
Acquisition-related fair value inventory adjustments	(22)		
Acquisition-related fair value intangible adjustments	(10)		
Non-income tax charge		(69)	
Pension settlement charges		(65)	
Interest expense, net	(251)	(230)	(229)
Earnings from continuing operations before income taxes	59	218	335
Provision for income taxes	(106)	(92)	(120)
Earnings (loss) from continuing operations	(47)	126	215
Loss from discontinued operations	(4)	(23)	(18)
Net earnings (loss)	(51)	103	197
Net earnings attributable to noncontrolling interests	(23)	(28)	(13)
Net earnings (loss) attributable to the Company	\$ (74)	\$ 75	\$ 184
Net earnings (loss) from continuing operations attributable to the Company	\$ (70)	\$ 98	\$ 202

Note: all amounts excluded from reportable segment totals are discussed in the following applicable sections.

## Executive Overview—Comparison of 2015 with 2014

## 2015 Highlights

- The unfavorable effect of foreign currency exchange rates reduced net sales by 13% and segment operating profit by 16% in 2015 compared to the prior year
- Acquired the food and beverage glass container business of Vitro, S.A.B. de C.V. for \$2.297 billion
- Entered into a new senior secured credit facility that matures in April 2020. To finance the Vitro Acquisition, this facility was then amended to borrow an incremental \$1.25 billion. The Company also issued \$1 billion of senior notes due 2023 and 2025.
- Repaid the senior notes due 2016
- Repurchased \$100 million of shares of common stock

Net sales decreased by \$628 million compared to the prior year primarily due to the unfavorable effect of changes in foreign currency exchange rates. Net sales for 2015 included approximately \$258 million from the acquired Vitro Business.

Segment operating profit for reportable segments decreased by \$168 million compared to the prior year. The decrease was largely attributable to the unfavorable effect of changes in foreign currency exchange rates and higher operating costs due to cost inflation and lower operational performance in Europe. Segment operating profit for 2015 included approximately \$46 million from the acquired Vitro Business.





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Net interest expense in 2015 increased \$21 million compared to 2014. The increase was due to higher note repurchase premiums and the write off of finance fees related to debt that was repaid during 2015 prior to its maturity. Exclusive of these items, net interest expense decreased \$1 million in the current year primarily due to debt management activities and the weaker Euro exchange rate in relation to the U.S. dollar, partially offset by an increase in net interest expense as a result of higher debt due to the Vitro Acquisition.

For 2015, the Company recorded a loss from continuing operations attributable to the Company of \$70 million, or (\$0.44) per share, compared with earnings of \$98 million, or \$0.59 per share (diluted), for 2014. Earnings in both periods included items that management considered not representative of ongoing operations. These items decreased earnings from continuing operations attributable to the Company by \$395 million, or \$2.44 per share, in 2015 and \$338 million, or \$2.04 per share, in 2014.

## Results of Operations—Comparison of 2015 with 2014

## Net Sales

The Company's net sales in 2015 were \$6,156 million compared with \$6,784 million in 2014, a decrease of \$628 million. Unfavorable foreign currency exchange rates, primarily due to a weaker Brazilian real, Colombian peso, Euro, Canadian dollar and Australian dollar in relation to the U.S. dollar, impacted sales by \$881 million in 2015 compared to 2014. Driven by incremental shipments related to the Vitro Acquisition, total glass container shipments, in tonnes, were up approximately 3% in 2015 compared to 2014. The Vitro Acquisition resulted in approximately \$258 million of additional sales. Excluding the impact of the Vitro Acquisition, shipments in 2015 were comparable to 2014. On a global basis, sales volumes of wine, spirits, food and non-alcoholic beverages all grew year-on-year. While sales volumes in the beer category declined by approximately 1%, driven by a decline in mainstream beer, shipments into craft and premium beer customers continued to expand. However, an unfavorable sales mix resulted in \$47 million of lower net sales in 2015. Net sales also benefited from slightly higher selling prices in 2015.

The change in net sales of reportable segments can be summarized as follows (dollars in millions):

Net sales— 2014		\$ 6,749
Price	\$ 19	
Sales volume (excluding acquisitions)	(47)	
Effects of changing foreign currency rates	(881)	
Vitro Acquisition	258	
Total effect on net sales		(651)
Net sales— 2015		\$ 6,098

Europe: Net sales in Europe in 2015 were \$2,324 million compared with \$2,794 in 2014, an decrease of \$470 million, or 17%. The primary reason for the decline in net sales in the region in 2015 was a \$445 million impact due to foreign currency exchange rates, as the Euro weakened in relation to the U.S. dollar. Glass container shipments in 2015 increased slightly compared to the prior year and this increased net sales by \$9 million. Selling prices decreased in Europe due to competitive pressures and resulted in a \$34 million decrease in net sales in 2015. This trend in lower prices is expected to continue into the first quarter of 2016.

North America: Net sales in North America in 2015 were \$2,039 million compared with \$2,003 million in 2014, an increase of \$36 million, or 2%. Net sales from the acquired Vitro food and beverage business in the United States increased the region's net sales by \$80 million in 2015. Total glass container shipments in the region were up 3% in

2015 compared to 2014. Excluding the impact of the Vitro Acquisition in the region, glass container shipments were up slightly in 2015, however, an unfavorable sales mix resulted in \$4 million of lower sales. Lower selling prices decreased net sales by \$14 million in 2015 due, in part, to the Company's contractual pass through provisions of lower natural gas costs. Unfavorable foreign currency exchange rate changes decreased net sales by \$26 million, as the Canadian dollar weakened in relation to the U.S. dollar.

Latin America: Net sales in Latin America in 2015 were \$1,064 million compared with \$1,159 million in 2014, a decrease of \$95 million, or 8%. The unfavorable effects of foreign currency exchange rate changes

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decreased net sales \$293 million in 2015 compared to 2014, principally due to a decline in the Brazilian real and the Colombian peso in relation to the U.S. dollar. Net sales from the acquired Vitro food and beverage business in Mexico and Bolivia increased the region's net sales by approximately \$178 million in 2015. Total glass container shipments were up approximately 18% in 2015. Excluding the impact of the Vitro Acquisition in the region, glass container shipments were down nearly 4% in 2015. This decline impacted net sales by approximately \$45 million and was primarily due to a general economic slowdown in Brazil, which is expected to continue into 2016. Improved pricing in the current year benefited net sales by \$65 million.

Asia Pacific: Net sales in Asia Pacific in 2015 were \$671 million compared with \$793 million for 2014, a decrease of \$122 million, or 15%. The unfavorable effects of foreign currency exchange rate changes decreased net sales \$117 million in 2015 compared to 2014, primarily due to the weakening of the Australian dollar in relation to the U.S. dollar. Glass container shipments were down 3% compared to the prior year, largely due to the planned plant closures in China in 2014. This resulted in \$7 million of lower sales in 2015. Higher prices increased net sales by \$2 million in the current year.

## Segment Operating Profit

Operating profit of the reportable segments includes an allocation of some corporate expenses based on both a percentage of sales and direct billings based on the costs of specific services provided. Unallocated corporate expenses and certain other expenses not directly related to the reportable segments' operations are included in Retained corporate costs and other. For further information, see Segment Information included in Note 2 to the Consolidated Financial Statements.

Segment operating profit of reportable segments in 2015 was \$740 million compared to \$908 million in 2014, a decrease of \$168 million, or 19%. The decrease in segment operating profit was primarily due to unfavorable foreign currency exchange rates. In addition, cost inflation and lower operational performance in Europe increased operating costs in the current year. Segment operating profit for 2015 included approximately \$46 million from the acquired Vitro Businesses.

The change in segment operating profit of reportable segments can be summarized as follows (dollars in millions):

Segment operating profit - 2014		\$ 908
Price	\$ 19	
Sales volume (excluding acquisitions)	(8)	
Operating costs	(84)	
Effects of changing foreign currency rates	(141)	
Vitro Acquisition	46	
Total net effect on segment operating profit		(168)
Segment operating profit - 2015		\$ 740

Europe: Segment operating profit in Europe in 2015 was \$209 million compared with \$353 million in 2014, a decrease of \$144 million, or 41%. The unfavorable effects of foreign currency exchange rates in 2015 decreased segment operating profit by \$63 million compared to the prior year. The region also had higher operating costs and lower production volumes in 2015 due to a higher level of furnace rebuild activity and lower productivity. In addition, the region did not receive an energy credit from a local government entity in 2015 as it had in the prior year. Together, this activity contributed to a \$49 million increase to operating expenses in Europe in 2015 compared to 2014. Lower selling prices impacted segment operating profit by \$34 million due to competitive activity, primarily in Southern Europe, while slightly higher sales volumes benefited segment operating profit by \$2 million in 2015.

North America: Segment operating profit in North America in 2015 was \$265 million compared with \$240 million in 2014, an increase of \$25 million, or 10%. Segment operating profit from the acquired Vitro food and beverage glass container distribution business in the region contributed \$4 million in 2015. Segment operating profit also benefited from lower operating costs of \$38 million in the current year, which were driven by lower energy, supply chain and logistics costs. As a result of the lower energy costs and the Company's

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contractual pass through provisions, selling prices were \$14 million lower in 2015 compared to 2014. Also, the unfavorable effects of the weakening of the Canadian dollar in relation to the U.S. dollar decreased segment operating profit by \$3 million.

Latin America: Segment operating profit in Latin America in 2015 was \$183 million compared with \$227 million in 2014, a decrease of \$44 million, or 19%. The unfavorable effects of foreign currency rate changes decreased segment operating profit by \$58 million in the current year. Segment operating profit from the acquired Vitro food and beverage business increased the region's operating profit by \$42 million in 2015. Excluding the impact of the Vitro Acquisition, the decline in sales volume discussed above reduced segment operating profit by \$12 million. Segment operating profit was also impacted by \$75 million of higher operating costs, primarily due to energy and soda ash inflation in Brazil. In addition, approximately \$6 million of non-strategic asset sales, which benefited 2014, did not reoccur in 2015. Higher selling prices increased segment operating profit by \$65 million in 2015.

Asia Pacific: Segment operating profit in Asia Pacific in 2015 was \$83 million compared with \$88 million in 2014, a decrease of \$5 million, or 6%. The unfavorable effects of foreign currency exchange rates decreased segment operating profit by \$17 million. Despite the decline in sales volume discussed above, a favorable sales mix resulted in a \$2 million increase to segment operating profit. Segment operating profit also benefited as operating costs decreased by \$8 million in the current year driven by footprint savings from prior year capacity reductions in the region and the favorable impact of an insurance recovery. Higher selling prices increased segment operating profit by \$2 million in the current year.

### Interest Expense, net

Net interest expense in 2015 was \$251 million compared with \$230 million in 2014. The increase was due to higher note repurchase premiums and the write off of finance fees related to refinancing activities in 2015. Exclusive of these items, net interest expense decreased \$1 million in the current year primarily due to debt management activities and the weaker Euro exchange rate in relation to the U.S. dollar, partially offset by an increase in net interest expense as a result of higher debt due to the Vitro Acquisition.

### Provision for Income Taxes

The Company's effective tax rate from continuing operations for 2015 was 179.7%, compared with 42.2% for 2014. The effective tax rate for 2015 was impacted by several charges that management considered not representative of ongoing operations, primarily charges for asbestos-related costs and note repurchase premiums and the write-off of finance fees, for which no tax benefit was recorded due to the Company's valuation allowance recorded in the U.S. The effective tax rate for 2014 was impacted by a non income tax charge, which was not deductible for income tax purposes.

Excluding the amounts related to items that management considers not representative of ongoing operations, the Company's effective tax rate for 2015 was approximately 25%, compared with approximately 22% for 2014. The 2015 effective tax rate was higher due to the geographic mix of earnings and timing issues associated with the establishment of the legal structure for the acquired operations in Mexico, the latter of which was resolved by year end 2015.

### Net Earnings Attributable to Noncontrolling Interests

Net earnings attributable to noncontrolling interests for 2015 was \$23 million compared to \$28 million for 2014. The decrease in 2015 was largely attributable to the unfavorable effect of changes in foreign currency exchange rates.

Earnings (loss) from Continuing Operations Attributable to the Company

For 2015, the Company recorded a loss from continuing operations attributable to the Company of \$70 million, or (\$0.44) per share, compared with earnings of \$98 million, or \$0.59 per share (diluted), for 2014. The after tax effects of the items excluded from segment operating profit, the unusual tax items and the additional

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interest charges increased or decreased earnings in 2015 and 2014 as set forth in the following table (dollars in millions).

Description	Net Earnings Increase (Decrease)	
	2015	2014
Charge for asbestos-related costs	\$ (225)	\$ (135)
Restructuring, asset impairment and other charges	(69)	(67)
Note repurchase premiums and write-off of finance fees	(42)	(20)
Strategic transaction costs	(26)	
Acquisition-related fair value inventory adjustments	(16)	
Acquisition-related fair value intangible adjustments	(9)	
Tax benefit (charge) for certain tax adjustments	(8)	8
Non-income tax charge		(69)
Pension settlement charges		(55)
Total	\$ (395)	\$ (338)

## Foreign Currency Exchange Rates

Given the global nature of its operations, the Company is subject to fluctuations in foreign currency exchange rates. As described above, the Company's reported revenues and segment operating profit in 2015 were reduced due to foreign currency effects compared to 2014.

This trend has continued into 2016 as a result of a strengthening U.S. dollar. During times of a strengthening U.S. dollar, the reported revenues and segment operating profit of the Company's international operations will be reduced because the local currencies will translate into fewer U.S. dollars. The Company uses certain derivative instruments to mitigate a portion of the risk associated with changing foreign currency exchange rates.

## Executive Overview—Comparison of 2014 with 2013

## 2014 Highlights

- Segment operating profit decreased due to higher operating costs, partially offset by higher selling prices and the benefits from the European asset optimization program
- Entered into a joint venture in Mexico and a long term supply agreement with Constellation Brands, Inc. to supply glass containers for their beer business
- Issued \$800 million of senior notes due 2022 and 2025 and repurchased \$611 million of exchangeable senior notes
- Strong cash generation improves leverage ratio and continues share repurchases

Net sales decreased by \$183 million compared to the prior year due to a 2% decline in glass container shipments and due to the unfavorable effect of changes in foreign currency exchange rates. Higher selling prices had a positive impact on net sales.

Segment operating profit for reportable segments decreased by \$39 million compared to the prior year. The decrease was mainly attributable to higher operating costs, driven by cost inflation in most of the regions, higher supply chain and production costs in North America and lower production volumes in Asia Pacific and North America. Higher selling prices and the benefits from the European asset optimization partially offset these costs.

Net interest expense in 2014 increased \$1 million compared to 2013. The increase was due to higher note repurchase premiums and the write off of finance fees related to debt that was repaid during 2014 prior to its maturity than experienced in 2013. Exclusive of these costs, net interest declined \$5 million in 2014 compared to 2013 due to debt reduction initiatives and lower interest rates.



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Earnings from continuing operations attributable to the Company in 2014 were \$98 million, or \$0.59 per share (diluted), compared with \$202 million, or \$1.22 per share (diluted), for 2013. Earnings in both periods included items that management considered not representative of ongoing operations. These items decreased earnings from continuing operations attributable to the Company by \$338 million, or \$2.04 per share, in 2014 and \$248 million, or \$1.50 per share, in 2013.

## Results of Operations—Comparison of 2014 with 2013

## Net Sales

The Company's net sales in 2014 were \$6,784 million compared with \$6,967 million in 2013, a decrease of \$183 million. Glass container shipments, in tonnes, were down 2% in 2014 compared to 2013, driven by lower sales in Asia Pacific. Net sales were also lower due to the unfavorable effects of foreign currency exchange rate changes, primarily due to a weaker Brazilian real, Colombian peso and Australian dollar in relation to the U.S. dollar. Net sales in 2014 benefited from higher selling prices.

The change in net sales of reportable segments can be summarized as follows (dollars in millions):

Net sales— 2013		\$ 6,941
Price	\$ 73	
Sales volume (excluding acquisitions)	(112)	
Effects of changing foreign currency rates	(153)	
Total effect on net sales		(192)
Net sales— 2014		\$ 6,749

Europe: Net sales in Europe in 2014 were \$2,794 million compared with \$2,787 in 2013, an increase of \$7 million, or less than 1%. Glass container shipments in 2014 increased 2% compared to the prior year, particularly in the beer and wine categories. The higher sales volume, which increased net sales by \$49 million, was mainly due to unseasonably warm weather conditions in the first quarter and the carryover benefits of the Company's wine share recovery efforts from the prior year. Net sales in Europe decreased by \$3 million due to the unfavorable effects of foreign currency exchange rate changes, as the Euro weakened in relation to the U.S. dollar. Lower selling prices also reduced sales by \$39 million in 2014.

North America: Net sales in North America in 2014 were \$2,003 million compared with \$2,002 million in 2013, an increase of \$1 million. Higher selling prices of \$45 million increased net sales in 2014 due, in part, to the Company's contractual pass through provisions, as well as from passing through the freight costs for a large customer. Net sales declined by \$30 million in 2014 compared to the prior year due to a 1% decrease in glass container shipments and a less favorable sales mix. The primary driver for the decline in the region's volumes in 2014 was due to lower sales to major domestic beer brands. Unfavorable foreign currency exchange rates decreased net sales by \$14 million, as the Canadian dollar weakened in relation to the U.S. dollar.

Latin America: Net sales in Latin America in 2014 were \$1,159 million compared with \$1,186 million in 2013, a decrease of \$27 million, or 2%. The unfavorable effects of foreign currency exchange rate changes decreased net sales \$96 million in 2014 compared to 2013, principally due to a decline in the Brazilian real and the Colombian peso in relation to the U.S. dollar. Net sales increased by \$14 million in 2014 driven by a 4% increase in glass container shipments, partially offset by a change in sales mix. Volume growth was particularly strong in the beer category in 2014 and was evident in most of the countries where the Company operates in the region. Improved pricing in the current year benefited net sales by \$55 million.

Asia Pacific: Net sales in Asia Pacific in 2014 were \$793 million compared with \$966 million for 2013, a decrease of \$173 million, or 18%. The decrease in net sales was primarily due to lower sales volume, which resulted in \$145 million of lower sales in 2014. Glass container shipments were down 20% compared to the prior year, largely due to the planned plant closures in China, as well as lower shipments in Australia due to weaker demand in the domestic beer and export wine markets. To balance supply with demand, the Company permanently closed a furnace in Australia in the third quarter of 2014. The unfavorable effects of foreign currency exchange rate changes decreased net sales \$40 million in 2014 compared to 2013, primarily due to the

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weakening of the Australian dollar in relation to the U.S. dollar. Higher prices increased net sales by \$12 million in the current year.

## Segment Operating Profit

Operating profit of the reportable segments includes an allocation of some corporate expenses based on both a percentage of sales and direct billings based on the costs of specific services provided. Unallocated corporate expenses and certain other expenses not directly related to the reportable segments' operations are included in Retained corporate costs and other. For further information, see Segment Information included in Note 2 to the Consolidated Financial Statements.

Segment operating profit of reportable segments in 2014 was \$908 million compared to \$947 million in 2013, a decrease of \$39 million, or 4%. The decline in segment operating profit was primarily due to higher operating costs, partially offset by the benefits from the European asset optimization program and higher selling prices. Operating costs increased in the current year due to cost inflation, higher supply chain and production costs in North America and lower production volumes in Asia Pacific.

The change in segment operating profit of reportable segments can be summarized as follows (dollars in millions):

Segment operating profit - 2013		\$ 947
Price	\$ 73	
Sales volume	(7)	
Operating costs	(99)	
Effects of changing foreign currency rates	(6)	
Total net effect on segment operating profit		(39)
Segment operating profit - 2014		\$ 908

Europe: Segment operating profit in Europe in 2014 was \$353 million compared with \$305 million in 2013, an increase of \$48 million, or 16%. Lower operating expenses, driven by cost deflation and benefits from the region's asset optimization program, had a \$70 million positive impact on segment operating profit in 2014. The increase in sales volume discussed above increased segment operating profit by \$14 million. Partially offsetting these benefits were lower selling prices, which were down \$39 million in the current year due, in part, to competitive pressures in the region. Foreign currency exchange rates increased segment profit by \$3 million in 2014.

In 2014, the Company continued implementing the European asset optimization program to increase the efficiency and capability of its European operations. Through this program, the Company expects to improve the long term profitability of this region through investments and by addressing higher cost facilities to better align its European manufacturing footprint with market and customer needs.

North America: Segment operating profit in North America in 2014 was \$240 million compared with \$307 million in 2013, a decrease of \$67 million, or 22%. The decrease in segment operating profit was primarily due to higher operating costs of \$102 million in the current year, which were driven by higher energy, raw material and supply chain costs, as well as lower production and productivity levels. The decrease in sales volume mentioned above reduced segment profit by \$9 million. Higher selling prices partially offset these impacts and increased segment operating profit by \$45 million in the current year. The unfavorable effects of foreign exchange rates decreased segment profit by \$1 million.

Latin America: Segment operating profit in Latin America in 2014 was \$227 million compared with \$204 million in 2013, an increase of \$23 million, or 11%. Higher selling prices increased segment operating profit in 2014 by

\$55 million. The increase in sales volume discussed above increased segment operating profit by \$13 million. Several non-strategic asset sales also benefited segment operating profit by \$6 million in the current year. Operating costs were \$45 million higher in 2014, primarily driven by cost inflation, and partially offset by higher productivity in the region. The unfavorable effects of foreign currency exchange rate changes decreased segment operating profit by \$6 million in the current year.

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Asia Pacific: Segment operating profit in Asia Pacific in 2014 was \$88 million compared with \$131 million in 2013, a decrease of \$43 million, or 33%. Operating costs increased by \$28 million in the current year and were driven by lower production volumes and cost inflation. The decline in sales volume discussed above decreased segment operating profit by \$25 million. The unfavorable effects of foreign currency exchange rates decreased segment profit by \$2 million. Higher selling prices increased segment profit by \$12 million in the current year.

## Interest Expense, net

Net interest expense in 2014 was \$230 million compared with \$229 million in 2013. Interest expense for 2014 included \$20 million for note repurchase premiums and the write off of finance fees related to the tender offer to purchase all of its outstanding 3.00% Exchangeable Senior Notes due 2015 (the “2015 Exchangeable Notes”). Net interest expense for 2013 included \$14 million for note repurchase premiums and the write off of finance fees related to the discharge of the €300 million Senior Notes due 2017 (the “2017 Senior Notes”) and related to the repurchase of a portion of the 2015 Exchangeable Notes. Exclusive of these items, net interest expense decreased \$5 million in the current year primarily due to debt reduction initiatives and lower interest rates

## Provision for Income Taxes

The Company’s effective tax rate from continuing operations for 2014 was 42.2%, compared with 35.8% for 2013. The effective tax rate for 2014 was impacted by a non income tax charge, which was not deductible for income tax purposes. Excluding the amounts related to items that management considers not representative of ongoing operations, the Company’s effective tax rate for 2014 was 22.4%, compared with 21.9% for 2013.

## Net Earnings Attributable to Noncontrolling Interests

Net earnings attributable to noncontrolling interests for 2014 was \$28 million compared to \$13 million for 2013. The increase in 2014 was primarily due to the nonoccurrence of the impacts from restructuring and asset impairment charges in 2013 at the Company’s less than wholly owned facilities in Latin America and Asia Pacific, as well as higher earnings in the Company’s less than wholly owned subsidiaries in Latin America in 2014.

## Earnings from Continuing Operations Attributable to the Company

For 2014, the Company recorded earnings from continuing operations attributable to the Company of \$98 million compared with \$202 million for 2013. The after tax effects of the items excluded from segment operating profit, the unusual tax items and the additional interest charges increased or decreased earnings in 2014 and 2013 as set forth in the following table (dollars in millions).

Description	Net Earnings	
	2014	2013
Charge for asbestos-related costs	\$ (135)	\$ (145)
Non-income tax charge	(69)	
Restructuring, asset impairment and other charges	(67)	(92)
Pension settlement charges	(55)	
Note repurchase premiums and write-off of finance fees	(20)	(11)
Tax benefit for certain tax adjustments	8	
Total	\$ (338)	\$ (248)

#### Foreign Currency Exchange Rates

Given the global nature of its operations, the Company is subject to fluctuations in foreign currency exchange rates. As described above, the Company's reported revenues and segment operating profit in 2014 were reduced due to foreign currency effects compared to 2013.

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This trend has continued into 2015 as a result of a strengthening U.S. dollar. During times of a strengthening U.S. dollar, the reported revenues and segment operating profit of the Company's international operations will be reduced because the local currencies will translate into fewer U.S. dollars. The Company uses certain derivative instruments to mitigate a portion of the risk associated with changing foreign currency exchange rates.

### Items Excluded from Reportable Segment Totals

#### Retained Corporate Costs and Other

Retained corporate costs and other for 2015 were \$70 million compared with \$100 million for 2014. Retained corporate costs and other declined in 2015 compared to 2014 due to lower pension expense, lower management incentive compensation expense and the favorable impact from currency hedges.

Retained corporate costs and other for 2014 were \$100 million compared with \$119 million for 2013. Retained corporate costs and other declined in 2014 compared to 2013 due to lower pension expense.

#### Charge for Asbestos Related Costs

The 2015 charge for asbestos related costs was \$225 million, compared to the 2014 charge of \$135 million. These charges resulted from the Company's comprehensive annual legal review of asbestos related liabilities and costs. The Company's 2015 charge includes a period one year longer than the accrual period determined as reasonably estimable in the 2014 charge. This is a change in estimate resulting from an assessment of the qualitative and quantitative factors in the Company's 2015 comprehensive legal review.

See "Critical Accounting Estimates" and Note 12 to the Consolidated Financial Statements for additional information.

#### Restructuring, Asset Impairment and Other Charges

During 2015, the Company recorded charges totaling \$80 million for restructuring, asset impairment and other charges. These charges reflect \$63 million of completed furnace closures, primarily in the North America and Latin America regions and other charges of \$17 million.

During 2014, the Company recorded charges totaling \$91 million for restructuring, asset impairment and other charges. These charges reflect \$76 million of completed and planned furnace closures in Europe and Asia Pacific and other charges of \$15 million.

During 2013, the Company recorded charges totaling \$119 million for restructuring, asset impairment and related charges. These charges reflect completed and planned plant and furnace closures in Europe, Latin America and Asia Pacific, as well as global headcount reduction initiatives. These charges also include an asset impairment charge related to the Company's operations in Argentina, primarily due to macroeconomic issues in that country.

See Note 8 to the Consolidated Financial Statements for additional information.

#### Acquisition-related Fair Value Adjustments and Strategic Transaction Costs

During 2015, the Company recorded charges of \$22 million for acquisition-related fair value inventory adjustments related to the Vitro Acquisition. These charges were due to the accounting rules requiring inventory purchased in a

business combination to be marked up to fair value and then recorded as an increase to cost of goods sold as the inventory is sold. During 2015, the Company also recorded charges of \$10 million for acquisition-related fair value intangible asset adjustments related to trademark assets with short-term lives acquired as part of the Vitro Acquisition.

During 2015, the Company recorded charges of \$23 million for strategic transaction costs related to the Vitro Acquisition.

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### Non income tax charge

In 2014, the Company recorded a \$69 million charge based on a ruling on a non income tax assessment.

### Pension Settlement Charges

During 2014, the Company recorded charges totaling \$65 million for pension settlements in the United States and the Netherlands.

See Note 9 to the Consolidated Financial Statements for additional information.

### Discontinued Operations

On March 10, 2015, a tribunal constituted under the auspices of the International Centre for Settlement of Investment Disputes (“ICSID”) awarded a subsidiary of the Company more than \$455 million in an international arbitration against Venezuela related to the 2010 expropriation of the Company’s majority interest in two plants in that country. On July 10, 2015, ICSID confirmed that it had received from Venezuela a petition to annul the award. The annulment process can take up to several years to complete. The Company is unable at this stage to predict the amount or timing of compensation it will ultimately receive under the award. Therefore, the Company has not recognized this award in its financial statements.

A separate arbitration is pending with ICSID to obtain compensation primarily for third-party minority shareholders’ lost interests in the two expropriated plants.

The loss from discontinued operations of \$4 million for the year ended December 31, 2015 relates to ongoing costs for the Venezuelan expropriation. The loss from discontinued operations of \$23 million for the year ended December 31, 2014 included a settlement of a dispute with the purchaser of a previously disposed business, as well as ongoing costs related to the Venezuela expropriation.

### Acquisition of Vitro, S.A.B. de C.V.’s Food and Beverage Glass Container Business

On September 1, 2015, the Company completed the Vitro Acquisition in a cash transaction valued at approximately \$2.297 billion, subject to a working capital adjustment and certain other adjustments. The Vitro Business in Mexico is the largest supplier of glass containers in that country, manufacturing glass containers across multiple end uses, including food, soft drinks, beer, wine and spirits. The Vitro Acquisition included five food and beverage glass container plants in Mexico, a plant in Bolivia and a North American distribution business, and provided the Company with a competitive position in the glass packaging market in Mexico. The results of the Vitro Business have been included in the Company’s consolidated financial statements since September 1, 2015. Vitro’s food and beverage glass container operations in Mexico and Bolivia are included in the Latin American operating segment while its distribution business is included in the North American operating segment.

The Company financed the Vitro Acquisition with the proceeds from its recently completed senior notes offering, cash on hand and the incremental term loan facilities (see Note 11 to the Consolidated Financial Statements).

### Capital Resources and Liquidity

As of December 31, 2015, the Company had cash and total debt of \$399 million and \$5.6 billion, respectively, compared to \$512 million and \$3.4 billion, respectively, as of December 31, 2014. A significant portion of the cash was held in mature, liquid markets where the Company has operations, such as the U.S., Europe and Australia, and is

readily available to fund global liquidity requirements. The amount of cash held in non U.S. locations as of December 31, 2015 was \$393 million.

#### Current and Long Term Debt

On April 22, 2015, certain of the Company's subsidiaries entered into a new Senior Secured Credit Facility (the "Agreement"), which amended and restated the previous credit agreement (the "Previous Agreement"). The

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proceeds from the Agreement were used to repay all outstanding amounts under the Previous Agreement and the 7.375% senior notes due 2016. The Company recorded \$42 million of additional interest charges for note repurchase premiums and the related write-off of unamortized finance fees in 2015.

In connection with the closing of the Vitro Acquisition on September 1, 2015 (see Note 19 to the Consolidated Financial Statements), the Company entered into Amendment No. 2 (“Amendment No. 2”) to the Agreement, which provided for additional incremental availability under the incremental dollar cap in the Agreement of up to \$1,250 million. In addition, in connection with the closing of the Vitro Acquisition on September 1, 2015, the Company entered into the First Incremental Amendment to the Agreement (the “Incremental Amendment”) pursuant to which the Company incurred \$1,250 million of senior secured incremental term loan facilities, comprised of (i) a \$675 million term loan A facility (the “incremental term loan A facility”) on substantially the same terms and conditions (including as to maturity) as the term loan A facility in the Agreement and (ii) a \$575 million term loan B facility (the “incremental term loan B facility”) maturing seven years after the closing of the Vitro Acquisition using its incremental capacity under the Agreement.

At December 31, 2015, the Agreement, as amended by Amendment No. 2 and the Incremental Amendment (the “Amended Agreement”), includes a \$300 million revolving credit facility, a \$600 million multicurrency revolving credit facility, a \$1,575 million term loan A facility (\$1,546 million net of debt issuance costs), and a €279 million term loan A facility (\$301 million net of debt issuance costs), each of which has a final maturity date of April 22, 2020. The Amended Agreement also includes a \$575 million term loan B facility (\$563 million net of debt issuance costs) with a final maturity date of September 1, 2022. At December 31, 2015, the Company had unused credit of \$872 million available under the Amended Agreement. The weighted average interest rate on borrowings outstanding under the Amended Agreement at December 31, 2015 was 2.37%.

The Amended Agreement contains various covenants that restrict, among other things and subject to certain exceptions, the ability of the Company to incur certain liens, make certain investments, become liable under contingent obligations in certain defined instances only, make restricted payments, make certain asset sales within guidelines and limits, engage in certain affiliate transactions, participate in sale and leaseback financing arrangements, alter its fundamental business, and amend certain subordinated debt obligations.

The Amended Agreement also contains one financial maintenance covenant, a Total Leverage Ratio, that requires the Company as of the last day of a fiscal quarter not to exceed a ratio of 4.0x calculated by dividing consolidated total debt, less cash and cash equivalents, by consolidated EBITDA, as defined in the Amended Agreement. The maximum Total Leverage Ratio is subject to an increase of 0.5x for the four fiscal quarters commencing on and following the consummation of certain qualifying acquisitions as defined in the Amended Agreement. In connection with the Vitro Acquisition on September 1, 2015, the Company elected to increase such maximum Total Leverage Ratio to 4.5x for the four fiscal quarters ending June 30, 2016. The Total Leverage Ratio could restrict the ability of the Company to undertake additional financing or acquisitions to the extent that such financing or acquisitions would cause the Total Leverage Ratio to exceed the specified maximum.

On February 3, 2016, the Company entered into Amendment No. 4 (“Amendment No. 4”) to the Amended Agreement, which provided for an increase in the maximum Total Leverage Ratio for purposes of the financial covenant in the Amended Agreement to 5.0x for the fiscal quarters ending March 31, 2016, June 30, 2016 and September 30, 2016, 4.50x for the fiscal quarters ending December 31, 2016, March 31, 2017, June 30, 2017 and September 30, 2017, and stepping back down to 4.0x for the fiscal quarter ending December 31, 2017 and each fiscal quarter ending thereafter. At December 31, 2015, the Company’s Total Leverage Ratio was 4.0x, which was below the 4.5x specified maximum level at that date. The Company expects its Total Leverage Ratio to increase in the first three quarters of 2016, yet remain below the amended levels stated above, due to seasonal working capital requirements.

Failure to comply with these covenants and restrictions could result in an event of default under the Amended Agreement as amended by Amendment No. 4. In such an event, the Company could not request borrowings under the revolving facility, and all amounts outstanding under the Amended Agreement, together with accrued interest, could then be declared immediately due and payable. If an event of default occurs under the Amended Agreement as amended by Amendment No. 4 and the lenders cause all of the outstanding debt

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obligations under the Amended Agreement to become due and payable, this would result in a default under a number of other outstanding debt securities and could lead to an acceleration of obligations related to these debt securities. As of December 31, 2015, the Company was in compliance with all covenants and restrictions in the Amended Agreement. In addition, the Company believes that it will remain in compliance and that its ability to borrow funds under the Amended Agreement as amended by Amendment No. 4 will not be adversely affected by the covenants and restrictions.

The interest rates on borrowings under the Amended Agreement are, at the Company's option, the Base Rate or the Eurocurrency Rate, as defined in the Amended Agreement, plus an applicable margin. The applicable margin for the term loan A facility and the revolving credit facility is linked to the Company's Total Leverage Ratio and ranges from 1.25% to 1.75% for Eurocurrency Rate loans and from 0.25% to 0.75% for Base Rate loans. In addition, a facility fee is payable on the revolving credit facility commitments ranging from 0.20% to 0.30% per annum linked to the Total Leverage Ratio. The applicable margin for the term loan B facility is 2.75% for Eurocurrency Rate loans and 1.75% for Base Rate loans. The incremental term loan B facility is subject to a LIBOR floor of 0.75%.

Borrowings under the Amended Agreement are secured by substantially all of the assets, excluding real estate and certain other excluded assets, of certain of the Company's domestic subsidiaries and certain foreign subsidiaries. Borrowings are also secured by a pledge of intercompany debt and equity investments in certain of the Company's domestic subsidiaries and, in the case of foreign borrowings, of stock of certain foreign subsidiaries. All borrowings under the Amended Agreement are guaranteed by certain domestic subsidiaries of the Company for the term of the Amended Agreement.

Also, in connection with the Vitro Acquisition, during August 2015, the Company issued senior notes with a face value of \$700 million that bear interest at 5.875% and are due August 15, 2023 (the "Senior Notes due 2023") and senior notes with a face value of \$300 million that bear interest at 6.375% and are due August 15, 2025 (together with the Senior Notes due 2023, the "2015 Senior Notes"). The 2015 Senior Notes were issued via a private placement and are guaranteed by certain of the Company's domestic subsidiaries. The net proceeds from the 2015 Senior Notes, after deducting the debt discount and debt issuance costs, totaled approximately \$972 million and were used to finance, in part, the Vitro Acquisition.

During December 2014, the Company issued senior notes with a face value of \$500 million that bear interest at 5.00% and are due January 15, 2022 (the "Senior Notes due 2022"). The Company also issued senior notes with a face value of \$300 million that bear interest at 5.375% and are due January 15, 2025 (together with the Senior Notes due 2022, the "2014 Senior Notes"). The 2014 Senior Notes were issued via a private placement and are guaranteed by certain of the Company's domestic subsidiaries. The net proceeds from the 2014 Senior Notes, after deducting debt issuance costs, totaled approximately \$790 million and were used to purchase \$611 million aggregate principal amount of the Company's 3.00% 2015 Exchangeable Senior Notes. The remaining balance of the Exchangeable Senior Notes was repaid in the second quarter of 2015.

The Company assesses its capital raising and refinancing needs on an ongoing basis and may enter into additional credit facilities and seek to issue equity and/or debt securities in the domestic and international capital markets if market conditions are favorable. Also, depending on market conditions, the Company may elect to repurchase portions of its debt securities in the open market.

The Company has a €185 million European accounts receivable securitization program, which extends through September 2016, subject to periodic renewal of backup credit lines. Information related to the Company's accounts receivable securitization program as of December 31, 2015 and 2014 is as follows:

	2015	2014
Balance (included in short-term loans)	\$ 158	\$ 122
Weighted average interest rate	1.21%	1.41%

Cash Flows

Free cash flow was \$210 million for 2015 compared to \$329 million for 2014. The Company defines free cash flow as cash provided by continuing operating activities less additions to property, plant and equipment.

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Free cash flow does not conform to U.S. GAAP and should not be construed as an alternative to the cash flow measures reported in accordance with U.S. GAAP. The Company uses free cash flow for internal reporting, forecasting and budgeting and believes this information allows the board of directors, management, investors and analysts to better understand the Company's financial performance. Free cash flow for the years ended December 31, 2015 and 2014 is calculated as follows (dollars in millions):

	2015	2014
Cash provided by continuing operating activities	\$ 612	\$ 698
Additions to property, plant and equipment	(402)	(369)
Free cash flow	\$ 210	\$ 329

Operating activities: Cash provided by continuing operating activities was \$612 million for 2015 compared to \$698 million for 2014. The decrease in cash provided by continuing operating activities in 2015 was primarily due to lower earnings. Lower working capital benefited cash provided by continuing operating activities by \$88 million in 2015 compared to 2014, primarily due to an increase in accounts payable.

Lower year-over-year pension contributions, asbestos-related payments, and cash paid for restructuring activities also benefited cash provided by continuing operating activities in 2015 compared to 2014. In addition, the Company experienced a \$71 million year-over-year decline in cash paid for non-current assets and liabilities in 2015 compared to 2014. This decrease was primarily due to less cash paid for returnable packaging and installment payments related to a non-income tax assessment that was resolved with a foreign tax authority in 2015.

Investing activities: Cash utilized in investing activities was \$2,748 million for 2015 compared to \$455 million for 2014. Capital spending for property, plant and equipment during 2015 was \$402 million, compared with \$369 million in the prior year, reflecting higher spending for the construction of a new furnace in Mexico.

Investing activities in 2015 also included \$2,351 million paid for acquisitions, primarily related to the Vitro Acquisition. Investing activities in 2014 included \$114 million paid for acquisitions, primarily related to the Company's investment in a joint venture with Constellation Brands, Inc. (NYSE: STZ) ("Constellation") to operate and expand a glass container plant in Nava, Mexico. To help meet current and rising demand from Constellation's adjacent brewery, the joint venture plans to expand the plant from one furnace to four over the next three years. The Company contributed an additional \$20 million to this joint venture in 2015 and expects to contribute approximately \$140 million through 2017 for the joint venture's future expansion plans.

Financing activities: Cash provided by financing activities was \$2,057 million for 2015 compared to \$70 million of cash utilized for 2014. Financing activities in 2015 included additions to long-term debt of \$4,538 million, primarily related to the borrowings for the Vitro Acquisition and the refinancing of the Company's Senior Secured Credit Facility. Financing activities in 2015 also included the repayment of long-term debt of \$2,321, which includes the repayment of the Previous Agreement and the repayment of the senior notes due in 2016. Borrowings under short-term loans increased by \$51 million in 2015. The Company paid approximately \$90 million in note repurchase premiums and finance fees in 2015 compared to \$11 million in 2014.

The Company paid \$22 million and \$37 million in distributions to noncontrolling interests in 2015 and 2014, respectively. The Company also repurchased shares of its common stock for \$100 million in 2015 compared to \$32 million repurchased in 2014. The repurchases were completed using cash on hand and included an accelerated share repurchase program. Additional details about the Company's share repurchase activities are provided in Note 17 to the Consolidated Financial Statements.

The Company anticipates that cash flows from its operations and from utilization of credit available under the Agreement will be sufficient to fund its operating and seasonal working capital needs, debt service and other obligations on a short term (twelve months) and long term basis. Based on the Company's expectations regarding future payments for lawsuits and claims and also based on the Company's expected operating cash flow, the Company believes that the payment of any deferred amounts of previously settled or otherwise determined lawsuits and claims, and the resolution of presently pending and anticipated future lawsuits and claims associated



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with asbestos, will not have a material adverse effect upon the Company's liquidity on a short term or long term basis.

## Contractual Obligations and Off Balance Sheet Arrangements

The following information summarizes the Company's significant contractual cash obligations at December 31, 2015 (dollars in millions).

	Payments due by period				
	Total	Less than one year	1 - 3 years	3 - 5 years	More than 5 years
Contractual cash obligations:					
Long-term debt	\$ 5,351	\$ 57	\$ 432	\$ 2,189	\$ 2,673
Capital lease obligations	62	11	12	13	26
Operating leases	405	82	151	130	42
Interest(1)	1,442	237	468	362	375
Purchase obligations(2)	2,038	643	777	140	478
Pension benefit plan contributions(3)	25	25			
Postretirement benefit plan benefit payments(1)	104	11	22	22	49
Equity affiliate investment obligation(4)	140	80	60		
Total contractual cash obligations	\$ 9,567	\$ 1,146	\$ 1,922	\$ 2,856	\$ 3,643

	Amount of commitment expiration per period				
	Total	Less than one year	1 - 3 years	3 - 5 years	More than 5 years
Other commercial commitments:					
Standby letters of credit	\$ 28	\$ 28	\$ —	\$ —	\$ —
Total commercial commitments	\$ 28	\$ 28	\$ —	\$ —	\$ —

(1) Amounts based on rates and assumptions at December 31, 2015.

(2) The Company's purchase obligations consist principally of contracted amounts for energy and molds. In cases where variable prices are involved, current market prices have been used. The amount above does not include ordinary course of business purchase orders because the majority of such purchase orders may be canceled. The Company does not believe such purchase orders will adversely affect its liquidity position.

(3) In order to maintain minimum funding requirements, the Company is required to make contributions to its defined benefit pension plans of approximately \$25 million in 2016. Future funding requirements for the Company's pension plans will depend largely on actual asset returns and future actuarial assumptions, such as discount rates, and can vary significantly.

(4) In 2014, the Company entered into a joint venture agreement with Constellation Brands, Inc. to operate a glass container plant in Nava, Mexico. To help meet current and rising demand from Constellation's adjacent brewery, the joint venture plans to expand the plant from one furnace to four over the next three years. The Company expects to contribute approximately \$140 million for the joint venture's expansion plans through 2017.

The Company is unable to make a reasonably reliable estimate as to when cash settlement with taxing authorities may occur for its unrecognized tax benefits. Therefore, the liability for unrecognized tax benefits is not included in the table above. See Note 10 to the Consolidated Financial Statements for additional information.

#### Critical Accounting Estimates

The Company's analysis and discussion of its financial condition and results of operations are based upon its consolidated financial statements that have been prepared in accordance with accounting principles generally accepted in the United States ("U.S. GAAP"). The preparation of financial statements in conformity with

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U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues and expenses, and the disclosure of contingent assets and liabilities. The Company evaluates these estimates and assumptions on an ongoing basis. Estimates and assumptions are based on historical and other factors believed to be reasonable under the circumstances at the time the financial statements are issued. The results of these estimates may form the basis of the carrying value of certain assets and liabilities and may not be readily apparent from other sources. Actual results, under conditions and circumstances different from those assumed, may differ from estimates.

The impact of, and any associated risks related to, estimates and assumptions are discussed within Management's Discussion and Analysis of Financial Condition and Results of Operations, as well as in the Notes to the Consolidated Financial Statements, if applicable, where estimates and assumptions affect the Company's reported and expected financial results.

The Company believes that accounting for property, plant and equipment, impairment of long lived assets, pension benefit plans, contingencies and litigation related to asbestos liability, and income taxes involves the more significant judgments and estimates used in the preparation of its consolidated financial statements.

### Property, Plant and Equipment

The net carrying amount of property, plant and equipment ("PP&E") at December 31, 2015 totaled \$3 billion, representing 31% of total assets. Depreciation expense during 2015 totaled \$323 million, representing approximately 6% of total costs of goods sold. Given the significance of PP&E and associated depreciation to the Company's consolidated financial statements, the determinations of an asset's cost basis and its economic useful life are considered to be critical accounting estimates.

**Cost Basis**—PP&E is recorded at cost, which is generally objectively quantifiable when assets are purchased individually. However, when assets are purchased in groups, or as part of a business, costs assigned to PP&E are based on an estimate of fair value of each asset at the date of acquisition. These estimates are based on assumptions about asset condition, remaining useful life and market conditions, among others. The Company frequently employs expert appraisers to aid in allocating cost among assets purchased as a group.

Included in the cost basis of PP&E are those costs which substantially increase the useful lives or capacity of existing PP&E. Significant judgment is needed to determine which costs should be capitalized under these criteria and which costs should be expensed as a repair or maintenance expenditure. For example, the Company frequently incurs various costs related to its existing glass melting furnaces and forming machines and must make a determination of which costs, if any, to capitalize. The Company relies on the experience and expertise of its operations and engineering staff to make reasonable and consistent judgments regarding increases in useful lives or capacity of PP&E.

**Estimated Useful Life**—PP&E is generally depreciated using the straight line method, which deducts equal amounts of the cost of each asset from earnings each period over its estimated economic useful life. Economic useful life is the duration of time an asset is expected to be productively employed by the Company, which may be less than its physical life. Management's assumptions regarding the following factors, among others, affect the determination of estimated economic useful life: wear and tear, product and process obsolescence, technical standards, and changes in market demand.

The estimated economic useful life of an asset is monitored to determine its appropriateness, especially in light of changed business circumstances. For example, technological advances, excessive wear and tear, or changes in customers' requirements may result in a shorter estimated useful life than originally anticipated. In these cases, the Company depreciates the remaining net book value over the new estimated remaining life, thereby increasing

depreciation expense per year on a prospective basis. Likewise, if the estimated useful life is increased, the adjustment to the useful life decreases depreciation expense per year on a prospective basis. Changes in economic useful life assumptions did not have a material impact on the Company's reported results in 2015, 2014 or 2013.

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## Impairment of Long Lived Assets

Property, Plant and Equipment—The Company tests for impairment of PP&E whenever events or changes in circumstances indicate that the carrying amount of the assets may not be recoverable. PP&E held for use in the Company's business is grouped for impairment testing at the lowest level for which cash flows can reasonably be identified, typically a segment or a component of a segment. The Company evaluates the recoverability of PP&E based on undiscounted projected cash flows, excluding interest and taxes. If an asset group is considered impaired, the impairment loss to be recognized is measured as the amount by which the asset group's carrying amount exceeds its fair value. PP&E held for sale is reported at the lower of carrying amount or fair value less cost to sell.

Impairment testing requires estimation of the fair value of PP&E based on the discounted value of projected future cash flows generated by the asset group. The assumptions underlying cash flow projections represent management's best estimates at the time of the impairment review. Factors that management must estimate include, among other things: industry and market conditions, sales volume and prices, production costs and inflation. Changes in key assumptions or actual conditions which differ from estimates could result in an impairment charge. The Company uses reasonable and supportable assumptions when performing impairment reviews and cannot predict the occurrence of future events and circumstances that could result in impairment charges.

Goodwill –Goodwill is tested for impairment annually as of October 1 (or more frequently if impairment indicators arise) using a two-step process. Step 1 compares the business enterprise value ("BEV") of each reporting unit with its carrying value. The BEV is computed based on estimated future cash flows, discounted at the weighted average cost of capital of a hypothetical third-party buyer. If the BEV is less than the carrying value for any reporting unit, then Step 2 must be performed. Step 2 compares the implied fair value of goodwill with the carrying amount of goodwill. Any excess of the carrying value of the goodwill over the implied fair value will be recorded as an impairment loss. The calculations of the BEV in Step 1 and the implied fair value of goodwill in Step 2 are based on significant unobservable inputs, such as projected future cash flows of the reporting units, discount rates, and terminal business value, and are classified as Level 3 in the fair value hierarchy. The Company's projected future cash flows incorporates management's best estimates of the expected future results including, but not limited to, price trends, customer demand, material costs, asset replacement costs and any other known factors.

Goodwill is tested for impairment at the reporting unit level, which is the operating segment or one level below the operating segment, also known as a component. Two or more components of an operating segment shall be aggregated into a single reporting unit if the components have similar economic characteristics, based on an assessment of various factors. The Company has determined that the Europe and North America segments are reporting units. The Company aggregated the components of the Latin America and Asia Pacific segments into single reporting units equal to the reportable segments. The aggregation of the components of these segments was based on their economic similarity as determined by the Company using a number of quantitative and qualitative factors, including gross margins, the manner in which the Company operates the business, the consistent nature of products, services, production processes, customers and methods of distribution, as well as the level of shared resources and assets between the components.

During the fourth quarter of 2015, the Company completed its annual impairment testing and determined that no impairment of goodwill existed. Goodwill at December 31, 2015 totaled \$2.5 billion, representing 26% of total assets. The Company has four reporting units of which three of the reporting units have goodwill and include; \$840 million of recorded goodwill to the Company's Europe segment, \$624 million of recorded goodwill to the Company's Latin America segment and \$1 billion of recorded goodwill to the Company's North America segment. The testing performed as of October 1, 2015, indicated a significant excess of BEV over book value for North America. Both Europe and Latin America exceeded their carrying values by approximately 11% and 20%, respectively, and are determined to be the reporting units having the greatest risk of future impairment if actual results fall modestly short

of expectations. If the Company's projected future cash flows were substantially lower, or if the assumed weighted average cost of capital was substantially higher, the testing performed as of October 1, 2015, may have indicated an impairment of one or more of these reporting units and, as a result, the related

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goodwill may also have been impaired. Any impairment charges that the Company may take in the future could be material to its consolidated results of operations and financial condition. However, less significant changes in projected future cash flows or the assumed weighted average cost of capital would not have indicated an impairment. For example, if projected future cash flows had been decreased by 5%, or if the weighted average cost of capital had been increased by 5%, or both, the resulting lower BEV's would still have exceeded the book value of each of these reporting units.

During the time subsequent to the annual evaluation, and at December 31, 2015, the Company considered whether any events and/or changes in circumstances had resulted in the likelihood that the goodwill of any of its reporting units may have been impaired and has determined that no such events have occurred. The Company will monitor conditions throughout 2016 that might significantly affect the projections and variables used in the impairment test to determine if a review prior to October 1 may be appropriate. If the results of impairment testing confirm that a write down of goodwill is necessary, then the Company will record a charge in the fourth quarter of 2016, or earlier if appropriate. In the event the Company would be required to record a significant write down of goodwill, the charge would have a material adverse effect on reported results of operations and net worth.

**Other Long-Lived Assets - Intangibles** – Other long-lived assets consist primarily of purchased customer relationships intangibles and are amortized using the accelerated amortization method over their estimated useful lives. The Company reviews these assets for impairment whenever events or changes in circumstances indicate that the carrying amount of the asset may not be recoverable. In the event that a decline in fair value of an asset occurs, and the decline in value is considered to be other than temporary, an impairment loss is recognized. The test for impairment would require the Company to make estimates about fair value, which may be determined based on discounted cash flows, third party appraisals or other methods that provide appropriate estimates of value. The Company continually monitors the carrying value of their assets.

**Pension Benefit Plans**

**Significant Estimates**—The determination of pension obligations and the related pension expense or credits to operations involves significant estimates. The most significant estimates are the discount rate used to calculate the actuarial present value of benefit obligations and the expected long term rate of return on plan assets. The Company uses discount rates based on yields of high quality fixed rate debt securities at the end of the year. At December 31, 2015, the weighted average discount rate was 4.43% and 3.82% for U.S. and non U.S. plans, respectively. The Company uses an expected long term rate of return on assets that is based on both past performance of the various plans' assets and estimated future performance of the assets. Due to the nature of the plans' assets and the volatility of debt and equity markets, actual returns may vary significantly from year to year. The Company refers to average historical returns over longer periods (up to 10 years) in determining its expected rates of return because short term fluctuations in market values do not reflect the rates of return the Company expects to achieve based upon its long term investing strategy. For purposes of determining pension charges and credits in 2015, the Company's estimated weighted average expected long term rate of return on plan assets is 8.00% for U.S. plans and 7.21% for non U.S. plans compared to 8.00% for U.S. plans and 7.23% for non U.S. plans in 2014. The Company recorded pension expense from continuing operations of \$24 million, \$19 million, and \$60 million for the U.S. plans in 2015, 2014 and 2013, respectively, and \$7 million, \$24 million, and \$41 million for the non U.S. plans in 2015, 2014, and 2013, respectively from its principal defined benefit pension plans. Depending on currency translation rates, the Company expects to record approximately \$29 million of total pension expense for the full year of 2016. The 2016 pension expense will reflect a 7.5% expected long-term rate of return for the U.S. assets.

Future effects on reported results of operations depend on economic conditions and investment performance. For example, a one half percentage point change in the actuarial assumption regarding discount rates or in the expected rate of return used to calculate plan liabilities would result in a change of approximately \$8 million and \$15 million,

respectively, in the pretax pension expense for the full year 2016.

Recognition of Funded Status—The Company recognizes the funded status of each pension benefit plan on the balance sheet. The funded status of each plan is measured as the difference between the fair value of plan

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assets and actuarially calculated benefit obligations as of the balance sheet date. Actuarial gains and losses are accumulated in Other Comprehensive Income and the portion of each plan that exceeds 10% of the greater of that plan's assets or projected benefit obligation is amortized to income on a straight line basis over the average remaining service period of employees still accruing benefits or the expected life of participants not accruing benefits if all, or almost all, of the plan's participants are no longer accruing benefits.

### Contingencies and Litigation Related to Asbestos Liability

The Company conducts a comprehensive legal review of its asbestos-related liabilities and costs annually in connection with finalizing and reporting its annual results of operations, unless significant changes in trends or new developments warrant an earlier review. If the results of an annual comprehensive legal review indicate that the existing amount of the accrued liability is insufficient to cover its reasonably estimable asbestos-related costs, then the Company will record an appropriate charge to increase the accrued liability. As part of the annual comprehensive legal review, the Company considers the factors that affect its estimated accrued liability, and considers the timeframe used to reasonably estimate the liability for asbestos claims not yet asserted against the Company using primarily a qualitative assessment of the state of the asbestos litigation, as well as a quantitative hindsight review. The hindsight review includes an examination of the Company's prior estimates of the accrual for unasserted claims compared to the estimated value of claims actually received in those periods.

The significant assumptions underlying the material components of the Company's accrual are:

- a) settlements will continue to be limited almost exclusively to claimants who were exposed to the Company's asbestos-containing insulation prior to its exit from that business in 1958;
- b) claims will continue to be resolved primarily under the Company's administrative claims agreements or on terms comparable to those set forth in those agreements;
- c) the incidence of serious asbestos-related disease cases and claiming patterns against the Company for such cases do not change materially;
- d) the Company is substantially able to continue to defend itself successfully at trial and on appeal;
- e) the number and timing of additional co-defendant bankruptcies do not change significantly the assets available to participate in the resolution of cases in which the Company is a defendant; and
- f) co-defendants with substantial resources and assets continue to participate significantly in the resolution of future asbestos lawsuits and claims.

Based on its 2015 comprehensive legal review, the Company determined that it was able to reasonably estimate probable losses for asbestos claims not yet asserted against the Company for a period of four years. Therefore, the Company's charge for 2015 includes a period one year longer than the accrual period determined as reasonably estimable in the annual comprehensive legal reviews conducted since 2003. This is a change in estimate resulting from an assessment of the qualitative and quantitative factors in the Company's 2015 comprehensive legal review. The Company will continue to evaluate the qualitative factors relating to the litigation and conduct its annual hindsight reviews to determine the appropriate period of time for which it can reasonably estimate probable losses for unasserted claims. The determination of this time horizon continues to require a high degree of management judgment. Because part of the Company's asbestos liability at any year end is an estimate of the asbestos claims and legal defense costs that are expected to be incurred in the time horizon for which it is able to reasonably estimate probable losses, the Company usually expects to record an annual charge to account for the inclusion of one or more additional years in its time horizon.

In the fourth quarter of 2015, the Company recorded a charge of \$225 million to increase its accrued liability for asbestos-related costs. This compares to the 2014 charge of \$135 million although, as noted above, the accrual period for the 2015 charge is one year longer than for the 2014 charge. The Company's accruals are based on a number of factors as described further in Note 12 to the Consolidated Financial Statements.

A significant determinant in the Company's estimated asbestos liability is the period over which the liability can be reasonably estimated. If the Company was able to reasonably estimate losses for longer periods in the

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future, a larger liability would likely be recognized. As discussed above, in the fourth quarter of 2015, the Company recorded a charge of \$225 million, which included an increase to its estimated asbestos liability for an additional two-year period, or approximately \$113 million of expense per year. If the Company could reasonably estimate its asbestos-related expenses for ten years (rather than four years), and it assumed that its annual expense declined by an amount ranging from 5% to 10% for each year starting at year five, this would result in a hypothetical additional liability ranging from approximately \$475 million to \$550 million in excess of the \$522 million asbestos liability recorded at December 31, 2015.

The example above is hypothetical in nature and is provided to demonstrate how the Company's asbestos liability could be impacted if the Company was able to reasonably estimate asbestos-related expenses for longer periods in the future. Given the inherent volatility involved in the asbestos litigation, the Company is unable to provide an estimate of possible loss or range of loss beyond the \$522 million recorded as of December 31, 2015. Any future additional charge would likewise materially affect the Company's results of operations in which it is recorded.

## Income Taxes

The Company accounts for income taxes as required by general accounting principles under which management judgment is required in determining income tax expense and the related balance sheet amounts. This judgment includes estimating and analyzing historical and projected future operating results, the reversal of taxable temporary differences, tax planning strategies, and the ultimate outcome of uncertain income tax positions. Actual income taxes paid may vary from estimates, depending upon changes in income tax laws, actual results of operations, and the final audit of tax returns by taxing authorities. Tax assessments may arise several years after tax returns have been filed. Changes in the estimates and assumptions used for calculating income tax expense and potential differences in actual results from estimates could have a material impact on the Company's results of operations and financial condition.

Deferred tax assets and liabilities are recognized for the tax effects of temporary differences between the financial reporting and tax bases of assets and liabilities measured using enacted tax rates and for operating losses and tax credit carryforwards. Deferred tax assets and liabilities are determined separately for each tax jurisdiction in which the Company conducts its operations or otherwise incurs taxable income or losses. A valuation allowance is recorded when it is more likely than not that some portion or all of the deferred tax assets will not be realized. The realization of deferred tax assets depends on the ability to generate sufficient taxable income within the carryback or carryforward periods provided for in the tax law for each applicable tax jurisdiction. The Company considers the following possible sources of taxable income when assessing the realization of deferred tax assets:

- future reversals of existing taxable temporary differences;
- future taxable income exclusive of reversing temporary differences and carryforwards;
- taxable income in prior carryback years; and
- tax planning strategies

The assessment regarding whether a valuation allowance is required or should be adjusted also considers all available positive and negative evidence, including but not limited to:

- nature, frequency, and severity of recent losses;
- duration of statutory carryforward periods;
- historical experience with tax attributes expiring unused; and
- near and medium term financial outlook.

The weight given to the positive and negative evidence is commensurate with the extent to which the evidence may be objectively verified. Accordingly, it is difficult to conclude a valuation allowance is not required when there is significant objective and verifiable negative evidence, such as cumulative losses in recent years.



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The Company uses the actual results for the last three years and current year anticipated results as the primary measure of cumulative losses in recent years.

The evaluation of deferred tax assets requires judgment in assessing the likely future tax consequences of events recognized in the financial statements or tax returns and future profitability. The recognition of deferred tax assets represents the Company's best estimate of those future events. Changes in the current estimates, due to unanticipated events or otherwise, could have a material effect on the Company's results of operations and financial condition.

In certain foreign jurisdictions, the Company's analysis indicates that it has cumulative losses in recent years. This is considered significant negative evidence which is objective and verifiable and, therefore, difficult to overcome. However, the cumulative loss position is not solely determinative and, accordingly, the Company considers all other available positive and negative evidence in its analysis. Based on its analysis, the Company has recorded a valuation allowance for the portion of deferred tax assets where based on the weight of available evidence it is unlikely to realize those deferred tax assets.

The utilization of tax attributes to offset taxable income reduces the overall level of deferred tax assets subject to a valuation allowance. Additionally, the Company's recorded effective tax rate is lower than the applicable statutory tax rate, due primarily to income earned in jurisdictions for which a valuation allowance is recorded. The effective tax rate will approach the statutory tax rate in periods after valuation allowances are released. In the period in which valuation allowances are released, the Company will record a material tax benefit, which could result in a negative effective tax rate.

## ITEM 7A. QUALITATIVE AND QUANTITATIVE DISCLOSURES ABOUT MARKET RISK

Market risks relating to the Company's operations result primarily from fluctuations in foreign currency exchange rates, changes in interest rates, and changes in commodity prices, principally energy and soda ash. The Company uses certain derivative instruments to mitigate a portion of the risk associated with changing foreign currency exchange rates. The Company also uses certain derivative instruments to mitigate a portion of the risk associated with fluctuating energy prices in its North American region. These instruments carry varying degrees of counterparty credit risk. To mitigate this risk, the Company has defined a financial counterparty policy that established criteria to select qualified counterparties based on credit ratings and CDC spreads. The policy also limits the exposure with individual counterparties. The Company monitors these exposures quarterly. The Company does not enter into derivative financial instruments for trading purposes.

### Foreign Currency Exchange Rate Risk

### Earnings of operations outside the United States

A substantial portion of the Company's operations are conducted by subsidiaries outside the U.S. The primary international markets served by the Company's subsidiaries are in Canada, Australia, China, Latin America (principally Brazil, Colombia, and Mexico), and Europe (principally France, Germany, Italy, the Netherlands, Poland, Spain, and the United Kingdom,). In general, revenues earned and costs incurred by the Company's major international operations are denominated in their respective local currencies. Consequently, the Company's reported financial results could be affected by factors such as changes in foreign currency exchange rates or highly inflationary economic conditions in the international markets in which the Company's subsidiaries operate. When the U.S. dollar strengthens against foreign currencies, the reported U.S. dollar value of local currency earnings generally decreases; when the U.S. dollar weakens against foreign currencies, the reported U.S. dollar value of local currency earnings generally increases. For the years ended December 31, 2015, 2014, and 2013, the Company did not have any significant foreign subsidiaries whose functional currency was the U.S. dollar.

Borrowings not denominated in the functional currency

Because the Company's subsidiaries operate within their local economic environment, the Company believes it is appropriate to finance those operations with borrowings denominated in the local currency to the

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extent practicable where debt financing is desirable or necessary. This strategy mitigates the risk of reported losses or gains in the event the foreign currency strengthens or weakens against the U.S. dollar. Considerations which influence the amount of such borrowings include long and short term business plans, tax implications, and the availability of borrowings with acceptable interest rates and terms.

Available excess funds of a subsidiary may be redeployed through intercompany loans to other subsidiaries for debt repayment, capital investment, or other cash requirements. The intercompany loans give rise to foreign currency exchange rate risk, which the Company mitigates through the use of forward exchange contracts that effectively swap the intercompany loan and related interest to the appropriate local currency.

The Company believes the near term exposure to foreign currency exchange rate risk of its foreign currency risk sensitive instruments was not material at December 31, 2015 and 2014.

## Interest Rate Risk

The Company's interest expense is most sensitive to changes in the general level of interest rates applicable to the term loans under its Secured Credit Agreement (see Note 11 to the Consolidated Financial Statements for further information). The Company's interest rate risk management objective is to limit the impact of interest rate changes on net income and cash flow, while minimizing interest payments and expense. To achieve this objective, the Company regularly evaluates its mix of fixed and floating rate debt, and, from time to time, may enter into interest rate swap agreements.

The following table provides information about the Company's interest rate sensitivity related to its significant debt obligations at December 31, 2015. The table presents principal cash flows and related weighted average interest rates by expected maturity date.

(Dollars in millions)	2016	2017	2018	2019	2020	There- after	Total	Fair Value at 12/31/2015
Long-term debt at variable rate:								
Principal by expected maturity	\$ 217	\$ 78	\$ 101	\$ 100	\$ 1,543	\$ 545	\$ 2,584	\$ 2,584
Avg. principal outstanding	\$ 2,475	\$ 2,328	\$ 2,239	\$ 2,138	\$ 1,317	\$ 273		
Avg. interest rate	2.37 %	2.37 %	2.37 %	2.37 %	2.37 %	2.37 %		
Long-term debt at fixed rate:								
Principal by expected maturity	\$ 11	\$ 7	\$ 258	\$ 8	\$ 550	\$ 2,156	\$ 2,989	\$ 3,183
Avg. principal outstanding	\$ 2,984	\$ 2,984	\$ 2,734	\$ 2,734	\$ 2,191	\$ 1,824		

Avg. interest rate            5.92 %     5.92 %     5.74 %     5.74 %     5.50 %     5.62 %

The Company believes the near term exposure to interest rate risk of its debt obligations has not changed materially since December 31, 2015.

In addition, the determination of pension obligations and the related pension expense or credits to operations involves significant estimates. Future funding requirements for the Company's pension plans will depend largely on actual asset returns and future actuarial assumptions, such as discount rates, and can vary significantly. The discount rate is a significant estimate that is used to calculate the actuarial present value of benefit obligations and is based on yields of high quality fixed rate debt securities at the end of the year. For example, a one half percentage point change in the actuarial assumption regarding discount rates or in the expected rate of return used



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to calculate plan liabilities would result in a change of approximately \$8 million and \$15 million, respectively, in the pretax pension expense for the full year 2016.

### Commodity Price Risk

The Company has exposure to commodity price risk, principally related to energy. In North America, the Company enters into commodity forward contracts related to forecasted natural gas requirements, the objectives of which are to limit the effects of fluctuations in the future market price paid for natural gas and the related volatility in cash flows. The Company continually evaluates the natural gas market and related price risk and periodically enters into commodity forward contracts in order to hedge a portion of its usage requirements. The majority of the sales volume in North America is tied to customer contracts that contain provisions that pass the price of natural gas to the customer. In certain of these contracts, the customer has the option of fixing the natural gas price component for a specified period of time. At December 31, 2015, the Company had entered into commodity forward contracts covering approximately 7,300,000 MM BTUs, primarily related to customer requests to lock the price of natural gas. In Europe, the Company enters into fixed price contracts for a significant amount of its energy requirements. These contracts typically have terms of 3 years or less.

The Company believes the near term exposure to commodity price risk of its commodity forward contracts was not material at December 31, 2015.

### Forward Looking Statements

This document contains "forward-looking" statements within the meaning of Section 21E of the Securities Exchange Act of 1934 and Section 27A of the Securities Act of 1933. Forward-looking statements reflect the Company's current expectations and projections about future events at the time, and thus involve uncertainty and risk. The words "believe," "expect," "anticipate," "will," "could," "would," "should," "may," "plan," "estimate," "intend," "predict," "potential," "continue," and "may continue" and the negatives of these words and other similar expressions generally identify forward looking statements. It is possible the Company's future financial performance may differ from expectations due to a variety of factors including, but not limited to the following: (1) the Company's ability to integrate the Vitro Business in a timely and cost effective manner, to maintain on existing terms the permits, licenses and other approvals required for the Vitro Business to operate as currently operated, and to realize the expected synergies from the Vitro Acquisition, (2) risks related to the impact of integration of the Vitro Acquisition on earnings and cash flow, (3) risks associated with the significant transaction costs and additional indebtedness that the Company incurred in financing the Vitro Acquisition, (4) the Company's ability to realize expected growth opportunities and cost savings from the Vitro Acquisition, (5) foreign currency fluctuations relative to the U.S. dollar, specifically the Euro, Brazilian real, Mexican peso, Colombian peso and Australian dollar, (6) changes in capital availability or cost, including interest rate fluctuations and the ability of the Company to refinance debt at favorable terms, (7) the general political, economic and competitive conditions in markets and countries where the Company has operations, including uncertainties related to economic and social conditions, disruptions in capital markets, disruptions in the supply chain, competitive pricing pressures, inflation or deflation, and changes in tax rates and laws, (8) consumer preferences for alternative forms of packaging, (9) cost and availability of raw materials, labor, energy and transportation, (10) the Company's ability to manage its cost structure, including its success in implementing restructuring plans and achieving cost savings, (11) consolidation among competitors and customers, (12) the ability of the Company to acquire businesses and expand plants, integrate operations of acquired businesses and achieve expected synergies, (13) unanticipated expenditures with respect to environmental, safety and health laws, (14) the Company's ability to further develop its sales, marketing and product development capabilities, and (15) the timing and occurrence of events which are beyond the control of the Company, including any expropriation of the Company's operations, floods and other natural disasters, events related to asbestos-related claims, and the other risk factors discussed in this Annual Report on Form 10-K for the year ended December 31, 2015 and any subsequently filed Quarterly Report on Form 10-Q. It is not possible to foresee or identify

all such factors. Any forward-looking statements in this document are based on certain assumptions and analyses made by the Company in light of its experience and perception of historical trends, current conditions, expected future developments, and other factors it believes are appropriate in the circumstances. Forward-looking statements are not a guarantee of future performance and

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actual results or developments may differ materially from expectations. While the Company continually reviews trends and uncertainties affecting the Company's results of operations and financial condition, the Company does not assume any obligation to update or supplement any particular forward-looking statements contained in this document.

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ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The Board of Directors and Share Owners of

Owens Illinois, Inc.

We have audited the accompanying consolidated balance sheets of Owens-Illinois, Inc. as of December 31, 2015 and 2014, and the related consolidated statements of results of operations, comprehensive income, share owners' equity and cash flows for each of the three years in the period ended December 31, 2015. Our audits also included the financial statement schedule listed in the Index at Item 15. These financial statements and schedule are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements and schedule based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the consolidated financial position of Owens-Illinois, Inc. at December 31, 2015 and 2014, and the consolidated results of its operations and its cash flows for each of the three years in the period ended December 31, 2015, in conformity with U.S. generally accepted accounting principles. Also, in our opinion, the related financial statement schedule, when considered in relation to the basic financial statements taken as a whole, presents fairly in all material respects the information set forth therein.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), Owens-Illinois, Inc.'s internal control over financial reporting as of December 31, 2015, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework), and our report dated February 16, 2016 expressed an unqualified opinion thereon.

/s/ Ernst & Young LLP

Toledo, Ohio

February 16, 2016



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Owens-Illinois, Inc.

## CONSOLIDATED RESULTS OF OPERATIONS

Dollars in millions, except per share amounts

Years ended December 31,	2015	2014	2013
Net sales	\$ 6,156	\$ 6,784	\$ 6,967
Cost of goods sold	(5,046)	(5,531)	(5,636)
Gross profit	1,110	1,253	1,331
Selling and administrative expense	(476)	(523)	(506)
Research, development and engineering expense	(64)	(63)	(62)
Interest expense, net	(251)	(230)	(229)
Equity earnings	60	64	67
Other expense, net	(320)	(283)	(266)
Earnings from continuing operations before income taxes	59	218	335
Provision for income taxes	(106)	(92)	(120)
Earnings (loss) from continuing operations	(47)	126	215
Loss from discontinued operations	(4)	(23)	(18)
Net earnings (loss)	(51)	103	197
Net (earnings) attributable to noncontrolling interests	(23)	(28)	(13)
Net earnings (loss) attributable to the Company	\$ (74)	\$ 75	\$ 184
Amounts attributable to the Company:			
Earnings (loss) from continuing operations	\$ (70)	\$ 98	\$ 202
Loss from discontinued operations	(4)	(23)	(18)
Net (loss) earnings	\$ (74)	\$ 75	\$ 184
Basic earnings per share:			
Earnings (loss) from continuing operations	\$ (0.44)	\$ 0.60	\$ 1.22
Loss from discontinued operations	(0.03)	(0.14)	(0.11)
Net earnings (loss)	\$ (0.47)	\$ 0.46	\$ 1.11
Diluted earnings per share:			
Earnings (loss) from continuing operations	\$ (0.44)	\$ 0.59	\$ 1.22
Loss from discontinued operations	(0.03)	(0.14)	(0.11)
Net earnings (loss)	\$ (0.47)	\$ 0.45	\$ 1.11

See accompanying Notes to the Consolidated Financial Statements.

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Owens-Illinois, Inc.

CONSOLIDATED COMPREHENSIVE INCOME

Dollars in millions

Years ended December 31,	2015	2014	2013
Net earnings (loss)	\$ (51)	\$ 103	\$ 197
Other comprehensive income (loss):			
Foreign currency translation adjustments	(529)	(305)	(232)
Pension and other postretirement benefit adjustments, net of tax	(4)	(90)	609
Change in fair value of derivative instruments, net of tax	(6)	1	2
Other comprehensive loss	(539)	(394)	379
Total comprehensive income (loss)	(590)	(291)	576
Comprehensive income attributable to noncontrolling interests	(7)	(7)	(7)
Comprehensive income (loss) attributable to the Company	\$ (597)	\$ (298)	\$ 569

See accompanying Notes to the Consolidated Financial Statements.



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Owens-Illinois, Inc.

## CONSOLIDATED BALANCE SHEETS

Dollars in millions

December 31,	2015	2014
Assets		
Current assets:		
Cash and cash equivalents	\$ 399	\$ 512
Trade receivables, net of allowances of \$29 million and \$34 million at December 31, 2015 and 2014, respectively	562	550
Inventories	1,007	1,035
Prepaid expenses and other current assets	366	274
Total current assets	2,334	2,371
Other assets:		
Equity investments	409	427
Pension assets	32	22
Other assets	599	685
Intangibles	597	
Goodwill	2,489	1,893
Total other assets	4,126	3,027
Property, plant and equipment:		
Land, at cost	252	226
Buildings and equipment, at cost:		
Buildings and building equipment	1,123	1,097
Factory machinery and equipment	4,526	4,302
Transportation, office and miscellaneous equipment	88	105
Construction in progress	238	161
	6,227	5,891
Less accumulated depreciation	3,266	3,446
Net property, plant and equipment	2,961	2,445
Total assets	\$ 9,421	7,843

See accompanying Notes to the Consolidated Financial Statements.

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Owens-Illinois, Inc.

## CONSOLIDATED BALANCE SHEETS (continued)

Dollars in millions, except per share amounts

December 31,	2015	2014
Liabilities and Share Owners' Equity		
Current liabilities:		
Accounts payable	\$ 1,212	\$ 1,137
Salaries and wages	145	145
U.S. and foreign income taxes	36	43
Current portion of asbestos-related liabilities	130	143
Other accrued liabilities	371	372
Short-term loans	160	127
Long-term debt due within one year	68	361
Total current liabilities	2,122	2,328
Long-term debt	5,345	2,957
Deferred taxes	124	121
Pension benefits	504	465
Nonpension postretirement benefits	155	178
Other liabilities	205	227
Asbestos-related liabilities	392	292
Commitments and contingencies		
Share owners' equity:		
Share owners' equity of the Company:		
Common stock, par value \$.01 per share, 250,000,000 shares authorized, 184,480,646 and 183,915,370 shares issued (including treasury shares), respectively	2	2
Capital in excess of par value	3,064	3,066
Treasury stock, at cost, 23,519,049 and 19,718,055 shares, respectively	(573)	(480)
Retained earnings (loss)	(10)	64
Accumulated other comprehensive loss	(2,017)	(1,494)
Total share owners' equity of the Company	466	1,158
Noncontrolling interests	108	117
Total share owners' equity	574	1,275
Total liabilities and share owners' equity	\$ 9,421	\$ 7,843

See accompanying Notes to the Consolidated Financial Statements.

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Owens-Illinois, Inc.

## CONSOLIDATED SHARE OWNERS' EQUITY

Dollars in millions

	Share Owners' Equity of the Company					Non-controlling Interests	Total Share Owners' Equity
	Capital in		Treasury Stock	Retained Earnings (Loss)	Accumulated Other Comprehensive Loss		
	Common Stock	Excess of Par Value					
Balance on January 1, 2013	\$ 2	\$ 3,005	\$ (425)	\$ (195)	\$ (1,506)	\$ 174	\$ 1,055
Issuance of common stock (1.4 million shares)		25					25
Reissuance of common stock (0.2 million shares)			4				4
Treasury shares purchased (1.1 million shares)			(33)				(33)
Repurchase of exchangeable notes		(1)					(1)
Stock compensation		11					11
Net earnings				184		13	197
Other comprehensive income (loss)					385	(6)	379
Distributions to noncontrolling interests						(22)	(22)
Contribution from noncontrolling interests						5	5
Deconsolidation of subsidiary						(17)	(17)
Balance on December 31, 2013	2	3,040	(454)	(11)	(1,121)	147	1,603
Issuance of common stock (0.3 million shares)		5					5
Reissuance of common stock (0.2 million shares)			6				6
Treasury shares purchased (1.1 million shares)			(32)				(32)
Stock compensation		21					21
Net earnings				75		28	103
Other comprehensive income (loss)					(373)	(21)	(394)
Distributions to noncontrolling interests						(37)	(37)
Balance on December 31, 2014	2	3,066	(480)	64	(1,494)	117	1,275
		1					1

Issuance of common stock (0.2 million shares)			
Reissuance of common stock (0.3 million shares)		7	7
Treasury shares purchased (4.1 million shares)		(100)	(100)
Stock compensation	15		