



Owens-Illinois, Inc.

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D. C. 20549

FORM 10-K

(Mark One)

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES \mathbf{X} **EXCHANGE ACT OF 1934**

> For the fiscal year ended **December 31, 2016**

> > or

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

Commission file number 1-9576



OWENS-ILLINOIS, INC.

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of incorporation or organization)

22-2781933 (IRS Employer Identification No.) 43551

One Michael Owens Way, Perrysburg, Ohio (Address of principal executive offices)

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 \Box No \boxtimes

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

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

(Zip Code)

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. \Box

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 \Box
_		(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 \Box No \boxtimes

The aggregate market value (based on the consolidated tape closing price on June 30, 2016) of the voting and non-voting common equity held by non-affiliates of Owens-Illinois, Inc. was approximately \$3,717,494,000. 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 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, 2017 was 162,354,026.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the Owens-Illinois, Inc. Proxy Statement for The Annual Meeting of Share Owners To Be Held Thursday, May 11, 2017 ("Proxy Statement") are incorporated by reference into Part III hereof.

TABLE OF GUARANTORS

	Primary Standard					
Exact Name of Registrant As Specified In Its Charter	State/Country of Incorporation or Organization	Industrial Classification Code Number	I.R.S. Employee Identification Number			
Owens-Illinois Group, Inc.	Delaware	6719	34-1559348			
Owens-Brockway Packaging, Inc.	Delaware	6719	34-1559346			

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 79 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 provide innovative and competitive packaging solutions for the world's leading food and beverage companies. The Company's goal is to enhance shareholder value and enable the future success of its customers and employees. The Company is employing a strategic plan to realize its goals and vision including:

- To be the preferred supplier for glass packaging in the global food and beverage industry by significantly improving the customer experience; aligning its activity with customers' value; improving quality and flexibility; and improving innovation and speed of commercialization; as well as increasing sales, marketing, end-to-end supply chain capabilities and talent;
- To be the most cost effective global glass packaging producer by ensuring asset stability and total systems cost management; increasing efficiency, leveraging automation, and improving quality; cultivating game changing concepts that create new competitive advantages; and focusing on continuous improvement; and
- To expand its business in attractive, growing markets by growing with strategic customers; expanding into attractive new markets; and evaluating expansion into the value chain.

The Company will achieve these ambitions by working together as One Team, One Enterprise, with One Plan.

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 expense (net), 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

of the leading global food and beverage manufacturers, including (in alphabetical order) Anheuser-Busch InBev, Carlsberg, Coca-Cola, Constellation, Diageo, Heineken, MillerCoors, Nestle, PepsiCo and Pernod Ricard. 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, non-alcoholic beverages 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, Vidrala and BA Vidro.

North America. The Company has 19 glass container manufacturing plants in the U.S. and Canada, and an interest in a joint venture that manufactures glass containers in the U.S. Also, the Company has a distribution facility used to import glass containers from its business in Mexico. 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 17 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 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 eight 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., and Silgan Holdings Inc. The principal competitors producing plastic containers include 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.

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 the last three quarters of the year.

Manufacturing

The Company has 79 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 10-20% 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, more than 90% 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.

In Europe and Asia Pacific, the Company enters into fixed price contracts for a significant amount of its energy requirements. These contracts have terms that can range from 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 and economic impacts. These fixed price contracts typically have terms of one to five years, and generally include annual price adjustments for inflation and for certain contracts price adjustments for foreign currency variation.

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. 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.

Research, Development and Engineering

Research, development and engineering constitute important parts of the Company's technical activities. Expenditures for these activities were \$65 million, \$64 million and \$63 million for 2016, 2015 and 2014, 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 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.

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 manufacturing and engineering assistance. The worldwide licensee network provides a stream of revenue to help support the Company's development activities. In 2016, 2015 and 2014, the Company earned \$13 million, \$12 million and \$12 million, respectively, in royalties and net technical assistance revenue.

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_2 ") 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, 2016, 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 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_2 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_2 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_2 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 provinces of Quebec and Ontario in Canada, have adopted cap-and-trade legislation aimed at reducing greenhouse gas emissions.

In Asia Pacific, the *National Greenhouse and Energy Reporting Act 2007* commenced on July 1, 2008 in Australia and established a mandatory reporting system for corporate greenhouse gas emissions and energy production and consumption. In July 2014, the Australian government introduced 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 (effective from July 1, 2016) ensures that emissions reductions paid for through the crediting and purchasing elements of the ERF are not offset by significant increases in emissions above business-as-usual levels elsewhere in the economy. An emissions trading scheme has 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 also impose regulations to reduce CO₂ 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.

Employees

The Company's worldwide operations employed approximately 27,000 persons as of December 31, 2016. Approximately 74% of North American employees are hourly workers covered by collective bargaining agreements. The principal collective bargaining agreement, which at December 31, 2016, covered approximately 76% of the Company's union-affiliated employees in North America, will expire on March 31, 2019. Approximately 86% 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.o-i.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 that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC.

The Company's Corporate Governance Guidelines, Global 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 "Investors" 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.

Executive Officers of the Registrant

In the following table the Company sets forth certain information regarding those persons currently serving as executive officers of Owens-Illinois, Inc. as of February 10, 2017.

Name and Age	Position
Andres A. Lopez (54)	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.
Miguel Alvarez (52)	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 (66)	Senior Vice President of Corporate Development and Special Advisor to the Chief Executive Office since 2017; Senior Vice President and General Counsel 2003-2016; 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 (60)	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 (42)	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 (49)	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 (49)	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 (54)	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 (58)	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.
MaryBeth Wilkinson (44)	Senior Vice President and General Counsel since 2017; Corporate Secretary since 2016; Associate General Counsel 2013 – 2016; Assistant General Counsel 2010 – 2012. Previously Partner with a global law firm 2007 – 2010.

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.

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, its ability to pursue global or domestic acquisitions, its ability to reinvest in its operations, and its ability to pay dividends.

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").

Beginning with the initial liability of \$975 million established in 1993, the Company has accrued a total of approximately \$4.9 billion through 2016, before insurance recoveries, for its asbestos-related liability. The Company's ability to 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.

For many years, the Company has conducted a comprehensive legal review of its asbestos-related liabilities and costs annually in connection with finalizing its annual results of operations. In May 2016, the Company revised its method for estimating its asbestos-related liabilities in connection with finalizing and reporting its restated results of operations for the three years ended December 31, 2015. Its revised method uses estimated future claims filings provided by a third party consultant and the Company's legal judgment regarding estimated future indemnity and legal costs to develop a reasonable estimate of its total asbestos-related liabilities. The revised methodology has led the Company to conclude that an asbestos liability of \$692 million was required as of December 31, 2016.

The Company continues to believe that its ultimate asbestos-related liability cannot be estimated with certainty. As part of its future annual comprehensive legal reviews, the Company will review its estimate of its total asbestos-related liability, unless significant changes in trends or new developments warrant an earlier review. Such reviews may result in significant adjustments to the liability accrued at the time of the review.

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 be estimated with certainty. Asbestos-related payments continue to be substantial and 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.

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, 2016, the Company had approximately \$5.3 billion of total debt outstanding, a decrease from \$5.6 billion at December 31, 2015.

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, 2016, the Company's debt subject to variable interest rates represented approximately 34% 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 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. 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 \$4.6 billion, representing approximately 69% of the Company's net sales for the year ended December 31, 2016. 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;
- Fluctuations in currency exchange rates and other impacts resulting from the United Kingdom's referendum on withdrawal from the European Union;

- 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;
- 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 20% 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;
- 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.

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 last three 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 and cost 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.

In addition, the Company purchases its soda ash raw materials in U.S. dollars in the Latin America and Asia Pacific regions. Given fluctuations in foreign currency exchange rates, this may cause these regions to experience inflationary or deflationary impacts to their raw material costs.

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 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 and U.S. trade policy 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, the deductibility of interest expense or the cost of materials imported from other countries 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.

In addition, existing free trade laws and regulations, such as the North American Free Trade Agreement, provide certain beneficial duties and tariffs for qualifying imports and exports, subject to compliance with the applicable classification and other requirements. Changes in laws or policies governing the terms of foreign trade, and in particular increased trade restrictions, tariffs or taxes on imports from countries where the Company manufactures products, such as Mexico, could have a material adverse effect on its business and financial results. Also, a government's adoption of "buy national" policies or retaliation by another government against such policies may affect the prices of and demand for the Company's products and could have a negative impact on the Company's results of operations.

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, 2016, covered approximately 74% of the Company's employees in North America. The principal collective bargaining agreement, which at December 31, 2016 covered approximately 76% of the Company's union-affiliated employees in North America, will expire on March 31, 2019. Approximately 86% 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 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, cybersecurity vulnerabilities, threats and more sophisticated and targeted cyber-related attacks. 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 threats. The Company's measures in place to prevent and detect global security threats 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. 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, 2016 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 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 \$38 million, \$17 million and \$28 million to its defined benefit pension plans in 2016, 2015 and 2014, 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

None.

ITEM 2. PROPERTIES

The principal manufacturing facilities and other material important physical properties of the Company at December 31, 2016 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
Asia Pacific Operations	
Australia	
Adelaide	Melbourne
Brisbane	Sydney
China	
Tianjin	Zhaoqing
Indonesia	
Jakarta	
New Zealand	
Auckland	
European Operations	
Czech Republic	
Dubi	Nove Sedlo
Estonia	
Jarvakandi	
France	
Beziers	Vayres
Gironcourt	Veauche
Labegude	Vergeze
Puy-Guillaume	Wingles
Reims	

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	Sao Paulo
Rio de Janeiro (glass container and tableware)	
Colombia	
Buga (tableware)	Soacha
Envigado	Zipaquira
Ecuador	
Guayaquil	

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(1)	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.

PART II

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

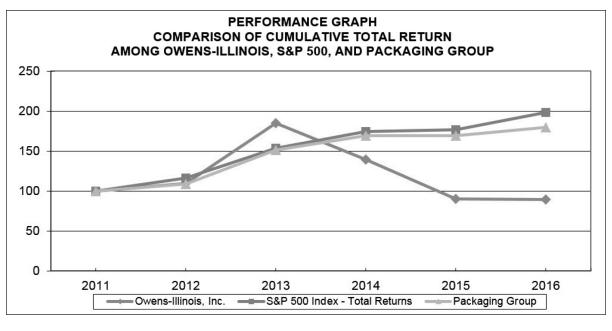
The price range for the Company's common stock on the New York Stock Exchange, as reported by the Financial Industry Regulatory Authority, Inc., was as follows:

	2016				2015					
	High		High		Low		High			Low
First Quarter	\$	17.06	\$	12.06	\$	26.99	\$	22.85		
Second Quarter		20.18		15.46		25.98		22.94		
Third Quarter		19.12		16.81		22.93		19.42		
Fourth Quarter		19.46		17.00		23.83		16.94		

The number of share owners of record on December 31, 2016 was 1,118. Approximately 100% 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 29,228 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 twelve months ended December 31, 2016. The Company has \$380 million remaining for repurchases as of December 31, 2016 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.



	Years Ending December 31,								
	2011	2012	2013	2014	2015	2016			
Owens-Illinois, Inc	\$ 100.00	\$ 109.75	\$ 184.62	\$ 139.27	\$ 89.89	\$ 89.93			
S&P 500	100.00	116.00	153.57	174.60	177.01	198.18			
Packaging Group	100.00	109.20	151.22	169.03	169.26	179.43			

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, 2011 and the change in market value of the stock, including additional shares assumed purchased through reinvestment of dividends, if any.

ITEM 6. SELECTED FINANCIAL DATA

The selected consolidated financial data presented below relates to each of the four years in the period ended December 31, 2016, which was derived from the audited consolidated financial statements of the Company. The selected consolidated financial data for the year ended December 31, 2012 has been omitted from this table because it was not practicable for the Company to present this financial information without undue effort. This was due to the Company's May 2016 restatement of its consolidated financial statements for the years ended December 31, 2015, 2014 and 2013 in order to correct an error related to the Company's method for estimating its future asbestos-related liabilities.

	Years ended December 31,							
		2016	2015		015 2014			2013
				(Dollars in	mil	lions)		
Consolidated operating results(a):								
Net sales	\$	6,702	\$	6,156	\$	6,784	\$	6,967
Cost of goods sold		(5,490)		(5,046)		(5,531)		(5,636)
Gross profit		1,212		1,110		1,253		1,331
Selling and administrative, research, development								
and engineering		(568)		(540)		(586)		(568)
Other expense, net		(16)		(51)		(130)		(66)
Earnings before interest expense and items below		628		519		537		697
Interest expense, net		(272)		(251)		(230)		(229)
Earnings from continuing operations before								
income taxes		356		268		307		468
Provision for income taxes		(119)		(106)		(92)		(120)
Earnings from continuing operations		237		162		215		348
Loss from discontinued operations		(7)		(4)		(23)		(18)
Net earnings		230		158		192		330
Net (earnings) attributable to noncontrolling interests		(21)		(23)		(28)		(13)
Net earnings attributable to the Company	\$	209	\$	135	\$	164	\$	317

	Years ended December 31,							
		2016		2015	2014			2013
Basic earnings per share of common stock:								
Earnings from continuing operations	\$	1.33	\$	0.86	\$	1.14	\$	2.03
Loss from discontinued operations		(0.04)		(0.03)		(0.14)		(0.11)
Net earnings	\$	1.29	\$	0.83	\$	1.00	\$	1.92
Weighted average shares outstanding (in thousands)	1	61,857		161,169	1	64,720		164,425
Diluted earnings per share of common stock:								
Earnings from continuing operations	\$	1.32	\$	0.85	\$	1.13	\$	2.02
Loss from discontinued operations		(0.04)		(0.03)		(0.14)		(0.11)
Net earnings	\$	1.28	\$	0.82	\$	0.99	\$	1.91
Diluted average shares (in thousands)	1	62,825		62,135	1	66,047		165,828

	Years ended December 31,								
	2016		2015		2014			2013	
				(Dollars i	n mill	ions)			
Other data:									
The following are included in earnings from									
continuing operations:									
Depreciation	\$	375	\$	323	\$	335	\$	350	
Amortization of intangibles		103		86		83		47	
Amortization of deferred finance fees (included in									
interest expense)		13		15		30		32	
Balance sheet data (at end of period):									
Working capital (current assets less current liabilities)	\$	194	\$	212	\$	43	\$	296	
Total assets		9,135		9,421		7,843		8,393	
Total debt		5,328		5,573		3,445		3,541	
Total share owners' equity	\$	363	\$	279	\$	771		1,010	
1 2								· ·	

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

	Years ended December 31,							
	2	2016	2	2015	2	014		2013
			(Dollars in millions)					
Cost of goods sold								
Pension settlement charges	\$	98	\$		\$	50	\$	
Acquisition-related fair value inventory adjustments				22				
Restructuring, asset impairment and related charges						8		
Selling and administrative, research, development								
and engineering								
Pension settlement charges						15		
Other expense, net								
Restructuring, asset impairment and other charges		129		75		78		119
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		(71)						
Charge for asbestos-related costs				16		46		12
Strategic transaction costs				23				
Non-income tax charge						69		
Acquisition-related fair value intangible adjustments				10				
Equity earnings related charges				5		5		
Interest expense, net								
Note repurchase premiums and additional interest								
charges for the write-off of unamortized								
deferred financing fees related to the early		0		10		•		1.1
extinguishment of debt		9		42		20		11
Provision for income taxes								
Net tax (benefit) expense for income tax on		1		(1.7)		(2.4		(1.4)
items above		1		(15)		(34		(14)
Tax expense (benefit) recorded for certain		(0)		0		(0)		
tax adjustments		(8)		8		(8)		
Net earnings attributable to noncontrolling interest		2						(12)
Net impact of noncontrolling interests on items above	<u>م</u>	$\frac{2}{100}$	<u></u>	100	<u>e</u>	240	<u></u>	(13)
	\$	160	\$	186	\$	249	\$	115

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

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):

	2016		16 2015		2014	
Net sales:						
Europe	\$	2,300	\$	2,324	\$	2,794
North America		2,220		2,039		2,003
Latin America		1,432		1,064		1,159
Asia Pacific		684		671		793
Reportable segment totals		6,636		6,098		6,749
Other		66		58		35
Net sales	\$	6,702	\$	6,156	\$	6,784
		2016	2015			2014
Segment operating profit:						
Europe	\$	237	\$	209	\$	353
North America		299		265		240
Latin America		269		183		227
Asia Pacific		77		83		88
Reportable segment totals		882		740		908
Items excluded from segment operating profit:						
Retained corporate costs and other		(98)		(70)		(100)
Restructuring, asset impairment and other related charges		(129)		(80)		(91)
Pension settlement charges		(98)				(65)
Charge for asbestos-related costs				(16)		(46)
Gain on China land sale		71				
Strategic transaction costs				(23)		
Acquisition-related fair value inventory adjustments				(22)		
Acquisition-related fair value intangible adjustments				(10)		
Non-income tax charge						(69)
Interest expense, net		(272)		(251)		(230)
Earnings from continuing operations before income taxes		356		268		307
Provision for income taxes		(119)		(106)		(92)
Earnings from continuing operations		237		162		215
Loss from discontinued operations		(7)		(4)		(23)
Net earnings		230		158		192
Net earnings attributable to noncontrolling interests		(21)		(23)		(28)
Net earnings attributable to the Company	\$	209	\$	135	\$	164
Net earnings from continuing operations attributable to the Company	\$	216	\$	139	\$	187

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

Executive Overview—Comparison of 2016 with 2015

2016 Highlights

- The September 1, 2015 Vitro Acquisition increased net sales by \$608 million and segment operating profit by \$122 million in 2016 compared to 2015
- Net sales in 2016 were \$6.7 billion, up 9% from the prior year, primarily due to incremental net sales from the Vitro Acquisition. Excluding the acquisition, shipments were comparable in both periods
- Driven by the Vitro Acquisition and progress on strategic initiatives, segment operating profit was higher in all regions, except for Asia Pacific, in 2016 compared to the prior year
- Issued €500 million of senior notes due 2024 and repaid higher-cost floating-rate debt

Net sales increased by \$546 million compared to the prior year primarily due to approximately \$608 million of incremental net sales from the Vitro Acquisition and slightly higher pricing, partially offset by the unfavorable effect of changes in foreign currency exchange rates and an unfavorable sales mix.

Segment operating profit for reportable segments increased by \$142 million compared to the prior year. The increase was largely attributable to approximately \$122 million of incremental segment operating profit from the acquired Vitro Business. Higher selling prices also increased segment operating profit. Partially offsetting this was the unfavorable effect of changes in foreign currency exchange rates and higher operating costs due to cost inflation.

Net interest expense in 2016 increased \$21 million compared to 2015. Net interest expense included \$9 million and \$42 million in 2016 and 2015, respectively, for note repurchase premiums and the write-off of finance fees related to debt that was repaid prior to its maturity. Exclusive of these items, net interest expense increased \$54 million in the current year primarily due to higher debt levels associated with the Vitro Acquisition.

For 2016, the Company recorded earnings from continuing operations attributable to the Company of \$216 million, or \$1.32 per share (diluted), compared with earnings of \$139 million, or \$0.85 per share (diluted), for 2015. 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 \$160 million, or \$0.99 per share, in 2016 and \$186 million, or \$1.15 per share, in 2015.

Results of Operations—Comparison of 2016 with 2015

Net Sales

The Company's net sales in 2016 were \$6,702 million compared with \$6,156 million in 2015, an increase of \$546 million, or 9%. Driven by incremental shipments related to the Vitro Acquisition, total glass container shipments, in tonnes, were up approximately 9% in 2016 compared to 2015. The Vitro Acquisition resulted in approximately \$608 million of additional sales. Excluding the impact of the Vitro Acquisition, shipments in 2016 were comparable to 2015. On a global basis, sales volumes of beer, wine, spirits, food and non-alcoholic beverages all grew year-on-year. However, an unfavorable sales mix resulted in \$41 million of lower net sales in 2016. Net sales also benefited from \$79 million in higher selling prices in 2016. Unfavorable foreign currency exchange rates, primarily due to a weaker Brazilian real, Mexican peso, Colombian peso, Canadian dollar and British pound in relation to the U.S. dollar, impacted sales by \$108 million in 2016 compared to 2015.

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

Net sales— 2015		\$ 6,098
Price	\$ 79	
Sales volume (excluding acquisitions)	(41)	
Effects of changing foreign currency rates	(108)	
Vitro Acquisition	608	
Total effect on net sales		538
Net sales—2016		\$ 6,636

Europe: Net sales in Europe in 2016 were \$2,300 million compared with \$2,324 million in 2015, a decrease of \$24 million, or 1%. The primary reason for the decline in net sales in 2016 was a \$28 million impact due to foreign currency exchange rates, as the British pound weakened in relation to the U.S. dollar. Glass container shipments in 2016, primarily to beer and wine customers, increased approximately 2% compared to the prior year and this increased net sales by \$30 million. Selling prices decreased in Europe due to competitive pressures and resulted in a \$26 million decrease in net sales in 2016. This trend in lower prices is expected to continue into the first quarter of 2017.

North America: Net sales in North America in 2016 were \$2,220 million compared with \$2,039 million in 2015, an increase of \$181 million, or 9%. Net sales from the acquired Vitro food and beverage business in the United States increased the region's net sales by \$196 million in 2016. Total glass container shipments were up nearly 7% in 2016 compared to 2015, primarily due to the acquired business and higher shipments in all major end uses except beer, which was on par with prior year. Excluding the impact of the Vitro Acquisition in the region, glass container shipments were up nearly 1% in 2016, however, an unfavorable sales mix resulted in \$36 million of lower sales. This impact to sales mix was due to several customers converting a portion of their glass shipments from carton packaging to bulk shipments. Higher selling prices as a result of contractual pass throughs increased net sales by \$25 million in 2016. Unfavorable foreign currency exchange rate changes decreased net sales by \$4 million, as the Canadian dollar weakened in relation to the U.S. dollar.

Latin America: Net sales in Latin America in 2016 were \$1,432 million compared with \$1,064 million in 2015, an increase of \$368 million, or 35%. Net sales from the acquired Vitro food and beverage business in Mexico and Bolivia increased the region's net sales by approximately \$412 million in 2016. Total glass container shipments were up approximately 41% in 2016. Excluding the impact of the Vitro Acquisition in the region, glass container shipments were down approximately 3% in 2016. This decline impacted net sales by approximately \$40 million and was primarily due to a general economic slowdown in Brazil and Ecuador, which is expected to continue into 2017, partially offset by growth in Colombia and Peru. The unfavorable effects of foreign currency exchange rate changes decreased net sales \$75 million in 2016 compared to 2015, principally due to a decline in the Brazilian real, Colombian peso, and the Mexican peso in relation to the U.S. dollar. Improved pricing in the current year benefited net sales by \$71 million.

Asia Pacific: Net sales in Asia Pacific in 2016 were \$684 million compared with \$671 million for 2015, an increase of \$13 million, or 2%. Glass container shipments were down approximately 3% compared to the prior year, however, a slightly more favorable sales mix increased net sales by \$5 million in 2016. Sales volumes in mature markets in the region were higher than prior year, but production volumes in those countries were lower due to planned engineering activity. These lower production volumes in the mature markets were supported by importing from emerging markets in the region, which in turn, led to lower domestic sales in those markets. Higher prices increased net sales by \$9 million in the current year. The unfavorable effects of foreign currency exchange rate changes decreased net sales \$1 million in 2016 compared to 2015.

Earnings from Continuing Operations before Income Taxes and Segment Operating Profit

Earnings from continuing operations before income taxes were \$356 million in 2016 compared to \$268 million in 2015, an increase of \$88 million, or 33%. This increase was primarily due to higher segment operating profit, partially offset by higher retained corporate costs and higher net interest expense.

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 2016 was \$882 million compared to \$740 million in 2015, an increase of \$142 million, or 19%. The increase was largely attributable to approximately \$122 million of segment operating profit from the acquired Vitro Business. Higher selling prices also increased segment operating profit by \$79 million. Partially offsetting this was the unfavorable effect of changes in foreign currency exchange rates (\$26 million) and higher operating costs (\$25 million), primarily due to inflation.

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

Segment operating profit - 2015		\$ 740
Price	\$ 79	
Sales volume (excluding acquisitions)	(8)	
Operating costs	(25)	
Effects of changing foreign currency rates	(26)	
Vitro Acquisition	 122	
Total net effect on segment operating profit		 142
Segment operating profit - 2016		\$ 882

Europe: Segment operating profit in Europe in 2016 was \$237 million compared with \$209 million in 2015, an increase of \$28 million, or 13%. The increase in sales volume discussed above improved segment operating profit by \$7 million. Segment operating profit also benefited from \$51 million in lower operating costs in 2016 than in the prior year due to energy deflation and improved operational performance. In 2015, production volumes were lower due to asset optimization projects that have now been completed. In addition, the region received an energy credit of approximately \$10 million from a local government entity in 2016 that had been delayed for legislative reasons in 2015. The unfavorable effects of foreign currency exchange rates, especially the British pound, decreased segment operating profit by \$14 million in 2016 compared to the prior year. Lower selling prices also decreased segment operating profit by \$26 million.

North America: Segment operating profit in North America in 2016 was \$299 million compared with \$265 million in 2015, an increase of \$34 million, or 13%. Segment operating profit from the acquired Vitro food and beverage glass container distribution business in the region contributed \$28 million of incremental profit in 2016. Higher selling prices as a result of contractual pass throughs increased segment operating profit by \$25 million in 2016 compared to 2015. Higher production volumes and improved operating efficiencies were more than offset by cost inflation. Together, this contributed to a \$13 million reduction to segment operating profit in 2016. The unfavorable sales mix discussed above reduced segment operating profit by \$5 million. Also, the unfavorable effects of the weakening of the Canadian dollar in relation to the U.S. dollar decreased segment operating profit by \$1 million.

Latin America: Segment operating profit in Latin America in 2016 was \$269 million compared with \$183 million in 2015, an increase of \$86 million, or 47%. Segment operating profit from the acquired Vitro food and beverage business contributed approximately \$94 million of incremental profit to the region in 2016. Excluding the impact of the Vitro Acquisition, the decline in sales volume discussed above reduced segment operating profit by \$13 million. The unfavorable effects of foreign currency rate changes, especially the Brazilian real, Colombian peso and Mexican peso, decreased segment operating profit by \$14 million in the current year. Despite management interventions to contain costs and improve asset optimization, segment operating profit was also unfavorably impacted by \$57 million of higher operating costs, primarily due to energy and soda ash inflation in the region. Partially offsetting these declines were higher selling prices that increased segment operating profit by \$71 million in 2016. In addition, approximately \$5 million of gains related to non-strategic asset sales benefited 2016.

Asia Pacific: Segment operating profit in Asia Pacific in 2016 was \$77 million compared with \$83 million in 2015, a decrease of \$6 million, or 7%. Cost inflation, higher production downtime due to furnace rebuild activity and higher costs for intra-regional shipments drove operating costs \$21 million higher in 2016 compared to the prior year. The favorable effects of foreign currency exchange rates increased segment operating profit by \$3 million in 2016. The more favorable sales mix discussed above improved segment operating profit by \$3 million. Higher selling prices also increased segment operating profit by \$9 million in the current year.

Interest Expense, net

Net interest expense in 2016 was \$272 million compared with \$251 million in 2015. Net interest expense included \$9 million and \$42 million in 2016 and 2015, respectively, for note repurchase premiums and the write-off of finance fees related to debt that was repaid prior to its maturity. Exclusive of these items, net interest expense increased \$54 million in the current year primarily due to higher debt levels associated with the Vitro Acquisition.

Provision for Income Taxes

The Company's effective tax rate from continuing operations for 2016 was 33.4%, compared with 39.6% for 2015. The Company's effective tax rate for 2016 was lower than 2015 due to the impact of significant costs related to refinancing, restructuring and acquisition-related costs in 2015 within jurisdictions that generated little or no tax benefit.

Excluding the amounts related to items that management considers not representative of ongoing operations, the Company's effective tax rate for 2016 was approximately 24%, compared with approximately 25% for 2015.

Net Earnings Attributable to Noncontrolling Interests

Net earnings attributable to noncontrolling interests for 2016 was \$21 million compared to \$23 million for 2015. The decrease in 2016 was largely attributable to the unfavorable effect of changes in foreign currency exchange rates.

Earnings from Continuing Operations Attributable to the Company

For 2016, the Company recorded earnings from continuing operations attributable to the Company of \$216 million, or \$1.32 per share (diluted), compared with earnings of \$139 million, or \$0.85 per share (diluted), for 2015. 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 2016 and 2015 as set forth in the following table (dollars in millions).

			Net Earnings Increase (Decrease)				
Description		2016		2015			
Restructuring, asset impairment and other charges	\$	(123)	\$	(73)			
Pension settlement charges		(98)					
Note repurchase premiums and write-off of finance fees		(9)		(42)			
Gain on China land sale		62					
Tax benefit (charge) for certain tax adjustments		8		(8)			
Strategic transaction costs				(22)			
Charge for asbestos-related costs				(16)			
Acquisition-related fair value inventory adjustments				(16)			
Acquisition-related fair value intangible adjustments				(9)			
Total	\$	(160)	\$	(186)			

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 2016 were reduced due to foreign currency effects compared to 2015.

This trend has continued into 2017 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 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.

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 earnings from continuing operations attributable to the Company of \$139 million, or \$0.85 per share (diluted), compared with earnings of \$187 million, or \$1.13 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 \$186 million, or \$1.15 per share, in 2015 and \$249 million, or \$1.50 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 million in 2014, a 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 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)	
Vitro Acquisition	46	
Effects of changing foreign currency rates	(141)	
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 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 39.6%, compared with 30.0% for 2014. The effective tax rate for 2015 was impacted by several charges that management considered not representative of ongoing operations, including charges for note repurchase premiums, the write-off of finance fees, restructuring charges and acquisition 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 earnings from continuing operations attributable to the Company of \$139 million, or \$0.85 per share (diluted), compared with earnings of \$187 million, or \$1.13 per share (diluted), for 2014. 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 2015 and 2014 as set forth in the following table (dollars in millions).

		Incr	Net Earnings Increase (Decrease)				
Description		2015		2014			
Restructuring, asset impairment and other charges	\$	(73)	\$	(67)			
Note repurchase premiums and write-off of finance fees		(42)		(20)			
Strategic transaction costs		(22)					
Charge for asbestos-related costs		(16)		(46)			
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	\$	(186)	\$	(249)			

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.

Items Excluded from Reportable Segment Totals

Retained Corporate Costs and Other

Retained corporate costs and other for 2016 were \$98 million compared with \$70 million for 2015. These costs were higher in 2016 primarily due to higher pension expense, management incentive compensation expense and the impact from currency hedges.

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

Restructuring, Asset Impairment and Other Charges

During 2016, the Company recorded charges totaling \$129 million for restructuring, asset impairment and other charges. These charges reflect \$98 million of plant and furnace closures, primarily in the European and Latin America regions. In addition, other charges of \$31 million were recorded during 2016, primarily related to an impairment charge recorded at one of the Company's equity investments.

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.

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

Pension Settlement Charges

During 2016, the Company recorded charges totaling \$98 million for pension settlements in the United States.

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.

Charge for Asbestos-Related Costs

For the year ended December 31, 2016, there was no adjustment required for asbestos-related costs, compared to the charges of \$16 million and \$46 million for the years ended December 31, 2015 and 2014, respectively. These charges resulted from the Company's comprehensive annual legal review of asbestos-related liabilities and costs. As part of its future comprehensive annual reviews, the Company will estimate its total asbestos-related liability and such reviews may result in adjustments to the liability accrued at the time of the review. The Company continues to believe that its ultimate asbestos-related liability cannot be estimated with certainty.

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

Gain on China Land Compensation

During 2016, the Company recorded a gain of \$71 million related to compensation received for land that the Company was required to return to the Chinese government.

Acquisition-related Fair Value Adjustments and Strategic Transaction Costs

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

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.

Non-income tax charge

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

Discontinued Operations

On April 4, 2016, the annulment committee formed by the World Bank's International Centre for Settlement of Investment Disputes ("ICSID") ruled that a subsidiary of the Company is free to pursue the enforcement of a prior arbitration award against Venezuela. That award amounts to more than \$485 million after including interest from the date of the expropriation by Venezuela (October 26, 2010). Venezuela's application to annul the award is still pending, although the annulment proceedings were suspended in October 2016 because Venezuela has not paid its fees owed to ICSID. If the proceeding is stayed for non-payment for a consecutive period in excess of six months, ICSID's Secretary General could move that the committee discontinue the annulment proceeding altogether. The Company intends to take appropriate steps to vigorously enforce and collect the award, which is enforceable in approximately 150 member states that are party to the ICSID Convention. However, even with the lifting of the stay of enforcement, the Company recognizes that the collection of the award may present significant practical challenges. Because the award has yet to be satisfied and the annulment proceeding is pending, the Company is unable at this stage to reasonably predict the efforts that will be necessary to successfully enforce collection of the 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 \$7 million and \$4 million, for the years ended December 31, 2016 and 2015, respectively, 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 a purchaser of a previously disposed business, as well as ongoing costs related to the Venezuelan expropriation.

Vitro Acquisition

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 a 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, 2016, the Company had cash and total debt of \$492 million and \$5.3 billion, respectively, compared to \$399 million and \$5.6 billion, respectively, as of December 31, 2015. 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, 2016 was \$459 million.

Current and Long-Term Debt

On April 22, 2015, the Company entered into a Senior Secured Credit Facility, which subsequently has been amended several times with the most recent amendment being entered into on February 3, 2016 (the "Amended Agreement"). In connection with the closing of the Vitro Acquisition on September 1, 2015 (see Note 19 to the Consolidated Financial Statements), the Company incurred \$1,250 million of senior secured incremental term loan facilities, comprised of (i) a \$675 million term loan A facility on substantially the same terms and conditions (including as to maturity) as the term loan A facility in the Amended Agreement and (ii) a \$575 million term loan B facility, which was subsequently repaid in full in November 2016 as described below.

At December 31, 2016, 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 (\$1,395 million net of debt issuance costs), and a €279 million term loan A facility (\$282 million net of debt issuance costs), each of which has a final maturity date of April 22, 2020. At December 31, 2016, the Company had unused credit of \$884 million available under the Amended Agreement. The weighted average interest rate on borrowings outstanding under the Amended Agreement at December 31, 2016 was 2.39%.

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 covenant, a Total Leverage Ratio that requires the Company not to exceed a ratio calculated by dividing consolidated total debt, less cash and cash equivalents, by consolidated EBITDA, as defined in the Amended Agreement. 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 of (i) 4.5x for the four fiscal quarters ending December 31, 2016, March 31, 2017, June 30, 2017 and September 30, 2017, and (ii) 4.0x for the fourth fiscal quarter ending December 31, 2017 and each fiscal quarter thereafter.

Failure to comply with these covenants and restrictions could result in an event of default under the Amended Agreement. In such an event, the Company would be unable to 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 and the lenders cause all of the outstanding debt 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, 2016, 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 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 Ioan 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 Ioans and from 0.25% to 0.75% for Base Rate Ioans. 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.

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.

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 November 2016, the Company issued senior notes with a face value of \notin 500 million that bear interest at 3.125% and are due November 15, 2024. The notes were issued via a private placement and are guaranteed by certain of the Company's domestic subsidiaries. The net proceeds, after deducting the debt discount and debt issuance costs, totaled approximately \$520 million and were used to repay the term loan B facility under the Amended Agreement.

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 March 2019, subject to periodic renewal of backup credit lines.

Information related to the Company's accounts receivable securitization program as of December 31, 2016 and 2015 is as follows:

	2	2016		2015
Balance (included in short-term loans)	\$	152	\$	158
Weighted average interest rate		0.74%)	1.21%

Cash Flows

Operating activities: Cash provided by continuing operating activities was \$758 million for 2016 compared to \$612 million for 2015. Higher net earnings and the impact from higher depreciation and amortization were the primary drivers for the improvement in cash provided by continuing operating activities in 2016. In addition, lower asbestos-related payments and cash paid for restructuring activities in 2016 more than offset the impact of higher pension contributions than in the prior year. Working capital was a source of cash of \$90 million and \$88 million for 2016 and 2015, respectively, and included \$128 million received in 2016 as a refund on value added taxes previously paid by the Company in conjunction with the Vitro Acquisition. This refund will not reoccur in 2017.

Investing activities: Cash utilized in investing activities was \$417 million for 2016 compared to \$2,748 million for 2015. Capital spending for property, plant and equipment during 2016 was \$454 million, compared with \$402 million in the prior year, and reflected a full year of capital spending related to the Vitro Business in 2016 compared to only four months in 2015.

Investing activities in 2016 also included \$56 million paid for acquisitions and primarily related to additional contributions made to the Company's investment in a joint venture in Nava, Mexico. In 2017, the Company expects to contribute approximately \$42 million for the joint venture's expansion plans. Cash utilized for acquisitions in 2015 was \$2,351 and primarily related to the Vitro Acquisition. In 2016, the Company received \$85 million in net proceeds on the disposal of assets, which were primarily related to cash received from the Chinese government for the Company's sale of certain land use rights and related properties.

Financing activities: Cash utilized in financing activities was \$228 million for 2016 compared to \$2,057 million of cash provided by financing activities for 2015. Financing activities in 2016 included additions to long-term debt of \$1,235 million, which included the issuance of €500 million of senior notes. Financing

activities in 2016 also included the repayment of long-term debt of \$1,453 million, which included the repayment of floating-rate debt in the Company's Senior Secured Credit Facility from the proceeds of the previously mentioned senior note issuance. 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 included the repayment of long-term debt of \$2,321 million, which included the repayment of the previous credit agreement and the repayment of the senior notes due in 2016. Borrowings under short-term loans increased by \$10 million in 2016. The Company paid approximately \$9 million in note repurchase premiums and finance fees in 2016 compared to \$90 million in 2015.

The Company paid \$16 million and \$22 million in distributions to noncontrolling interests in 2016 and 2015, respectively. In 2016, the Company did not repurchase any shares of its common stock compared to \$100 million repurchased in 2015.

The Company anticipates that cash flows from its operations and from utilization of credit available under the Amended 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 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, 2016 (dollars in millions).

	Payments due by period									
	Total			ss than ie year			3 - 5 years			ore than years
Contractual cash obligations:										
Long-term debt	\$	5,109	\$	27	\$	375	\$	2,414	\$	2,293
Capital lease obligations		57		6		13		14		24
Operating leases		205		65		79		37		24
Interest(1)		1,267		233		433		320		281
Purchase obligations(2)		1,742		637		593		168		344
Pension benefit plan contributions(3)		32		32						
Postretirement benefit plan benefit payments(1)		102		11		22		21		48
Equity affiliate investment obligation(4)		42		42						
Total contractual cash obligations	\$	8,556	\$	1,053	\$	1,515	\$	2,974	\$	3,014

		А	mount	t of com	mitme	nt expir	ation p	er peri	od	
	Т	otal		s than year		- 3 ears	3 - 5 years			e than ears
Other commercial commitments:										
Standby letters of credit	\$	56	\$	56	\$		\$	_	\$	_
Total commercial commitments	\$	56	\$	56	\$		\$		\$	

(1) Amounts based on rates and assumptions at December 31, 2016.

- (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 \$32 million in 2017. 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 over the next two years. The Company expects to contribute approximately \$42 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 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 the impairment of long-lived assets, pension benefit plans, contingencies and litigation related to its asbestos liability, and income taxes involves the more significant judgments and estimates used in the preparation of its consolidated financial statements.

Impairment of Long-Lived Assets

<u>Property, Plant and Equipment</u>—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.

<u>Goodwill</u> –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 2016, the Company completed its annual impairment testing and determined that no impairment of goodwill existed. Goodwill at December 31, 2016 totaled approximately \$2.5 billion, representing 27% of total assets. The Company has four reporting units of which three of the reporting units have goodwill and include; approximately \$800 million of recorded goodwill to the Company's Europe segment, approximately \$600 million of recorded goodwill to the Company's Latin America segment and approximately \$1 billion of recorded goodwill to the Company's North America segment. The testing performed as of October 1, 2016, indicated a significant excess of BEV over book value for North America and Latin America. Europe exceeded its carrying values by approximately 12%, and is determined to be the reporting unit 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, 2016, may have indicated an impairment of one or more of these reporting units and, as a result, the related 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, 2016, 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 2017 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 2017, 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.

<u>Other Long-Lived Assets - Intangibles</u> – 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, 2016, the weighted average discount rate was 4.17 % and 2.94 % 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 2016, the Company's estimated weighted average expected long-term rate of return on plan assets is 7.50% for U.S. plans and 7.15% for non-U.S. plans compared to 8.00% for U.S. plans and 7.21% for non-U.S. plans in 2015. The Company recorded pension expense from continuing operations (exclusive of settlement charges) of \$23 million, \$24 million, and \$19 million for the U.S. plans in 2016, 2015 and 2014, respectively, and \$8 million, \$7 million, and \$24 million for the non-U.S. plans in 2016, 2015, and 2014, 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 2017. The 2017 pension expense will reflect a 7.50% 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 \$7 million and \$13 million, respectively, in the pretax pension expense for the full year 2017.

<u>Recognition of Funded Status</u>—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 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

For many years, the Company has conducted 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. As part of its current annual comprehensive legal review, the Company provides historical claims filing data to a third party consultant with expertise in predicting future claims filings based on actuarial inputs such as disease incidence and mortality. The Company uses these estimates of total future claims, along with its legal judgment regarding an estimation of future disposition costs and related legal costs, as inputs to develop a reasonable estimate of probable liability. If the results of the annual comprehensive legal review indicate that the existing amount of the accrued liability is lower (higher) than its reasonably estimable asbestos-related costs, then the Company will record an appropriate charge (credit) to the Company's results of operations to increase (decrease) the accrued liability.

The significant assumptions underlying the material components of the Company's accrual are described in the Risk Factors section and in Note 12 to the Consolidated Financial Statements. Changes in these significant assumptions have the potential to impact the Company's asbestos-related liability.

In addition, if trends relating to the Company's actual claims filings materially differ, up or down, from the amounts predicted, the total number of estimated claims indicated by future actuarial analyses could change significantly. Significant changes in the total number of predicted claims could impact the total predicted asbestos-related liability, which in turn could result in a material charge or credit to the Company's results of operations.

The Company uses historical data for both indemnity and related legal costs, as well as its legal judgment and expectations about future inflationary and deflationary drivers, to predict the estimated disposition cost per claim and the legal costs for the remainder of the litigation. If trends relating to the actual per claim cost differ materially, up or down, from the previously estimated amount, the Company may in the future revise its estimate of its asbestos-related liability. The same may also be true with respect to legal costs. Significant changes in the estimated asbestos-related liability could result in a material charge or credit to the Company's results of operations.

The Company believes it is reasonably possible that it will incur a loss for its asbestos-related liabilities in excess of the amount currently recognized, which is \$692 million as of December 31, 2016. The Company estimates that reasonably possible losses could be as high as \$825 million. This estimate of additional reasonably possible loss reflects a legal judgment about the number and cost of potential future claims. The Company believes this estimate is consistent with the level of variability it has experienced when comparing actual results to recent near-term projections. However, it is also possible that the ultimate asbestos-related liability could be above this estimate.

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. The Company has received tax assessments in excess of established reserves. The Company believes that adequate provisions for all income tax uncertainties have been made. However, if tax assessments are settled against the Company at amounts in excess of established reserves, it could have a material impact to the Company's results of operations, financial position or cash flows. 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.

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. 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, 2016, 2015 and 2014, 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 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, 2016 and 2015.

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, 2016. The table presents principal cash flows and related weighted-average interest rates by expected maturity date.

(Dollars in millions)	 2017		2018	2	019		2020		2021		here- ifter	Total	Fair alue at /31/2016
Long-term debt at													
variable rate:													
Principal by expected													
maturity	\$ 25	\$	29	\$	92	\$	1,542	\$	2	\$	_	\$1,690	\$ 1,690
Avg. principal													
outstanding	\$ 845	\$	1,678	\$1	,651	\$	1,590	\$	773	\$	1		
Avg. interest rate	2.43%	6	2.43%		2.43%	Ď	2.43%		2.43%	ó	2.43%	0	
Long-term debt at fixed rate:													
Principal by expected													
maturity	\$ 8	\$	258	\$	9	\$	532	\$	353	\$2	2,316	\$3,476	\$ 3,771
Avg. principal													
outstanding	\$ 3,474	\$	3,224	\$3	,224	\$2	2,700	\$2	2,346	\$1	1,852		
Avg. interest rate	5.50%	6	4.68%		4.18%	Ď	4.29%		4.09%	0	5.09%	6	

The Company believes the near term exposure to interest rate risk of its debt obligations has not changed materially since December 31, 2016.

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 to calculate plan liabilities would result in a change of approximately \$7 million and \$13 million, respectively, in the pretax pension expense for the full year 2017.

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, 2016, the Company had entered into commodity forward contracts covering approximately 12,300,000 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, 2016.

Forward Looking Statements

This document contains "forward-looking" statements within the meaning of Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act") 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 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, and to realize expected growth opportunities, cost savings and synergies from the Vitro Acquisition, (2) foreign currency fluctuations relative to the U.S. dollar, (3) changes in capital availability or cost, including interest rate fluctuations and the ability of the Company to refinance debt at favorable terms, (4) 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, (5) the Company's ability to generate sufficient future cash flows to ensure the Company's goodwill is not impaired, (6) consumer preferences for alternative forms of packaging, (7) cost and availability of raw materials, labor, energy and transportation, (8) the Company's ability to manage its cost structure, including its success in implementing restructuring plans and achieving cost savings, (9) consolidation among competitors and customers, (10) the Company's ability to acquire businesses and expand plants, integrate operations of acquired businesses and achieve expected synergies, (11) unanticipated expenditures with respect to environmental, safety and health laws, (12) the Company's ability to further develop its sales, marketing and product development capabilities, (13) the Company's ability to prevent and detect cybersecurity threats against its information technology systems, (14) the Company's ability to accurately estimate its total asbestos-related liability or to control the timing and occurrence of events relates to asbestos-related claims, (15) changes in U.S. trade policies, (16) the Company's ability to achieve its strategic plan, and the other risk factors discussed in this Annual Report on Form 10-K for the year ended December 31, 2016 and any subsequently filed Quarterly Report on Form 10-O. 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 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.

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, 2016 and 2015, 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, 2016. 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, 2016 and 2015, and the consolidated results of its operations and its cash flows for each of the three years in the period ended December 31, 2016, 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, 2016, 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 10, 2017 expressed an unqualified opinion thereon.

/s/ Ernst & Young LLP Toledo, Ohio February 10, 2017

CONSOLIDATED RESULTS OF OPERATIONS

Dollars in millions, except per share amounts

Net sales\$ 6,702\$ 6,156\$ 6,784Cost of goods sold(5,490)(5,046)(5,531)Gross profit1,2121,1101,253Selling and administrative expense(503)(476)(523)Research, development and engineering expense(65)(64)(63)Interest expense, net(272)(251)(230)Equity earnings606064Other expense, net(76)(111)(194)Earnings from continuing operations before income taxes356268307Provision for income taxes(119)(106)(92)Earnings from continuing operations(77)(4)(23)Net earnings attributable to noncontrolling interests(21)(23)(28)Net earnings attributable to the Company:(77)(4)(23)Earnings from continuing operations(77)(4)(23)Net earnings(77)(4)(23)Set from discontinued operations(77)(4)(23)Net earnings attributable to the Company:(77)(4)(23)Earnings from continuing operations(77)(4)(23)Net earnings(77)(4)(23)Net earnings from continuing operations(77)(4)(23)Set form discontinued operations(77)(4)(23)Set form discontinued operations(77)(4)(23)Net earnings from continuing operations(77)(4)(23)Net earnings from
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Net earnings \$ 1.29 \$ 0.83 \$ 1.00
Diluted earnings per share:
Earnings from continuing operations\$ 1.32\$ 0.85\$ 1.13
Loss from discontinued operations
Net earnings $\boxed{\$ 1.28}$ $\boxed{\$ 0.82}$ $\boxed{\$ 0.99}$

CONSOLIDATED COMPREHENSIVE INCOME

Dollars in millions

Years ended December 31,	2016	2015	2014
Net earnings	\$ 230	\$ 158	\$ 192
Other comprehensive loss:			
Foreign currency translation adjustments	(224)	(529)	(305)
Pension and other postretirement benefit adjustments, net of tax	52	(4)	(90)
Change in fair value of derivative instruments, net of tax	13	(6)	1
Other comprehensive loss.	(159)	 (539)	(394)
Total comprehensive income (loss)	71	(381)	(202)
Comprehensive income attributable to noncontrolling interests	(17)	(7)	(7)
Comprehensive income (loss) attributable to the Company	\$ 54	\$ (388)	\$ (209)

CONSOLIDATED BALANCE SHEETS

Dollars in millions

December 31,	2016	2015
Assets		
Current assets:		
Cash and cash equivalents Trade receivables, net of allowances of \$32 million and \$29 million at	\$ 492	\$ 399
December 31, 2016 and 2015, respectively	580	562
Inventories	983	1,007
Prepaid expenses and other current assets	199	366
Total current assets	2,254	2,334
Other assets:		
Equity investments	433	409
Pension assets	40	32
Other assets	602	599
Intangibles	464	597
Goodwill	2,462	2,489
Total other assets	4,001	4,126
Property, plant and equipment:		
Land, at cost	241	252
Buildings and equipment, at cost:		
Buildings and building equipment.	1,090	1,123
Factory machinery and equipment	4,496	4,526
Transportation, office and miscellaneous equipment	85	88
Construction in progress	238	238
	6,150	6,227
Less accumulated depreciation	3,270	3,266
Net property, plant and equipment	2,880	2,961
Total assets	\$ 9,135	\$ 9,421

CONSOLIDATED BALANCE SHEETS (Continued)

Dollars in millions, except per share amounts

December 31,	2016	2015
Liabilities and Share Owners' Equity		
Current liabilities:		
Accounts payable	\$ 1,135	\$ 1,212
Salaries and wages	174	145
U.S. and foreign income taxes	58	36
Current portion of asbestos-related liabilities	115	130
Other accrued liabilities	383	371
Short-term loans	162	160
Long-term debt due within one year	33	68
Total current liabilities	2,060	2,122
Long-term debt	5,133	5,345
Deferred taxes.	100	124
Pension benefits	552	504
Nonpension postretirement benefits	162	155
Other liabilities	188	205
Asbestos-related liabilities	577	687
Share owners' equity:		
Share owners' equity of the Company:		
Common stock, par value \$.01 per share, 250,000,000 shares authorized,		
185,354,796 and 184,480,646 shares issued (including treasury shares),		
respectively	2	2
Capital in excess of par value	3,080	3,064
Treasury stock, at cost, 23,017,367 and 23,519,049 shares, respectively	(560)	(573)
Retained loss	(96)	(305)
Accumulated other comprehensive loss	(2,172)	(2,017)
Total share owners' equity of the Company	254	171
Noncontrolling interests	109	108
Total share owners' equity	363	279
Total liabilities and share owners' equity	\$ 9,135	\$ 9,421

CONSOLIDATED SHARE OWNERS' EQUITY

Dollars in millions

		Share Own					
	Common Stock	Capital in Excess of Par Value	Treasury Stock	Retained Earnings (Loss)	Accumulated Other Comprehensive Loss	Non- controlling Interests	Total Share Owners' Equity
Balance on January 1, 2014	\$ 2	\$ 3,040	\$ (454)	\$ (604)	\$ (1,121)	\$ 147	\$1,010
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				164		28	192
Other comprehensive income (loss).					(373)	(21)) (394)
Distributions to noncontrolling interests						(37)) (37)
Balance on December 31, 2014	2	3,066	(480)	(440)	(1,494)	117	771
Issuance of common stock (0.2 million shares)		1					1
Reissuance of common stock (0.3 million shares)			7				7
Treasury shares purchased (4.1 million shares)			(100)				(100)
Stock compensation		15					15
Net earnings				135		23	158
Other comprehensive income (loss)					(523)	(16)) (539)
Distributions to noncontrolling interests						(22)) (22)
Acquisitions of noncontrolling interests		(18))			6	(12)
Balance on December 31, 2015	2	3,064	(573)	(305)	(2,017)	108	279
Issuance of common stock (0.3 million shares)		5					5
Reissuance of common stock (0.1 million shares)			13				13
Stock compensation		11					11
Net earnings				209		21	230
Other comprehensive income (loss)					(155)	(4)) (159)
Distributions to noncontrolling interests						(16)) (16)
Balance on December 31, 2016	<u>\$ 2</u>	\$ 3,080	<u>\$ (560</u>)	<u>\$ (96</u>)	<u>\$ (2,172)</u>	<u>\$ 109</u>	<u>\$ 363</u>

CONSOLIDATED CASH FLOWS

Dollars in millions

Years ended December 31,	2016		2015		2014	
Operating activities:						
Net earnings	\$	230	\$	158	\$	192
Loss from discontinued operations		7		4		23
Non-cash charges (credits):						
Depreciation		375		323		335
Amortization of intangibles and other deferred items		103		86		83
Amortization of finance fees and debt discount		13		15		30
Deferred tax provision (benefit)		(4)		12		(18)
Pension expense.		31		31		43
Restructuring, asset impairment and related charges		98		63		76
Pension settlement charges		98				65
Impairment of equity investment.		25				
Gain on China land sale.		(71)				
Non-income tax charge		(,1)				69
Asbestos-related costs				16		46
Acquisition-related fair value inventory adjustments				22		-0
Acquisition-related fair value intendity adjustments				10		
Pension contributions		(38)		(17)		(28)
		. ,		. ,		. ,
Asbestos-related payments		(125)		(138)		(148)
Cash paid for restructuring activities		(24)		(38)		(58)
Change in components of working capital		90		88		117
Other		(50)		(23)		(129)
Cash provided by continuing operating activities		758		612		698
Cash utilized in discontinued operating activities		(7)		(4)		(23)
Total cash provided by operating activities		751		608		675
Investing activities:						
Additions to property, plant and equipment		(454)		(402)		(369)
Acquisitions, net of cash acquired		(56)	(2,351)		(114)
Net cash proceeds related to sale of assets and other		85		1		19
Net foreign exchange derivative activity		8		4		
Net activity for non-controlling partner loans						9
Cash utilized in investing activities		(417)	(2,748)		(455)
Financing activities:						
Additions to long-term debt	1	1,235		4,538		1,247
Repayments of long-term debt		(,453)		2,321)		(1,101)
Increase (decrease) in short-term loans	(10	```	51		(139)
Payment of finance fees		(9)		(90)		(11)
Distributions paid to noncontrolling interests.		(16)		(22)		(37)
Treasury shares purchased		(10)		(100)		(32)
Issuance of common stock and other		5		(100)		(32)
Cash provided by (utilized in) financing activities		(228)		2,057		(70)
		· ·				
Effect of exchange rate fluctuations on cash		(13) 93		(30)		(21)
Increase (decrease) in cash.				(113)		129
Cash and cash equivalents at beginning of period	<u>_</u>	399	<u>_</u>	512	<u>_</u>	383
Cash and cash equivalents at end of period	<u>\$</u>	492	<u>\$</u>	399	<u>\$</u>	512

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Tabular data dollars in millions, except per share amounts

1. Significant Accounting Policies

Basis of Consolidated Statements The consolidated financial statements of Owens-Illinois, Inc. (the "Company") include the accounts of its subsidiaries. Newly acquired subsidiaries have been included in the consolidated financial statements from dates of acquisition.

The Company uses the equity method of accounting for investments in which it has a significant ownership interest, generally 20% to 50%. Other investments are accounted for at cost. The Company monitors other than temporary declines in fair value and records reductions in carrying values when appropriate.

Nature of Operations The Company is a leading manufacturer of glass container products. The Company's principal product lines are glass containers for the food and beverage industries. The Company has glass container operations located in 23 countries. The principal markets and operations for the Company's products are in Europe, North America, Latin America and Asia Pacific.

Use of Estimates The preparation of financial statements in conformity with accounting principles generally accepted in the United States requires management of the Company to make estimates and assumptions that affect certain amounts reported in the financial statements and accompanying notes. Actual results may differ from those estimates, at which time the Company would revise its estimates accordingly.

Foreign Currency Translation The assets and liabilities of non-U.S. subsidiaries are translated into U.S. dollars at year-end exchange rates. Any related translation adjustments are recorded in accumulated other comprehensive income in share owners' equity.

Revenue Recognition The Company recognizes sales, net of estimated discounts and allowances, when the title to the products and risk of loss are transferred to customers. Provisions for rebates to customers are provided in the same period that the related sales are recorded.

Shipping and Handling Costs Shipping and handling costs are included with cost of goods sold in the Consolidated Results of Operations.

Stock-Based Compensation The Company has various stock-based compensation plans consisting of stock option grants and restricted share awards. Costs resulting from all share-based compensation plans are required to be recognized in the financial statements. A public entity is required to measure the cost of employee services received in exchange for an award of equity instruments based on the grant-date fair value of the award. That cost is recognized over the required service period (usually the vesting period). No compensation cost is recognized for equity instruments for which employees do not render the required service.

Cash The Company defines "cash" as cash and time deposits with maturities of three months or less when purchased. Outstanding checks in excess of funds on deposit are included in accounts payable.

Accounts Receivable Receivables are stated at amounts estimated by management to be the net realizable value. The Company charges off accounts receivable when it becomes apparent based upon age or customer circumstances that amounts will not be collected.

Allowance for Doubtful Accounts The allowance for doubtful accounts is established through charges to the provision for bad debts. The Company evaluates the adequacy of the allowance for doubtful accounts on a periodic basis. The evaluation includes historical trends in collections and write-offs, management's judgment of the probability of collecting accounts and management's evaluation of business risk.

Inventory Valuation Inventories are valued at the lower of average costs or market.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Tabular data dollars in millions, except per share amounts

Goodwill Goodwill represents the excess of cost over fair value of net assets of businesses acquired. Goodwill is evaluated annually, as of October 1, for impairment or more frequently if an impairment indicator exists.

Intangible Assets and Other Long-Lived Assets Intangible assets are amortized over the expected useful life of the asset. Amortization expense directly attributed to the manufacturing of the Company's products is included in cost of goods sold. Amortization expense related to non-manufacturing activities is included in selling and administrative and other. The Company evaluates the recoverability of intangible assets and other long-lived assets based on undiscounted projected cash flows, excluding interest and taxes, when factors indicate that impairment may exist. If impairment exists, the asset is written down to fair value.

Property, Plant and Equipment Property, plant and equipment ("PP&E") is carried at cost and includes expenditures for new facilities and equipment and those costs which substantially increase the useful lives or capacity of existing PP&E. In general, depreciation is computed using the straight-line method and recorded over the estimated useful life of the asset. Factory machinery and equipment is depreciated over periods ranging from 5 to 25 years with the majority of such assets (principally glass-melting furnaces and forming machines) depreciated over 7 to 15 years. Buildings and building equipment are depreciated over periods ranging from 10 to 50 years. Depreciation expense directly attributed to the manufacturing of the Company's products is included in cost of goods sold. Depreciation expense related to non-manufacturing activities is included in selling and administrative. Depreciation expense includes the amortization of assets recorded under capital leases. Maintenance and repairs are expensed as incurred. Costs assigned to PP&E of acquired businesses are based on estimated fair values at the date of acquisition. The Company evaluates the recoverability of PP&E based on undiscounted projected cash flows, excluding interest and taxes, when factors indicate that impairment may exist. If impairment exists, the asset is written down to fair value.

Derivative Instruments The Company uses forward exchange contracts, options and commodity forward contracts to manage risks generally associated with foreign exchange rate and commodity market volatility. Derivative financial instruments are included on the balance sheet at fair value. When appropriate, derivative instruments are designated as and are effective as hedges, in accordance with accounting principles generally accepted in the United States. If the underlying hedged transaction ceases to exist, all changes in fair value of the related derivatives that have not been settled are recognized in current earnings. The Company does not enter into derivative financial instruments for trading purposes and is not a party to leveraged derivatives. Cash flows from forward exchange contracts not designated as hedges are classified as an investing activity. Cash flows of commodity forward contracts are classified as operating activities.

Fair Value Measurements Fair value is defined as the amount that would be received to sell an asset or paid to transfer a liability in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants. Generally accepted accounting principles defines a three-tier fair value hierarchy, which prioritizes the inputs used in measuring fair value as follows:

Level 1: Observable inputs such as quoted prices in active markets;

Level 2: Inputs, other than quoted prices in active markets, that are observable either directly or indirectly; and

Level 3: Unobservable inputs for which there is little or no market data, which requires the Company to develop assumptions.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Tabular data dollars in millions, except per share amounts

The carrying amounts reported for cash and short-term loans approximate fair value. In addition, carrying amounts approximate fair value for certain long-term debt obligations subject to frequently redetermined interest rates. Fair values for the Company's significant fixed rate debt obligations are generally based on published market quotations.

The Company's derivative assets and liabilities consist of natural gas forwards and foreign exchange option and forward contracts. The Company uses an income approach to valuing these contracts. Natural gas forward rates and foreign exchange rates are the significant inputs into the valuation models. These inputs are observable in active markets over the terms of the instruments the Company holds, and accordingly, the Company classifies its derivative assets and liabilities as Level 2 in the hierarchy. The Company also evaluates counterparty risk in determining fair values.

Reclassifications Certain reclassifications of prior years' data have been made to conform to the current year presentation.

New Accounting Standards

Revenue from Contracts with Customers - In May 2014, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") No. 2014-09, "Revenue from Contracts with Customers," which requires an entity to recognize the amount of revenue to which it expects to be entitled for the transfer of promised goods or services to customers. In August 2015, the FASB issued ASU No. 2015-14, "Revenue from Contracts with Customers", which delayed by one year the effective date of the new revenue recognition standard, which will be effective for the Company on January 1, 2018. The Company has started an implementation process, including a review of customer contracts, to evaluate the effect this standard will have on its consolidated financial statements and related disclosures. At this time, the Company does not expect that the implementation of this standard in 2018 will have a significant impact on the timing in which it recognizes revenue. While the Company continues to assess the potential impacts of the new standard, the Company does not currently expect the adoption of the new standard to have a material impact on consolidated net income or the consolidated balance sheet. The Company plans to select the modified retrospective transition method upon adoption effective January 1, 2018.

Leases - In February 2016, the FASB issued ASU No. 2016-02, "Leases". Under this guidance, lessees will be required to recognize on the balance sheet a lease liability and a right-of-use asset for all leases, with the exception of short-term leases. The lease liability represents the lessee's obligation to make lease payments arising from a lease, and will be measured as the present value of the lease payments. The right-of-use asset represents the lessee's right to use a specified asset for the lease term, and will be measured at the lease liability amount, adjusted for lease prepayment, lease incentives received and the lessee's initial direct costs. The standard also requires a lessee to recognize a single lease cost allocated over the lease term, generally on a straight-line basis. The new guidance is effective for the Company on January 1, 2019. ASU No. 2016-02 is required to be applied using the modified retrospective approach for all leases existing as of the effective date and provides for certain practical expedients. Early adoption is permitted. The Company is currently evaluating the effects that the adoption of ASU No. 2016-02 will have on the Company's consolidated financial statements, and anticipates the new guidance will significantly impact its consolidated financial statements as the Company has a significant number of leases. As further described in Note 16, Operating Leases, as of December 31, 2016, the Company had minimum lease commitments under non-cancellable operating leases totaling \$205 million.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Tabular data dollars in millions, except per share amounts

Credit Losses - In June 2016, the FASB issued ASU No. 2016-13, Financial Instruments - Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments. This guidance requires the measurement of all expected credit losses for financial assets held at the reporting date based on historical experience, current conditions and reasonable and supportable forecasts. This guidance also requires enhanced disclosures regarding significant estimates and judgments used in estimating credit losses. The new guidance is effective for the Company on January 1, 2020. Early adoption is permitted for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2018. The Company is currently evaluating the impact that the adoption of this guidance will have on its consolidated financial statements.

Stock Compensation - In March 2016, the FASB issued ASU No. 2016-09, "Improvements to Employee Share-Based Payment Accounting," which requires all excess tax benefits or deficiencies to be recognized as income tax expense or benefit in the income statement. In addition, excess tax benefits should be classified along with other income tax cash flows as an operating activity in the statement of cash flows. Application of the standard is required for the Company on January 1, 2017. The Company does not expect a significant impact in its Consolidated Financial Statements.

Pension Asset Value - In May 2015, the FASB issued ASU No. 2015-07, "Fair Value Measurement (Topic 820): Disclosures for Investments in Certain Entities that Calculate Net Asset Value per Share (or Its Equivalent)." Under the new guidance, investments measured at net asset value ("NAV"), as a practical expedient for fair value, are excluded from the fair value hierarchy. Removing investments measured using the practical expedient from the fair value hierarchy is intended to eliminate the diversity in practice that currently exists with respect to the categorization of these investments. The new guidance is effective for the Company on January 1, 2016. The guidance impacted the presentation of certain pension related assets that use NAV as a practical expedient. See Note 9 for additional information.

2. Segment Information

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 (see Note 19), the Company has renamed the former South America segment to the Latin America segment. These four segments are aligned with the Company's internal approach to managing, reporting, and evaluating performance of its global glass operations. Certain assets and activities not directly related to one of the regions or to glass manufacturing are reported with Retained corporate costs and other. These include licensing, equipment manufacturing, global engineering, and certain equity investments. Retained corporate costs and other also includes certain headquarters administrative and facilities costs and certain incentive compensation and other benefit plan costs that are global in nature and are not allocable to the reportable segments.

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 Company's management uses segment operating profit, in combination with selected cash flow information, to evaluate performance and to allocate resources. Segment operating profit for 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.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Tabular data dollars in millions, except per share amounts

Financial information regarding the Company's reportable segments is as follows:

	2016		2015		 2014
Net sales:					
Europe	\$	2,300	\$	2,324	\$ 2,794
North America		2,220		2,039	2,003
Latin America		1,432		1,064	1,159
Asia Pacific		684		671	793
Reportable segment totals		6,636		6,098	 6,749
Other		66		58	35
Net sales	\$	6,702	\$	6,156	\$ 6,784

	2016		6 2		 2014
Segment operating profit:					
Europe	\$	237	\$	209	\$ 353
North America		299		265	240
Latin America		269		183	227
Asia Pacific		77		83	88
Reportable segment totals		882		740	908
Items excluded from segment operating profit:					
Retained corporate costs and other		(98)		(70)	(100)
Charge for asbestos-related costs				(16)	(46)
Restructuring, asset impairment and other charges		(129)		(80)	(91)
Pension settlement charges		(98)			(65)
Gain on China land sale		71			
Strategic transaction costs.				(23)	
Acquisition-related fair value inventory adjustments				(22)	
Acquisition-related fair value intangible adjustments				(10)	
Non-income tax charge					(69)
Interest expense, net		(272)		(251)	(230)
Earnings from continuing operations before income taxes	\$	356	\$	268	\$ 307

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Tabular data dollars in millions, except per share amounts

	Europe		North America		Latin America		Asia Pacific		Reportable Segment Totals		tained p Costs l Other	onsoli- dated Totals
Total assets:												
2016	\$	2,792	\$	2,522	\$ 2,537	\$	926	\$	8,777	\$	358	\$ 9,135
2015		2,902		2,500	2,807		917		9,126		295	9,421
2014		3,214		1,971	1,300		1,018		7,503		340	7,843
Equity investments:												
2016	\$	78	\$	21	\$ 	\$	117	\$	216	\$	217	\$ 433
2015		78		22			145		245		164	409
2014		81		24			153		258		169	427
Equity earnings:												
2016	\$	15	\$	12	\$ 	\$	4	\$	31	\$	29	\$ 60
2015		16		19			7		42		18	60
2014		19		17			4		40		24	64
Capital expenditures:												
2016	\$	163	\$	108	\$ 123	\$	59	\$	453	\$	1	\$ 454
2015		164		97	89		50		400		2	402
2014		188		89	55		34		366		3	369
Depreciation and amortization												
expense:												
2016	\$	118	\$	139	\$ 173	\$	37	\$	467	\$	11	\$ 478
2015		120		128	107		40		395		14	409
2014		140		131	79		53		403		15	418

The Company's net property, plant and equipment by geographic segment are as follows:

	U.S.		Non-U.S.		 Total
2016	\$	749	\$	2,131	\$ 2,880
2015		736		2,225	2,961
2014		713		1,732	2,445

The Company's net sales by geographic segment are as follows:

	U.S.		Non-U.S.		Total
2016	\$	2,124	\$	4,578	\$ 6,702
2015		1,939		4,217	6,156
2014		1,852		4,932	6,784

Intercompany sales in Latin America totaled \$195 million, \$101 million and \$0 for the years ended December 31, 2016, 2015, and 2014, respectively.

Operations outside the U.S. that accounted for more than 10% of consolidated net sales from continuing operations were in France (2015 — 10%, 2014 — 11%).

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Tabular data dollars in millions, except per share amounts

3. Inventories

Major classes of inventory are as follows:

	2016		2015
Finished goods	\$	827	\$ 858
Raw materials		118	113
Operating supplies		38	36
	\$	983	\$ 1,007

4. Equity Investments

At December 31, 2016 the Company's ownership percentage in affiliates include:

	O-I Ownership	
Affiliates	Percentage	Business Type
BJC O-I Glass Pte. Ltd.	50%	Glass container manufacturer
CO Vidrieria SARL ("COV")	50%	Glass container manufacturer
Rocky Mountain Bottle Company	50%	Glass container manufacturer
Tata Chemical (Soda Ash) Partners	25%	Soda ash supplier
Vetrerie Meridionali SpA ("VeMe")	50%	Glass container manufacturer
Vetri Speciali SpA	50%	Specialty glass manufacturer

Summarized information pertaining to the Company's equity affiliates follows:

	20	16	20	015	2	014
Equity in earnings:						
Non-U.S.	\$	19	\$	23	\$	23
U.S		41		37		41
Total	\$	60	\$	60	\$	64
Dividends received.	\$	38	\$	53	\$	54

Summarized combined financial information for equity affiliates is as follows (unaudited):

	 2016	2015		
At end of year:				
Current assets	\$ 451	\$	430	
Non-current assets	1,025		959	
Total assets.	 1,476		1,389	
Current liabilities	200		203	
Other liabilities and deferred items.	368		211	
Total liabilities and deferred items	 568		414	
Net assets	\$ 908	\$	975	

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Tabular data dollars in millions, except per share amounts

For the year:	2016		2	2015	2	2014
Net sales	\$	755	\$	719	\$	752
Gross profit	\$	182	\$	193	\$	198
Net earnings	\$	134	\$	139	\$	150

Based on an evaluation of each of the Company's equity investments for the three years ending December 31, 2016, no investments exceeded the significant subsidiary thresholds per Rule 3-09 of Regulation S-X. As such, separate financial statements for the Company's equity investments are not required to be filed.

The Company made purchases of approximately \$176 million and \$161 million from equity affiliates in 2016 and 2015, respectively, and owed approximately \$76 million and \$66 million to equity affiliates as of December 31, 2016 and 2015, respectively.

There is a difference of approximately \$12 million as of December 31, 2016, between the amount at which certain investments are carried and the amount of underlying equity in net assets. The portion of the difference related to inventory or amortizable assets is amortized as a reduction of the equity earnings. The remaining difference is considered goodwill.

5. Goodwill and Intangible Assets

Goodwill

The changes in the carrying amount of goodwill for the years ended December 31, 2016, 2015 and 2014 are as follows:

	North Latin Europe America America		C	Other	Total		
Balance as of January 1, 2014	\$	1,044	\$ 734	\$ 276	\$	5	\$ 2,059
Translation effects		(118)	(11)	(37)			(166)
Balance as of December 31, 2014		926	723	239		5	1,893
Acquisition related adjustments			316	480			796
Translation effects		(86)	(19)	(95)			(200)
Balance as of December 31, 2015		840	 1,020	 624		5	 2,489
Acquisition related adjustments			15	26			41
Translation effects		(32)	3	(39)			(68)
Balance as of December 31, 2016	\$	808	\$ 1,038	\$ 611	\$	5	\$ 2,462

The acquisition related adjustments in 2016 and 2015 primarily relate to the Vitro Acquisition (see Note 19).

Goodwill for the Asia Pacific segment is \$0 and net of accumulated impairment losses of \$1,135 million as of December 31, 2016, 2015 and 2014.

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

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Tabular data dollars in millions, except per share amounts

in Step 2 are based on significant unobservable inputs, such as price trends, customer demand, material costs, discount rates and asset replacement costs, and are classified as Level 3 in the fair value hierarchy.

During the fourth quarter of 2016, the Company completed its annual impairment testing and determined that no impairment existed.

Intangible assets

On September 1, 2015, the Company acquired customer list intangibles as part of the Vitro Acquisition (see Note 19).

Customer list intangible assets are amortized using the accelerated amortization method over their 20 year lives. Net intangible asset values were \$464 million and \$597 million for the years ended December 31, 2016 and 2015, respectively. Amortization expense for intangible assets was \$39 million, \$21 million and \$1 million for the years ended December 31, 2016, 2015 and 2014, respectively. Estimated amortization related to intangible assets through 2021 is as follows: 2017, \$44 million; 2018, \$44 million; 2019, \$42 million; 2020, \$41 million; and 2021, \$39 million. No impairment existed on these assets at December 31, 2016.

The Company has determined that the fair value measurements related to the customer list intangibles are based on significant unobservable inputs and are classified as Level 3 in the fair value hierarchy.

6. Prepaid Expenses and Other Assets

Prepaid expenses and other current assets at December 31, 2016 and 2015 are as follows:

	2016		2	015
Prepaid expenses	\$	50	\$	52
Value added taxes		46		195
Other		103		119
	\$	199	\$	366

Other assets (noncurrent) consist of the following at December 31, 2016 and 2015:

	2016		2	2015
Deferred tax assets	\$	185	\$	177
Deferred returnable packaging costs		115		110
Repair part inventories		107		118
Capitalized software		85		86
Value added taxes		22		17
Deferred finance fees		5		6
Other		83		85
	\$	602	\$	599

Capitalized software includes costs related to the acquisition and development of internal-use software. These costs are amortized over the estimated useful life of the software. Amortization expense for capitalized software was \$13 million, \$19 million and \$17 million for 2016, 2015 and 2014, respectively. Estimated amortization related to capitalized software through 2021 is as follows: 2017, \$14 million; 2018, \$14 million; 2019, \$13 million; 2020, \$12 million; and 2021, \$11 million.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Tabular data dollars in millions, except per share amounts

7. Derivative Instruments

The Company has certain derivative assets and liabilities which consist of natural gas forwards and foreign exchange option and forward contracts. The Company uses an income approach to value these contracts. Natural gas forward rates and foreign exchange rates are the significant inputs into the valuation models. These inputs are observable in active markets over the terms of the instruments the Company holds, and accordingly, the Company classifies its derivative assets and liabilities as Level 2 in the hierarchy. The Company also evaluates counterparty risk in determining fair values.

Commodity Forward Contracts Designated as Cash Flow Hedges

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, 2016 and 2015, the Company had entered into commodity forward contracts covering approximately 12,300,000 MM BTUs and 7,300,000 MM BTUs, respectively, primarily related to customer requests to lock the price of natural gas.

The Company accounts for the above forward contracts as cash flow hedges at December 31, 2016 and recognizes them on the balance sheet at fair value. The effective portion of changes in the fair value of a derivative that is designated as, and meets the required criteria for, a cash flow hedge is recorded in the Accumulated Other Comprehensive Income component of share owners' equity ("OCI") and reclassified into earnings in the same period or periods during which the underlying hedged item affects earnings. An unrecognized gain of \$6 million at December 31, 2016 and an unrecognized loss of \$4 million at December 31, 2015 related to the commodity forward contracts were included in Accumulated OCI, and will be reclassified into earnings over the next twelve to twenty-four months. Any material portion of the change in the fair value of a derivative designated as a cash flow hedge that is deemed to be ineffective is recognized in current earnings. The ineffectiveness related to these natural gas hedges for the year ended December 31, 2016 and 2015 was not material.

	Amount of gain (loss) Recognized in OCI on						Amount of gain (loss) Reclassified from Accumulated OCI into Income					
Commodity Forward Contracts (Effective Portion)					(reported in cost of goods sold) (Effective Portion)							
	2016	2	2015	2014			2016	2015		2014		
\$	7	\$	(4) \$		3	\$		\$	(1) \$		2	

The effect of the commodity forward contracts on the results of operations for the years ended December 31, 2016, 2015 and 2014 is as follows:

Foreign Exchange Derivative Contracts and not Designated as Hedging Instruments

The Company may enter into short-term forward exchange or option agreements to purchase foreign currencies at set rates in the future. These agreements are used to limit exposure to fluctuations in foreign currency exchange rates for significant planned purchases of fixed assets or commodities that are denominated in currencies other than the subsidiaries' functional currency. The Company may also use forward exchange agreements to offset the foreign currency risk for receivables and payables, including intercompany receivables,

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Tabular data dollars in millions, except per share amounts

payables and loans, not denominated in, or indexed to, their functional currencies. The Company records these short-term forward exchange agreements on the balance sheet at fair value and changes in the fair value are recognized in current earnings.

At December 31, 2016 and 2015, the Company had outstanding forward exchange and option agreements denominated in various currencies covering the equivalent of approximately \$490 million and \$790 million, respectively, related primarily to intercompany transactions and loans.

The effect of the foreign exchange derivative contracts on the results of operations for the years ended December 31, 2016, 2015 and 2014 is as follows:

	Amount of Gain (Loss)							
Location of Gain (Loss) Recognized in Income on Foreign Exchange Contracts	Recognized in Income on Foreign Exchange Contracts							
	20	16	2	2015		2014		
Other expense, net	\$	6	\$	10	\$		(8)	

Balance Sheet Classification

The Company records the fair values of derivative financial instruments on the balance sheet as follows: (a) receivables if the instrument has a positive fair value and maturity within one year, (b) deposits, receivables, and other assets if the instrument has a positive fair value and maturity after one year, and (c) other accrued liabilities or other liabilities (current) if the instrument has a negative fair value and maturity within one year.

The following table shows the amount and classification (as noted above) of the Company's derivatives as of December 31, 2016 and 2015:

	Fair Value					
	Balance Sheet Location	2	2016		2015	
Asset Derivatives:						
Derivatives designated as hedging instruments:						
Commodity futures contracts	b	\$	6	\$		
Derivatives not designated as hedging instruments:						
Foreign exchange derivative contracts	а	\$	9	\$	14	
Total asset derivatives		\$	15	\$	14	
Liability Derivatives:						
Derivatives designated as hedging instruments:						
Commodity futures contracts	с	\$		\$	3	
Derivatives not designated as hedging instruments:						
Foreign exchange derivative contracts	с		5		2	
Total liability derivatives		\$	5	\$	5	

8. Restructuring Accruals, Asset Impairments and Other Costs Related to Closed Facilities

The Company continually reviews its manufacturing footprint and operating cost structure and may decide to close operations or reduce headcount to gain efficiencies, integrate acquired operations, reduce future expenses and other market factors. The Company incurs costs associated with these actions including employee

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Tabular data dollars in millions, except per share amounts

severance and benefits, other exit costs such as those related to contract terminations, and asset impairment charges. The Company also may incur other costs related to closed facilities including environmental remediation, clean up, dismantling and preparation for sale or other disposition.

The Company accounts for restructuring and other costs under applicable provisions of generally accepted accounting principles. Charges for employee severance and related benefits are generally accrued based on contractual arrangements with employees or their representatives. Other exit costs are accrued based on the estimated cost to settle related contractual arrangements. Estimated environmental remediation costs are accrued when specific claims have been received or are probable of being received.

The Company's decisions to curtail selected production capacity have resulted in write downs of certain long-lived assets to the extent their carrying amounts exceeded fair value or fair value less cost to sell. The Company classified the significant assumptions used to determine the fair value of the impaired assets as Level 3 in the fair value hierarchy as set forth in the general accounting principles for fair value measurements.

When a decision is made to take these actions, the Company manages and accounts for them programmatically apart from the on-going operations of the business. Information related to major programs (as in the case of the European Asset Optimization and Asia Pacific Restructuring programs below) are presented separately. Minor initiatives are presented on a combined basis as Other Restructuring Actions. These restructuring initiatives taken by the Company are not related to the European Asset Optimization program or the Asia Pacific restructuring plan. When charges related to major programs are completed, remaining accrual balances are classified with Other Restructuring Actions.

European Asset Optimization

In 2011, the Company initiated the European Asset Optimization program to increase the efficiency and capability of its European operations and to better align its European manufacturing footprint with market and customer needs. This program involved making additional investments in certain facilities and addressing assets with higher cost structures. As part of this program, the Company recorded charges of \$0, \$0, and \$1 million for the years ended 2016, 2015 and 2014, respectively for employee costs, write-down of assets, and environmental remediation related to decisions to close furnaces and manufacturing facilities in Europe. The Company recorded total cumulative charges of \$127 million and does not expect to execute any further actions under this program.

Asia Pacific Restructuring

Since 2011, the Company has implemented a restructuring plan in its Asia Pacific segment, primarily related to aligning its supply base with lower demand in the region. As part of this plan, the Company recorded charges of \$4 million, \$5 million and \$73 million for the years ended 2016, 2015 and 2014, respectively, for employee costs, write-down of assets, and pension charges related to furnace closures and additional restructuring activities. The Company recorded total cumulative charges of \$224 million and does not expect to execute any further actions under this program.

Other Restructuring Actions

In 2016, the Company recorded charges of \$94 million for other restructuring actions. These charges primarily represented employee costs, write-down of assets, and other exit costs of \$64 million for plant closures in Latin America, Europe, and North America and \$30 million related to other restructuring actions. The Company took certain other restructuring actions and recorded charges in 2015 of \$58 million. These

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Tabular data dollars in millions, except per share amounts

charges primarily related to employee costs, write-down of assets and other exit costs totaling \$14 million for a plant closure and furnace closure in Latin America, \$38 million for a plant closure in North America and \$6 million for other restructuring actions. In 2014, the Company took certain other restructuring actions and recorded charges of \$2 million for employee costs related to global headcount reduction initiatives.

The following table presents information related to restructuring, asset impairment and other costs related to closed facilities from January 1, 2015 through December 31, 2015:

	European Asset Optimization		Asset Asia Pacific			Other ructuring Actions	Total Restructuring		
Balance at January1, 2015	\$	12	\$	12	\$	36	\$	60	
Charges				5		58		63	
Write-down of assets to net realizable value				(4)		(27)		(31)	
Net cash paid, principally severance and									
related benefits		(5)		(5)		(28)		(38)	
Other, including foreign exchange translation		(4)		(1)		(6)		(11)	
Balance at December 31, 2015	\$	3	\$	7	\$	33	\$	43	

The following table presents information related to restructuring, asset impairment and other costs related to closed facilities from January 1, 2016 through December 31, 2016:

	Pacific cturing	Restr	ther ucturing tions	Total Restructuring		
Balance at January1, 2016	\$ 7	\$	36	\$	43	
Charges	4		94		98	
Write-down of assets to net realizable value.			(28)		(28)	
Net cash paid, principally severance and related benefits	(3)		(21)		(24)	
Other, including foreign exchange translation	(1)		(3)		(4)	
Balance at December 31, 2016	\$ 7	\$	78	\$	85	

The restructuring accrual balance represents the Company's estimates of the remaining future cash amounts to be paid related to the actions noted above. As of December 31, 2016, the Company's estimates include approximately \$67 million for employee benefits costs, \$16 million for environmental remediation costs, and \$2 million for other exit costs.

9. Pension Benefit Plans and Other Postretirement Benefits

Pension Benefit Plans

The Company has defined benefit pension plans covering a substantial number of employees located in the United States and several other non-U.S. jurisdictions. Benefits generally are based on compensation for salaried employees and on length of service for hourly employees. The Company's policy is to fund pension plans such that sufficient assets will be available to meet future benefit requirements. The Company's defined benefit pension plans use a December 31 measurement date. The following tables relate to the Company's principal defined benefit pension plans.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Tabular data dollars in millions, except per share amounts

The changes in the pension benefit obligations for the year are as follows:

		U.	s.		Non-	U.S.	
	_	2016		2015	2016		2015
Obligations at beginning of year	\$	2,190	\$	2,428	\$ 1,210	\$	1,311
Change in benefit obligations:							
Service cost		15		24	16		15
Interest cost		90		96	44		44
Actuarial (gain) loss, including the effect of change in							
discount rates		36		(107)	160		(9)
Curtailment, settlement, and plan amendment		(200)					
Acquisitions							37
Participant contributions					2		1
Benefit payments		(175)		(252)	(71)		(58)
Other				1	3		
Foreign currency translation					(129)		(131)
Net change in benefit obligations		(234)		(238)	25		(101)
Obligations at end of year	\$	1,956	\$	2,190	\$ 1,235	\$	1,210

The changes in the fair value of the pension plans' assets for the year are as follows:

	U.	s.			Non-		
	2016		2015	_	2016		2015
Fair value at beginning of year	\$ 1,909	\$	2,190	\$	1,012	\$	1,094
Change in fair value:							
Actual gain (loss) on plan assets	118		(32)		139		42
Benefit payments	(175)		(252)		(71)		(58)
Employer contributions	2		2		38		15
Participant contributions					2		1
Settlements	(200)						
Acquisitions							22
Foreign currency translation					(111)		(104)
Other			1		2		
Net change in fair value of assets	(255)		(281)		(1)		(82)
Fair value at end of year	\$ 1,654	\$	1,909	\$	1,011	\$	1,012

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 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.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Tabular data dollars in millions, except per share amounts

The funded status of the pension plans at year end is as follows:

	U.	s.		Non-		
	2016		2015	2016		2015
Plan assets at fair value	\$ 1,654	\$	1,909	\$ 1,011	\$	1,012
Projected benefit obligations.	1,956		2,190	1,235		1,210
Plan assets less than projected benefit obligations	 (302)		(281)	 (224)		(198)
Items not yet recognized in pension expense:						
Actuarial loss	1,046		1,145	352		320
Prior service cost (credit).	1		2	(1)		(1)
	1,047		1,147	351		319
Net amount recognized	\$ 745	\$	866	\$ 127	\$	121

The net amount recognized is included in the Consolidated Balance Sheets at December 31, 2016 and 2015 as follows:

	U.	S.			Non-	U.S.	
	2016		2015	2016			2015
Pension assets	\$ 	\$		\$	40	\$	32
Current pension liability, included with other							
accrued liabilities	(7)		(1)		(7)		(6)
Pension benefits	(295)		(280)		(257)		(224)
Accumulated other comprehensive loss	1,047		1,147		351		319
Net amount recognized	\$ 745	\$	866	\$	127	\$	121

The following changes in plan assets and benefit obligations were recognized in accumulated other comprehensive income at December 31, 2016 and 2015 as follows (amounts are pretax):

		U.	s.			Non-	U.S.		
	2	2016	2015			016	2	2015	
Current year actuarial (gain) loss	\$	66	\$	95	\$	87	\$	15	
Amortization of actuarial loss		(67)		(74)		(12)		(15)	
Settlement		(98)							
		(99)		21		75			
Translation						(43)		(31)	
	\$	(99)	\$	21	\$	32	\$	(31)	

The accumulated benefit obligation for all defined benefit pension plans was \$3,126 million and \$3,306 million at December 31, 2016 and 2015, respectively.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Tabular data dollars in millions, except per share amounts

The components of the net pension expense for the year are as follows:

		U.S.				
	2016	2015	2014	2016	2015	2014
Service cost	\$ 15	\$ 24	\$ 22	\$ 16	\$ 15	\$ 23
Interest cost	90	96	105	44	44	69
Expected asset return	(149)	(170)	(176)	(65)	(67)	(86)
Amortization:						
Actuarial loss	67	74	68	13	15	18
Prior service credit.						
Net amortization	67	74	68	13	15	18
Net expense	\$ 23	\$ 24	\$ 19	\$ 8	\$ 7	\$ 24

Effective January 1, 2016 the Company amended its salary pension plan in North America to freeze future pension benefits. This action required an obligation remeasurement for the curtailment of benefits, which resulted in a reduction of the Company's pension expense.

In 2016, the Company settled a portion of the U.S. Hourly Pension Plan obligation, which resulted in a settlement charge of \$98 million. In 2014, the Company settled a portion of the U.S. Salary Pension Plan pension obligation, which resulted in a settlement charge of \$30 million. On October 1, 2014, the Company settled the liability associated with its pension plan in the Netherlands, resulting in a settlement charge of approximately \$35 million. Non-U.S. pension expense excludes \$3 million of pension settlement costs that were recorded in restructuring expense in 2014. The table above excludes these charges.

Amounts that are expected to be amortized from accumulated other comprehensive income into net pension expense during 2017:

	U	U.S.		I-U.S.
Amortization:				
Actuarial loss	\$	57	\$	16
Prior service cost		1		
Net amortization	\$	58	\$	16

The following information is for plans with projected and accumulated benefit obligations in excess of the fair value of plan assets at year end:

	Projected Benefit Obligation Exceeds the Fair Value of Plan Assets								Benefit Obligation r Value of Plan Asset						
	U.S. Non-U.S.					U.		5.							
	2016	2015	2	2016		16 2015		2015	2016		2	2015			
Projected benefit obligations	\$ 1,956	\$ 2,190	\$	897	\$	876	\$ 1,956	\$ 2,190	\$	897	\$	876			
Accumulated benefit obligation	1,956	2,160		867		850	1,956	2,160		867		850			
Fair value of plan assets	1,654	1,909		632		645	1,654	1,909		632		645			

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Tabular data dollars in millions, except per share amounts

The weighted average assumptions used to determine benefit obligations are as follows:

	U.	S.	Non-	U.S.
	2016	2015	2016	2015
Discount rate	4.17%	4.43%	2.94%	3.68%
Rate of compensation increase	N/A	2.97%	2.90%	2.84%

The weighted average assumptions used to determine net periodic pension costs are as follows:

		U.S.			Non-U.S.				
	2016	2015	2014	2016	2015	2014			
Discount rate	4.43%	4.05%	4.81%	3.68%	3.65%	4.14%			
Rate of compensation increase	2.97%	2.96%	2.97%	2.84%	2.89%	3.31%			
Expected long-term rate of return on assets	7.50%	8.00%	8.00%	7.15%	7.21%	7.23%			

Future benefits are assumed to increase in a manner consistent with past experience of the plans, which, to the extent benefits are based on compensation, includes assumed salary increases as presented above.

For 2016, the Company's weighted average expected long-term rate of return on assets was 7.50% for the U.S. plans and 7.15% for the non-U.S. plans. In developing this assumption the Company considered its historical 10-year average return (through December 31, 2016) and evaluated input from its third party pension plan asset consultants, including their review of asset class return expectations.

It is the Company's policy to invest pension plan assets in a diversified portfolio consisting of an array of asset classes within established target asset allocation ranges. The investment risk of the assets is limited by appropriate diversification both within and between asset classes. The assets for the U.S. plans are maintained in a group trust. The U.S. plans hold no individual assets other than the investment in the group trust. The assets of the group trust and the Company's non-U.S. plans are primarily invested in a broad mix of domestic and international equities, domestic and international bonds, and real estate, subject to the target asset allocation ranges. The assets are managed with a view to ensuring that sufficient liquidity will be available to meet expected cash flow requirements.

The investment valuation policy of the Company is to value investments at fair value. All investments are valued at their respective net asset values. Equity securities for which market quotations are readily available are valued at the last reported sales price on their principal exchange on valuation date or official close for certain markets. Fixed income investments are valued by an independent pricing service. Investments in registered investment companies or collective pooled funds are valued at their respective net asset values. Short-term investments are stated at amortized cost, which approximates fair value. The fair value of real estate is determined by periodic appraisals.

In accordance with the Company's adoption of ASU No. 2015-07 in 2016, certain investments measured at net asset value ("NAV"), as a practical expedient for fair value, have been excluded from the fair value hierarchy. The fair value measurements tables presented below have been amended to conform to the current year presentation under ASU No. 2015-07. See Note 1 for more information.

The Company's U.S. pension plan assets held in the group trust are measured at net asset value in the fair value hierarchy. The total U.S. plan assets amounted to \$1,654 million and \$1,909 million as of December 31, 2016 and 2015, respectively. In 2016, the U.S. plan assets consisted of approximately 62% equity securities, 31% debt securities, and 7% real estate and other.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Tabular data dollars in millions, except per share amounts

In 2016, the non-U.S. plan assets consisted of approximately 41% equity securities, 42% debt securities, and 17% real estate and other. The following table sets forth by level, within the fair value hierarchy, the Company's non-U.S. pension plan assets at fair value as of December 31, 2016 and 2015:

	2016							2015									
	Le	vel 1	Le	vel 2	Le	Level 3		otal	Level 1		Level 2		Level 3		Т	otal	
Cash and cash equivalents	\$	24	\$		\$		\$	24	\$	30	\$		\$		\$	30	
Equity securities								—								—	
Debt securities		37		2				39		16						16	
Real estate						4		4						5		5	
Other				37		6		43				24		6		30	
Total	\$	61	\$	39	\$	10			\$	46	\$	24	\$	11			
Investments measured at net													_				
asset value							\$	901							<u></u>	931	
Total non-U.S. assets at fair value							<u>\$1</u>	,011							<u>\$1</u>	,012	

The following is a reconciliation of the Company's pension plan assets recorded at fair value using significant unobservable inputs (Level 3):

	20	16	20)15
Beginning balance.	\$	11	\$	5
Net increase (decrease)		(1)		6
Ending balance	\$	10	\$	11

The net increase (decrease) in the fair value of the Company's Level 3 pension plan assets is primarily due to purchases and sales of unlisted real estate funds. The change in the fair value of Level 3 pension plan assets due to actual return on those assets was immaterial in 2016.

In order to maintain minimum funding requirements, the Company is required to make contributions to its defined benefit pension plans of \$32 million in 2017.

The following estimated future benefit payments, which reflect expected future service, as appropriate, are expected to be paid in the years indicated:

Year(s)	U.S.		Non-U.S.	
2017	\$	157	\$	53
2018		146		51
2019		145		54
2020		143		57
2021		140		60
2022-2026		656		343

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Tabular data dollars in millions, except per share amounts

The Company also sponsors several defined contribution plans for all salaried and hourly U.S. employees, and employees in Canada, the U.K., The Netherlands and Australia. Participants' contributions are based on their compensation. The Company matches contributions of participants, up to various limits, in substantially all plans. Company contributions to these plans amounted to \$34 million in 2016, \$29 million in 2015, and \$19 million in 2014.

Postretirement Benefits Other Than Pensions

The Company provides retiree health care and life insurance benefits covering certain U.S. salaried and hourly employees, and substantially all employees in Canada. Benefits provided by the Company for hourly retirees are determined by collective bargaining. Employees are generally eligible for benefits upon retirement and completion of a specified number of years of creditable service. The Company uses a December 31 measurement date to measure its postretirement benefit obligations.

The changes in the postretirement benefit obligations for the year are as follows:

	U.S.					Non-	n-U.S.		
	2016		2015		2	016	20	015	
Obligations at beginning of year	\$	97	\$	111	\$	68	\$	81	
Change in benefit obligations:									
Service cost						1		1	
Interest cost		4		4		3		3	
Actuarial (gain) loss, including the effect of changing									
discount rates		(1)		(10)		9		(1)	
Benefit payments		(9)		(8)		(2)		(3)	
Foreign currency translation						2		(13)	
Other		1							
Net change in benefit obligations		(5)		(14)		13		(13)	
Obligations at end of year	\$	92	\$	97	\$	81	\$	68	

The funded status of the postretirement benefit plans at year end is as follows:

	U.S.				Non-U.S.			
	2016		2015		2016		2015	
Postretirement benefit obligations	\$	(92)	\$	(97)	\$	(81)	\$	(68)
Items not yet recognized in net postretirement benefit cost:								
Actuarial gain (loss)		(21)		(23)		(6)		3
Prior service credit		30		38				
		9		15		(6)		3
Net amount recognized	\$	(83)	\$	(82)	\$	(87)	\$	(65)

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Tabular data dollars in millions, except per share amounts

The net amount recognized is included in the Consolidated Balance Sheets at December 31, 2016 and 2015 as follows:

	U.S.				Non-U.S.			•
	2	2016	2	015	2	016	2	015
Current nonpension postretirement benefit, included with Other								
accrued liabilities	\$	(8)	\$	(8)	\$	(3)	\$	(2)
Nonpension postretirement benefits		(84)		(89)		(78)		(66)
Accumulated other comprehensive income (loss)		9		15		(6)		3
Net amount recognized	\$	(83)	\$	(82)	\$	(87)	\$	(65)

The following changes in benefit obligations were recognized in accumulated other comprehensive income at December 31, 2016 and 2015 as follows (amounts are pretax):

	U.S.					-U.S.	
	20	016	2	015	20	16	2015
Current year actuarial (gain) loss	\$	(1)	\$	(10)	\$	9	\$ —
Amortization of actuarial loss		(1)		(2)			
Amortization of prior service credit.		8		8			
	\$	6	\$	(4)	\$	9	<u>\$ </u>

The components of the net postretirement benefit cost for the year are as follows:

		U.S.		Non-U.S.				
	2016	2015	2014	2016	2015	2014		
Service cost	\$ —	\$ —	\$ —	\$ 1	\$ 1	\$ 1		
Interest cost	4	4	5	3	3	4		
Curtailment gain								
Amortization:								
Actuarial loss	1	2	2					
Prior service credit	(7)	(8)	(8)					
Net amortization	(6)	(6)	(6)					
Net postretirement benefit (income) cost	<u>\$ (2</u>)	<u>\$ (2</u>)	<u>\$ (1</u>)	\$ 4	\$ 4	\$ 5		

Amounts that are expected to be amortized from accumulated other comprehensive income into net postretirement benefit cost during 2017:

	U.S.		Non	I-U.S.
Amortization:				
Actuarial loss	\$	(1)	\$	—
Prior service credit		7		
Net amortization	\$	6	\$	

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Tabular data dollars in millions, except per share amounts

Amortization included in net postretirement benefit cost is based on the average remaining service of employees. The weighted average discount rates used to determine the accumulated postretirement benefit obligation and net postretirement benefit cost are as follows:

		U.S.			Non-U.S.	
	2016	2015	2014	2016	2015	2014
Accumulated postretirement benefit obligation	4.11%	4.35%	4.00%	3.55%	3.80%	3.75%
Net postretirement benefit cost	4.34%	3.99%	4.63%	3.80%	3.75%	4.47%

The weighted average assumed health care cost trend rates at December 31 are as follows:

	U.S	•	Non-U	J.S.
	2016	2015	2016	2015
Health care cost trend rate assumed for next year	6.40%	6.60%	5.00%	5.00%
Rate to which the cost trend rate is assumed to decline				
(ultimate trend rate)	5.00%	5.00%	5.00%	5.00%
Year that the rate reaches the ultimate trend rate	2024	2024	N/A	N/A

Assumed health care cost trend rates affect the amounts reported for the postretirement benefit plans. A one-percentage-point change in assumed health care cost trend rates would have the following effects:

	U.S. 1-Percentage-Point				Non-U.S. 1-Percentage-Point			
	Inc	rease	Decrease		Increase		Decrease	
Effect on total of service and interest cost	\$		\$		\$	1	\$	(1)
Effect on accumulated postretirement benefit obligations		4		(3)		13		(10)

Amortization included in net postretirement benefit cost is based on the average remaining service of employees.

The following estimated future benefit payments, which reflect expected future service, as appropriate, are expected to be paid in the years indicated:

Year(s)	U.S.		Non-U.S.	
2017	\$	8	\$	3
2018		8		3
2019		8		3
2020		8		3
2021		7		3
2022 - 2026		30	18	8

Other U.S. hourly retirees receive health and life insurance benefits from a multi-employer trust established by collective bargaining. Payments to the trust as required by the bargaining agreements are based upon specified amounts per hour worked and were \$6 million in 2016, \$6 million in 2015 and \$6 million in 2014. Postretirement health and life benefits for retirees of foreign subsidiaries are generally provided through the national health care programs of the countries in which the subsidiaries are located.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Tabular data dollars in millions, except per share amounts

10. Income Taxes

The provision for income taxes was calculated based on the following components of earnings (loss) before income taxes:

Continuing operations	2016		2015		2	2014
<u>U.S.</u>	\$	(27)	\$		\$	36
Non-U.S.		383		268		271
	\$	356	\$	268	\$	307
Discontinued operations		2016		2015	2	2014
U.S	\$		\$		\$	(19)
Non-U.S.		(7)		(4)		(4)
	\$	(7)	\$	(4)	\$	(23)
The provision (benefit) for income taxes consists of the following:						
		2016	2	2015	2	2014
Current:						
U.S	\$		\$	9	\$	7
Non-U.S.		123		85		103
		123		94		110

Deferred:			
U.S	3	10	
Non-U.S	(7)	2	(18)
	(4)	12	(18)
Total:			
U.S	3	19	7
Non-U.S	116	87	85
Total for continuing operations	119	106	92
Total for discontinued operations.			
	\$ 119	\$ 106	\$ 92

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Tabular data dollars in millions, except per share amounts

A reconciliation of the provision for income taxes based on the statutory U.S. Federal tax rate of 35% to the provision for income taxes is as follows:

	2016		16 201		2	014
Tax provision on pretax earnings from continuing operations at statutory						
U.S. Federal tax rate	\$	124	\$	94	\$	107
Increase (decrease) in provision for income taxes due to:						
Non-U.S. tax rates.		(22)		(12)		(22)
Changes in valuation allowance		3		1		(2)
Withholding tax, net		22		18		18
Non-deductible acquisition costs				6		
U.S. tax on intercompany dividends and interest		3		16		1
Tax exempt income		(2)		(3)		(5)
Intraperiod tax allocation		(8)				
Tax law changes		(3)		(3)		
Tax credit		(19)		(14)		(3)
Changes in tax reserves		8		5		(13)
Mexico inflationary adjustments		6		3		
Other items		7		(5)		11
Provision for income taxes.	\$	119	\$	106	\$	92

Deferred income taxes reflect: (1) the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes; and (2) carryovers and credits for income tax purposes.

Significant components of the Company's deferred tax assets and liabilities at December 31, 2016 and 2015 are as follows:

	2016	2015
Deferred tax assets:		
Accrued postretirement benefits	\$ 53	\$ 51
Asbestos-related liabilities	242	286
Foreign tax credit	413	389
Operating and capital loss carryovers.	389	435
Other credit carryovers	34	38
Accrued liabilities	95	82
Pension liability	138	128
Other	74	63
Total deferred tax assets	1,438	1,472
Deferred tax liabilities:		
Property, plant and equipment	131	128
Intangibles and deferred software	119	131
Other	9	25
Total deferred tax liabilities	259	284
Valuation allowance	(1,094)	(1,135)
Net deferred taxes	\$ 85	\$ 53

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Tabular data dollars in millions, except per share amounts

Deferred taxes are included in the Consolidated Balance Sheets at December 31, 2016 and 2015 as follows:

	2016		2	2015
Other assets	\$	185	\$	177
Deferred taxes				
Net deferred taxes	\$	85	\$	53

The Company reviews the likelihood that it will realize the benefit of its deferred tax assets and therefore the need for valuation allowances on a quarterly basis, or whenever events indicate that a review is required. In determining the requirement for a valuation allowance, the historical and projected financial results of the legal entity or consolidated group recording the net deferred tax asset is considered, along with other positive and negative evidence.

At December 31, 2016, before valuation allowance, the Company had unused foreign tax credits of \$413 million expiring in 2017 through 2026, research tax credits of \$14 million expiring from 2019 to 2036, and alternative minimum tax credits of \$18 million which do not expire and which will be available to offset future U.S. Federal income tax. Approximately \$151 million of the deferred tax assets related to operating and capital loss carryforwards can be carried over indefinitely, with the remaining \$238 million expiring between 2017 and 2036.

In certain 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.

At December 31, 2016, the Company's equity in the undistributed earnings of foreign subsidiaries for which income taxes had not been provided approximated \$2.2 billion. The Company intends to reinvest these earnings indefinitely in the non-U.S. operations. It is not practicable to estimate the U.S. and foreign tax which would be payable should these earnings be distributed. Deferred taxes are provided for earnings of non-U.S. jurisdictions when the Company plans to remit those earnings.

The Company records a liability for unrecognized tax benefits related to uncertain tax positions. The Company accrues interest and penalties associated with unrecognized tax benefits as a component of its income tax expense.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Tabular data dollars in millions, except per share amounts

The following is a reconciliation of the Company's total gross unrecognized tax benefits for the years ended December 31, 2016, 2015 and 2014:

	2016		2015		2	014
Balance at January 1	\$	74	\$	77	\$	100
Additions and reductions for tax positions of prior years				1		(13)
Additions based on tax positions related to the current year		15		10		10
Reductions due to the lapse of the applicable statute of limitations		(3)		(5)		(8)
Reductions due to settlements		(12)		(1)		(1)
Foreign currency translation				(8)		(11)
Balance at December 31	\$	74	\$	74	\$	77
Unrecognized tax benefits, which if recognized, would impact the						
Company's effective income tax rate	\$	66	\$	67	\$	70
Accrued interest and penalties at December 31	\$	23	\$	25	\$	29
Interest and penalties included in tax expense for the years ended						
December 31	<u>\$</u>	(2)	\$	(1)	<u>\$</u>	(2)

Based upon the outcome of tax examinations, judicial proceedings, or expiration of statute of limitations, it is reasonably possible that the ultimate resolution of these unrecognized tax benefits may result in a payment that is materially different from the current estimate of the tax liabilities. The Company believes that it is reasonably possible that the estimated liability could decrease up to \$11 million within the next 12 months. This is primarily the result of audit settlements or statute expirations in several taxing jurisdictions.

The Company is currently under examination in various tax jurisdictions in which it operates, including Argentina, Bolivia, Brazil, China, Canada, Colombia, Ecuador, France, Germany, Indonesia, and Italy. The years under examination range from 2006 through 2014. The Company has received tax assessments in excess of established reserves. The Company believes that adequate provisions for all income tax uncertainties have been made. However, if tax assessments are settled against the Company at amounts in excess of established reserves, it could have a material impact to the Company's results of operations, financial position or cash flows. During 2016, the Company concluded income tax audits in several jurisdictions, including the Czech Republic, Germany, Italy, and Hungary.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Tabular data dollars in millions, except per share amounts

11. Debt

The following table summarizes the long-term debt of the Company at December 31, 2016 and 2015:

	2016	2015
Secured Credit Agreement:		
Revolving Credit Facility:		
Revolving Loans	\$ —	\$ —
Term Loans:		
Term Loan A	1,395	1,546
Term Loan A (€279 million at December 31, 2016)	282	301
Term Loan B		563
Senior Notes:		
6.75%, due 2020 (€500 million)	523	542
4.875%, due 2021 (€330 million)	345	357
5.00%, due 2022	495	494
5.875%, due 2023	682	680
3.125%, due 2024 (€500 million)	520	
5.375%, due 2025	297	296
6.375%, due 2025	294	293
Senior Debentures:		
7.80%, due 2018	250	250
Capital leases	57	62
Other	26	29
Total long-term debt	5,166	5,413
Less amounts due within one year	33	68
Long-term debt	\$ 5,133	\$ 5,345

On April 22, 2015, the Company entered into a Senior Secured Credit Facility, which subsequently has been amended several times with the most recent amendment being entered into on February 3, 2016 (the "Amended Agreement"). In connection with the closing of the Vitro Acquisition on September 1, 2015 (see Note 19), the Company incurred \$1,250 million of senior secured incremental term loan facilities, comprised of (i) a \$675 million term loan A facility on substantially the same terms and conditions (including as to maturity) as the term loan A facility in the Amended Agreement and (ii) a \$575 million term loan B facility, which was subsequently repaid in full in November 2016 as described below.

At December 31, 2016, 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 (\$1,395 million net of debt issuance costs), and a \notin 279 million term loan A facility (\$282 million net of debt issuance costs), each of which has a final maturity date of April 22, 2020. At December 31, 2016, the Company had unused credit of \$884 million available under the Amended Agreement. The weighted average interest rate on borrowings outstanding under the Amended Agreement at December 31, 2016 was 2.39%.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Tabular data dollars in millions, except per share amounts

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 covenant, a Total Leverage Ratio, that requires the Company not to exceed a ratio calculated by dividing consolidated total debt, less cash and cash equivalents, by consolidated EBITDA, as defined in the Amended Agreement. 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 of (i) 4.5x for the four fiscal quarters ending December 31, 2016, March 31, 2017, June 30, 2017 and September 30, 2017, and (ii) 4.0x for the fourth fiscal quarter ending December 31, 2017 and each fiscal quarter thereafter.

Failure to comply with these covenants and restrictions could result in an event of default under the Amended Agreement. In such an event, the Company would be unable to 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 and the lenders cause all of the outstanding debt 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, 2016, 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 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.

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.

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.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Tabular data dollars in millions, except per share amounts

During November 2016, the Company issued senior notes with a face value of €500 million that bear interest at 3.125% and are due November 15, 2024. The notes were issued via a private placement and are guaranteed by certain of the Company's domestic subsidiaries. The net proceeds, after deducting the debt discount and debt issuance costs, totaled approximately \$520 million and were used to repay the term loan B facility under the Amended Agreement.

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 March 2019, subject to periodic renewal of backup credit lines.

Information related to the Company's accounts receivable securitization program as of December 31, 2016 and 2015 is as follows:

	2	2016	2015
Balance (included in short-term loans)	\$	152	\$ 158
Weighted average interest rate		0.74%	1.21%

The carrying amounts reported for the accounts receivable securitization program, and certain long-term debt obligations subject to frequently redetermined interest rates, approximate fair value. Fair values for the Company's significant fixed rate debt obligations are based on published market quotations, and are classified as Level 1 in the fair value hierarchy.

Annual maturities for all of the Company's long-term debt through 2021 are as follows: 2017, \$33 million; 2018, \$287 million; 2019, \$101 million; 2020, \$2,074 million; and 2021, \$354 million.

Fair values at December 31, 2016, of the Company's significant fixed rate debt obligations are as follows:

_	Principal Amount				Fair /alue
Senior Notes:					
6.75%, due 2020 (€500 million)	\$	526	\$ 120.63	\$	635
4.875%, due 2021 (€330 million)		347	114.00		396
5.00%, due 2022		500	103.49		517
5.875%, due 2023		700	105.37		738
3.125%, due 2024 (€500 million)		526	100.01		526
6.375%, due 2025		300	106.28		319
5.375%, due 2025		300	101.17		304
Senior Debentures:					
7.80%, due 2018		250	106.26		266

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Tabular data dollars in millions, except per share amounts

12. Contingencies

Asbestos

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 sold its insulation business unit at the end of 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 following table shows the approximate number of plaintiffs and claimants who had asbestos claims pending against the Company at the beginning of each listed year, the number of claims disposed of during that year, the year's filings and the claims pending at the end of each listed year (eliminating duplicate filings):

	2016	2015	2014
Pending at beginning of year	2,080	2,260	2,620
Disposed	1,750	1,460	1,830
Filed	1,070	1,280	1,470
Pending at end of year	1,400	2,080	2,260

Based on an analysis of the lawsuits pending as of December 31, 2016, approximately 88% of plaintiffs either do not specify the monetary damages sought, or in the case of court filings, claim an amount sufficient to invoke the jurisdictional minimum of the trial court. Approximately 9% of plaintiffs specifically plead damages above the jurisdictional minimum up to, and including, \$15 million or less, and 3% of plaintiffs specifically plead damages greater than \$15 million but less than or equal to \$100 million.

As indicated by the foregoing summary, current pleading practice permits considerable variation in the assertion of monetary damages. The Company's experience resolving hundreds of thousands of asbestos claims and lawsuits over an extended period demonstrates that the monetary relief alleged in a complaint bears little relevance to a claim's merits or disposition value. Rather, the amount potentially recoverable is determined by such factors as the type and severity of the plaintiff's asbestos disease, the plaintiff's medical history and exposure to other disease-causing agents, the product identification evidence against the Company and other co-defendants, the defenses available to the Company and other co-defendants, the specific jurisdiction in which the claim is made, and the plaintiff's firm representing the claimant.

In addition to the pending claims set forth above, the Company has claims-handling agreements in place with many plaintiffs' counsel throughout the country. These agreements require evaluation and negotiation regarding whether particular claimants qualify under the criteria established by such agreements. The criteria for such claims include verification of a compensable illness and a reasonable probability of exposure to a product manufactured by the Company's former business unit during its manufacturing period ending in 1958.

The Company has also been a defendant in other asbestos-related lawsuits or claims involving maritime workers, medical monitoring claimants, co-defendants and property damage claimants. Based upon its past experience, the Company believes that these categories of lawsuits and claims will not involve any material liability and they are not included in the above description of pending matters or in the following description of disposed matters.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Tabular data dollars in millions, except per share amounts

Since receiving its first asbestos claim, the Company as of December 31, 2016, has disposed of the asbestos claims of approximately 398,000 plaintiffs and claimants at an average indemnity payment per claim of approximately \$9,000. The Company's asbestos indemnity payments have varied on a per claim basis, and are expected to continue to vary considerably over time. Asbestos-related cash payments for 2016, 2015 and 2014 were \$125 million, \$138 million, and \$148 million, respectively. The Company's cash payments per claim disposed (inclusive of legal costs) were approximately \$71,000, \$95,000 and \$81,000 for the years ended December 31, 2016, 2015 and 2014, respectively.

As discussed above, the Company's objective is to achieve, where possible, resolution of asbestos claims pursuant to claims-handling agreements. Failure of claimants to meet certain medical and product exposure criteria in the Company's administrative claims handling agreements has generally reduced the number of claims that would otherwise have been received by the Company in the tort system. In addition, certain court orders and legislative acts have reduced or eliminated the number of claims that the Company otherwise would have received by the Company in the tort system. These developments generally have had the effect of increasing the Company's per-claim average indemnity payment over time.

Beginning with the initial liability of \$975 million established in 1993, the Company has accrued a total of approximately \$4.9 billion through 2016, before insurance recoveries, for its asbestos-related liability. The Company's estimates of its liability have 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 continues to monitor trends that may affect its ultimate liability and analyze the developments and variables likely to affect the resolution of pending and future asbestos claims against the Company. The material components of the Company's total accrued liability are determined by the Company in connection with its annual comprehensive legal review and consist of the following estimates, to the extent it is probable that such liabilities have been incurred and can be reasonably estimated: (i) the liability for asbestos claims already asserted against the Company; (ii) the liability for asbestos claims not yet asserted against the Company; and (iii) the legal defense costs estimated to be incurred in connection with the claims already asserted and those claims the Company believes will be asserted.

As noted above, 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. As part of its current annual comprehensive legal review, the Company provides historical claims filing data to a third party with expertise in determining the impact of disease incidence and mortality on future filing trends to develop information to assist the Company in estimating the total number of future claims to be filed. The Company uses this estimate of total future claims, along with an estimation of disposition costs and related legal costs, as inputs to develop its best estimate of its total probable liability. If the results of the annual comprehensive legal review indicate that the existing amount of the accrued liability is lower (higher) than its reasonably estimable asbestos-related costs, then the Company will record an appropriate charge (credit) to the Company's results of operations to increase (decrease) the accrued liability.

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;

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Tabular data dollars in millions, except per share amounts

- 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.

For the years ended December 31, 2016 and 2015, the Company concluded that accruals in the amounts of \$692 million and \$817 million, respectively, were required. These amounts have not been discounted for the time value of money. The Company's comprehensive legal reviews resulted in charges of \$0, \$16 million and \$46 million for the years ended December 31, 2016, 2015 and 2014, respectively.

The Company believes it is reasonably possible that it will incur a loss for its asbestos-related liabilities in excess of the amount currently recognized, which is \$692 million as of December 31, 2016. The Company estimates that reasonably possible losses could be as high as \$825 million. This estimate of additional reasonably possible loss reflects a legal judgment about the number and cost of potential future claims and legal costs. The Company believes this estimate is consistent with the level of variability it has experienced when comparing actual results to recent near-term projections. However, it is also possible that the ultimate asbestos-related liability could be above this estimate.

The Company expects a significant majority of the total number of claims to be received in the next ten years. This timeframe appropriately reflects the mortality of current and expected claimants in light of the Company's sale of its insulation business unit in 1958.

As noted above, the Company's asbestos-related liability is based on a projection of new claims that will eventually be filed against the Company and the estimated average disposition cost of these claims and related legal costs. Changes in these projections, and estimates, as well as changes in the significant assumptions noted above, have the potential to significantly impact the estimation of the Company's asbestos-related liability.

Other Matters

The Company's joint venture in China had been involved in litigation with its partner regarding whether the joint venture should be dissolved. Following an ownership change in 2016 with respect to the joint venture partner, this litigation has been withdrawn.

On July 5, 2016, the Company learned that the Enforcement Division of the SEC is conducting an investigation into certain accounting and control matters pertaining to the Company's determination of its asbestos-related liabilities. On May 13, 2016, the Company restated its consolidated financial statements for the years ended December 31, 2015, 2014 and 2013 in order to correct an error related to the Company's method for estimating its future asbestos-related liabilities. The Company is cooperating with the SEC's investigation. At this time, the Company is unable to predict the outcome of this matter or provide meaningful quantification of how the final resolution of this matter may impact its future consolidated financial statements, results of operations, or cash flows.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Tabular data dollars in millions, except per share amounts

Other litigation is pending against the Company, in many cases involving ordinary and routine claims incidental to the business of the Company and in others presenting allegations that are non-routine and involve compensatory, punitive or treble damage claims as well as other types of relief. The Company records a liability for such matters when it is both probable that the liability has been incurred and the amount of the liability can be reasonably estimated. Recorded amounts are reviewed and adjusted to reflect changes in the factors upon which the estimates are based, including additional information, negotiations, settlements and other events.

13. Accumulated Other Comprehensive Income (Loss)

The components of comprehensive income are: (a) net earnings; (b) change in fair value of certain derivative instruments; (c) pension and other postretirement benefit adjustments; and (d) foreign currency translation adjustments. The net effect of exchange rate fluctuations generally reflects changes in the relative strength of the U.S. dollar against major foreign currencies between the beginning and end of the year.

The following table lists the beginning balance, annual activity and ending balance of each component of accumulated other comprehensive income (loss):

	Net Effect of Exchange Rate Fluctuations			Change Certain erivative struments		mployee nefit Plans	(tal Accumulated Other Comprehensive Income (Loss)																														
Balance on January 1, 2015	\$	(55)	\$	(11)	\$	(1,428)	\$	(1,494)																														
Change before reclassifications		(513)		(4)		(58)		(575)																														
Amounts reclassified from accumulated other																																						
comprehensive income				(1)(a)(a) 83(b)		83(b)																															
Translation effect																																				(31)		(31)
Tax effect				(1)		2		1																														
Other comprehensive income (loss)																																						
attributable to the Company		(513)		(6)		(4)		(523)																														
Balance on December 31, 2015		(568)		(17)		(1,432)		(2,017)																														
Change before reclassifications		(220)		7		(2)		(215)																														
Amounts reclassified from accumulated other																																						
comprehensive income				6(a))	72(b		72(b)		72(b)		72(b)		78																								
Translation effect						(25)		(25)																														
Tax effect						15		15																														
Intraperiod tax allocation						(8)		(8)																														
Other comprehensive income (loss)								ii																														
attributable to the Company		(220)		13		52		(155)																														
Balance on December 31, 2016	\$	(788)	\$	(4)	\$	(1,380)	\$	(2,172)																														

⁽a) Amount is included in Cost of goods sold on the Consolidated Results of Operations (see Note 7 for additional information).

⁽b) Amount is included in the computation of net periodic pension cost and net postretirement benefit cost (see Note 9 for additional information).

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Tabular data dollars in millions, except per share amounts

14. Stock Options and Other Stock Based Compensation

The Company has various nonqualified plans approved by share owners under which it has granted stock options, restricted shares and performance vested restricted share units. At December 31, 2016, there were 5,081,000 shares available for grants under these plans. Total compensation cost for all grants of shares and units under these plans was \$15 million, \$15 million and \$21 million for the years ended December 31, 2016, 2015 and 2014, respectively.

Stock Options

In general, subject to change in control, options become exercisable 25% per year beginning on the first anniversary of grant. No options may be exercised in whole or in part during the first year after the date granted. In general, options expire following termination of employment or the seventh anniversary of the option grant. The fair value of options is amortized over the vesting periods which range from one to four years.

Stock option information at December 31, 2016 and for the year then ended is as follows:

	Number of Shares (thousands)	Weighted Average Exercise Price (per share)	Weighted Average Remaining Contractual Term (years)	Aggregate Intrinsic Value
Options outstanding at January 1, 2016	2,621	\$ 23.64		
Granted	1,098	15.10		
Exercised	(504)	10.13		
Forfeited or expired	(119)	21.24		
Options outstanding at December 31, 2016	3,096	22.91	4.2	\$ <u>3</u>
Options vested or expected to vest at December 31, 2016	3,096	\$ 22.91	2.3	\$ 3
Options exercisable at December 31, 2016	1,342	\$ 27.71	4.2	\$

Certain additional information related to stock options is as follows for the periods indicated:

	2016 2015			2014		
Weighted average grant-date fair value of options granted (per share)	\$ 4.98	\$	7.79	\$	13.17	
Aggregate intrinsic value of options exercised	\$ 2	\$		\$	3	
Aggregate cash received from options exercised.	\$ 5	\$	1	\$	5	

The fair value of each option grant is estimated on the date of grant using the Black-Scholes option pricing model using the following weighted average assumptions:

	2016	2015	2014
Expected life of options (years)	5.20	5.00	5.00
Expected stock price volatility	32.8%	34.5%	43.0%
Risk-free interest rate	1.5%	1.7%	1.6%
Expected dividend yield	0.0%	0.0%	0.0%

The expected life of options is determined from historical exercise and termination data. The expected stock price volatility is determined by reference to historical prices over a period equal to the expected life.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Tabular data dollars in millions, except per share amounts

Restricted Shares and Restricted Share Units

Shares granted after March 21, 2005 and prior to 2011, vest 25% per year beginning on the first anniversary and unvested shares are forfeited upon termination of employment. Restricted share units granted to employees after 2010 vest 25% per year beginning on the first anniversary. Holders of vested restricted share units receive one share of the Company's common stock for each unit as units vest. Granted but unvested restricted share units granted to directors vest after one year.

The fair value of the restricted shares and restricted share units is equal to the market price of the Company's common stock on the date of the grant. The fair value of restricted shares and restricted share units, is amortized over the vesting periods which range from one to four years.

The activity of restricted shares and restricted share units is as follows:

		Number of Restricted Shares (thousands)		Yeighted Werage Grant- Date ir Value er share)
Nonvested at January 1, 2016		672	\$	23.66
Granted		389		15.70
Vested		(215)		25.88
Forfeited		(10)		21.11
Nonvested at December 31, 2016		836		19.42
Awards granted during 2015			\$	22.69
Awards granted during 2014	• • •		\$	33.36
2	016	2015		2014
Total fair value of shares vested. \$	6	\$ 4	\$	5

Performance Vested Restricted Share Units

Performance vested restricted share units vest on January 1 of the third year following the year in which they are granted. Holders of vested units may receive up to 2 shares of the Company's common stock for each unit, depending upon the attainment of consolidated performance goals established by the Compensation Committee of the Company's Board of Directors. If minimum goals are not met, no shares will be issued. Granted but unvested restricted share units are forfeited upon termination of employment, unless certain retirement criteria are met.

The fair value of each performance vested restricted share unit is equal to the product of the fair value of the Company's common stock on the date of grant and the estimated number of shares into which the performance vested restricted share unit will be converted. The fair value of performance vested restricted share units is amortized ratably over the vesting period. Should the estimated number of shares into which the performance vested restricted share unit will be converted change, an adjustment will be recorded to recognize the accumulated difference in amortization between the revised and previous estimates.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Tabular data dollars in millions, except per share amounts

Performance vested restricted share unit activity is as follows:

	Number of Performance Vested Restricted Shares Units (thousands)		hted Average Date Fair Value per unit)
Nonvested at January 1, 2016	933	\$	26.80
Granted	726		15.10
Vested	(158)		26.10
Forfeited/Cancelled.	(146)		25.41
Nonvested at December 31, 2016	1,355		20.76
Awards granted during 2015		\$	23.63
Awards granted during 2014		\$	33.41

Approximately 158,000 shares were issued in 2016 with a fair value at issuance date of \$4 million related to performance vested restricted share units.

As of December 31, 2016, there was \$17 million of total unrecognized compensation cost related to all unvested stock options, restricted shares, restricted share units and performance vested restricted share units. That cost is expected to be recognized over a weighted average period of approximately two years.

15. Other Expense, net

Other expense, net for the years ended December 31, 2016, 2015 and 2014 included the following:

	2	2016	2	015	2	014
Restructuring, asset impairment and other charges	\$	104	\$	75	\$	68
Intangible amortization expense		39		21		1
Impairment of equity investment		25				
Charge for asbestos related costs				16		46
Gain on China land compensation		(71)				
Royalty income		(13)		(12)		(12)
Strategic transaction costs				23		
Acquisition-related fair value intangible adjustments				10		
Non-income tax charge						69
Foreign currency exchange loss (gain)		6		(10)		(2)
Other expense (income)		(14)		(12)		24
	\$	76	\$	111	\$	194

In 2016, the Company evaluated the future estimated earnings and cash flow of an equity investment and determined that it was other-than-temporarily impaired. As such, the Company recorded an impairment charge of \$25 million to reduce its carrying value down to its estimated fair value. The Company classified the significant assumptions used to determine the fair value of the impaired assets as Level 3 in the fair value hierarchy as set forth in the general accounting principles for fair value measurements.

In 2014, the Company recorded a charge of \$69 million resulting from a non-income tax assessment from a foreign tax authority.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Tabular data dollars in millions, except per share amounts

16. Operating Leases

Rent expense attributable to all warehouse, office buildings and equipment operating leases was \$80 million in 2016, \$72 million in 2015, and \$63 million in 2014. Minimum future rentals under operating leases are as follows: 2017, \$65 million; 2018, \$47 million; 2019, \$32 million; 2020, \$23 million; 2021, \$14 million; and 2022 and thereafter, \$24 million.

17. Earnings Per Share

The following table sets forth the computation of basic and diluted earnings per share:

	2016	2015	2014
Numerator:			
Net earnings attributable to the Company	<u>\$ 209</u>	<u>\$ 135</u>	<u>\$ 164</u>
Denominator (in thousands):			
Denominator for basic earnings per share-weighted average			
shares outstanding	161,857	161,169	164,720
Effect of dilutive securities:			
Stock options and other	968	966	1,327
Denominator for diluted earnings per share-adjusted weighted			
average shares outstanding	162,825	162,135	166,047
Basic earnings per share:			
Earnings from continuing operations	\$ 1.33	\$ 0.86	\$ 1.14
Loss from discontinued operations	(0.04)	(0.03)	(0.14)
Net earnings	\$ 1.29	\$ 0.83	\$ 1.00
Diluted earnings per share:			
Earnings from continuing operations	\$ 1.32	\$ 0.85	\$ 1.13
Loss from discontinued operations	(0.04)	(0.03)	(0.14)
Net earnings	\$ 1.28	\$ 0.82	\$ 0.99

Options to purchase 2,770,458, 1,937,315 and 1,143,933 weighted average shares of common stock which were outstanding during 2016, 2015 and 2014, respectively, were not included in the computation of diluted earnings per share because the options' exercise price was greater than the average market price of the common shares.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Tabular data dollars in millions, except per share amounts

18. Supplemental Cash Flow Information

Changes in the components of working capital related to operations (net of the effects related to acquisitions and divestitures) were as follows:

	2016		2015		2	2014
Decrease (increase) in current assets:						
Receivables	\$	(32)	\$	(14)	\$	59
Inventories		16		(13)		(26)
Prepaid expenses and other		145		(4)		(1)
Increase (decrease) in current liabilities:						
Accounts payable		(58)		100		103
Accrued liabilities		(31)		21		12
Salaries and wages		32		12		(3)
U.S. and foreign income taxes		18		(14)		(27)
	\$	90	\$	88	\$	117

The Company uses various factoring programs to sell certain receivables to financial institutions as part of managing its cash flows. At December 31, 2016 and 2015, the amount of receivables sold by the Company was \$318 million and \$317 million, respectively. Any continuing involvement with the sold receivables is immaterial.

	2016		2	015	2	2014
Interest paid in cash	\$	261	\$	227	\$	199
Income taxes paid in cash (all non-U.S)		99		101		101

Cash interest for the years ended December 31, 2016, 2015 and 2014 includes \$9 million, \$32 million and \$9 million of note repurchase premiums, respectively.

19. Business Combinations

On September 1, 2015, the Company completed the Vitro Acquisition in a cash transaction valued at approximately \$2.297 billion in cash, 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 and contributed approximately \$608 million of incremental net sales and \$122 million of incremental segment operating profit in the year ended December 31, 2016. 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 a senior notes offering, cash on hand and the incremental term loan facilities (see Note 11).

The total purchase price was allocated to the tangible and identifiable intangible assets and liabilities based upon their respective fair values. The purchase agreement contained customary provisions for working capital adjustments, which the Company resolved with the seller in the first quarter of 2016. The Company completed the purchase price allocation process in the third quarter of 2016. The following table summarizes the fair value

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Tabular data dollars in millions, except per share amounts

of the assets and liabilities assumed on September 1, 2015 and subsequent adjustments identified through the purchase price allocation process and recorded through the measurement period:

	September 1, 2015	Measurement Period Adjustments	September 30, 2016	
Cash	\$ 17	\$	\$ 17	
Other current assets	344	(10)	334	
Goodwill	1,073	(236)	837	
Customer list intangibles	406	202	608	
Net property, plant and equipment.	597	48	645	
Total assets	2,437	4	2,441	
Current liabilities	93	(7)	86	
Long-term debt	11		11	
Long-term liabilities	36	11	47	
Net assets acquired	\$ 2,297	\$	\$ 2,297	

The fair value of the tangible assets was estimated utilizing income and market approaches, considering remaining useful life. The customer list intangible asset includes the Company's established relationships with its customers and the ability of these customers to generate future economic profits for the Company. The value assigned to customer list intangibles is based on the present value of future earnings attributable to the asset group after recognition of required returns to other contributory assets.

Recognized goodwill is attributable to the assembled workforce, expected synergies and other intangible assets that do not qualify for separate recognition. The Vitro Acquisition goodwill is not deductible for tax purposes.

The balance sheet adjustments identified above did not result in any significant adjustments to the periods' income statements.

20. Pro Forma Information - Vitro Acquisition

Had the Vitro Acquisition, described in Note 19 and the related financing described in Note 11, occurred at the beginning of each respective period, unaudited pro forma consolidated net sales, earnings from continuing operations and earnings from continuing operations per share of common stock (diluted) would have been as follows:

	Year Ending December 31, 2015									
		As eported		uisition stments		ancing 1stments		o Forma Adjusted		
Net sales	\$	6,156	\$	574	\$		\$	6,730		
Earnings from continuing operations attributable to the Company	\$	139	\$	79	\$	(46)	\$	172		
Diluted earnings per share from continuing operations	\$	0.85					\$	1.06		

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Tabular data dollars in millions, except per share amounts

21. Discontinued Operations

On April 4, 2016, the annulment committee formed by the World Bank's International Centre for Settlement of Investment Disputes ("ICSID") ruled that a subsidiary of the Company is free to pursue the enforcement of a prior arbitration award against Venezuela. That award amounts to more than \$485 million after including interest from the date of the expropriation by Venezuela (October 26, 2010). Venezuela's application to annul the award is still pending, although the annulment proceedings were suspended in October 2016 because Venezuela has not paid its fees owed to ICSID. If the proceeding is stayed for non-payment for a consecutive period in excess of six months, ICSID's Secretary General could move that the committee discontinue the annulment proceeding altogether. The Company intends to take appropriate steps to vigorously enforce and collect the award, which is enforceable in approximately 150 member states that are party to the ICSID Convention. However, even with the lifting of the stay of enforcement, the Company recognizes that the collection of the award may present significant practical challenges. Because the award has yet to be satisfied and the annulment proceeding is pending, the Company is unable at this stage to reasonably predict the efforts that will be necessary to successfully enforce collection of the 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 \$7 million and \$4 million, for the years ended December 31, 2016 and 2015, respectively, 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 a purchaser of a previously disposed business, as well as ongoing costs related to the Venezuelan expropriation.

22. Financial Information for Subsidiary Guarantors and Non-Guarantors

The following presents condensed consolidating financial information for the Company, segregating: (1) Owens-Illinois, Inc., the issuer of senior debentures (the "Parent"); (2) the two subsidiaries which have guaranteed the senior debentures on a subordinated basis (the "Guarantor Subsidiaries"); and (3) all other subsidiaries (the "Non-Guarantor Subsidiaries"). The Guarantor Subsidiaries are 100% owned direct and indirect subsidiaries of the Company and their guarantees are full, unconditional and joint and several. They have no operations and function only as intermediate holding companies.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Tabular data dollars in millions, except per share amounts

Certain reclassifications have been made to conform all of the financial information to the financial presentation on a consolidated basis. The principal eliminations relate to investments in subsidiaries and intercompany balances and transactions.

	December 31, 2					016			
			Guarantor Non-Guaranto		Non-Guarantor			6	
Balance Sheet Current assets:	Parent	Subsid	diaries	Subsidiaries		Elii	minations	Cor	solidated
Cash and cash equivalents	\$ —	\$		\$ 4	92	\$		\$	492
Trade receivables, net	э —	Φ			580	φ		φ	492 580
Inventories)80)83				983
					99				199
Prepaid expenses and other current assets				1	.99				199
Total current assets				2,2	254				2,254
Investments in and advances to subsidiaries	1,198		946				(2,144)		_
Property, plant and equipment, net				2,8	880				2,880
Intangibles				4	64				464
Goodwill				2,4	62				2,462
Other assets)75				1,075
Total assets	\$ 1,198	\$	946	\$ 9,1	35	\$	(2,144)	\$	9,135
Current liabilities :									
Short-term loans and long-term debt due									
within one year	\$ —	\$		\$ 1	95	\$		\$	195
Current portion of asbestos liability	115								115
Accounts payable				1,1	35				1,135
Other liabilities	2				515		(2)		615
Total current liabilities	117			1,9	945		(2)		2,060
T / 11/	250			5.1	22		(250)		5 1 2 2
Long-term debt.	250			5,1	33		(250)		5,133
Asbestos-related liabilities	577								577
Other long-term liabilities					002		(1.0.0.5)		1,002
Share owners' equity	254		946		946		(1,892)		254
Noncontrolling interests				1	.09				109
Total liabilities and share owners' equity	\$ 1,198	\$	946	\$ 9,1	35	\$	(2,144)	\$	9,135

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

	December 31, 2015					
Balance Sheet			Non-Guarantor Subsidiaries	Eliminations	Consolidated	
Current assets:					Consolidated	
Cash and cash equivalents	\$ —	\$	\$ 399	\$	\$ 399	
Trade receivables, net			562		562	
Inventories			1,007		1,007	
Prepaid expenses and other current assets			366		366	
Total current assets			2,334		2,334	
Investments in and advances to subsidiaries	1,240	988		(2,228)	_	
Property, plant and equipment, net			2,961		2,961	
Intangibles			597		597	
Goodwill			2,489		2,489	
Other assets			1,040		1,040	
Total assets	\$ 1,240	\$ 988	\$ 9,421	<u>\$ (2,228</u>)	\$ 9,421	
Current liabilities :						
Short-term loans and long-term debt due						
within one year	\$ —	\$ —	\$ 228	\$	\$ 228	
Current portion of asbestos liability	130				130	
Accounts payable			1,212		1,212	
Other liabilities	2		552	(2)	552	
Total current liabilities	132		1,992	(2)	2,122	
Long-term debt.	250		5,345	(250)	5,345	
Asbestos-related liabilities	687				687	
Other long-term liabilities			988		988	
Share owners' equity	171	988	988	(1,976)	171	
Noncontrolling interests			108		108	
Total liabilities and share owners' equity	\$ 1,240	\$ 988	\$ 9,421	\$ (2,228)	\$ 9,421	
1 5					<u>_</u>	

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

	Year ended December 31, 2016											
Results of Operations	Parent	Guarantor Subsidiaries	Non-Guarantor Subsidiaries	Eliminations	Consolidated							
Net sales	\$	\$	\$ 6,702	\$	\$ 6,702							
Cost of goods sold			(5,490)		(5,490)							
Gross profit			1,212		1,212							
Selling and administrative expense Research, development and engineering			(503)		(503)							
expense			(65)		(65)							
Net intercompany interest	20		(20)		(00)							
Interest expense, net.	(20)		(252)		(272)							
Equity earnings from subsidiaries	209	209	(252)	(418)	(272)							
Other equity earnings	207	20)	60	(410)	60							
Other expense, net			(76)		(76)							
Other expense, het			(70)		(70)							
Earnings before income taxes	209	209	356	(418)	356							
Provision for income taxes	209	209		(410)								
Provision for income taxes			(119)		(119)							
Earnings from continuing operations	209	209	237	(418)	237							
Loss from discontinued operations	209	209	(7)	(110)	(7)							
			(i)		(')							
Net earnings	209	209	230	(418)	230							
Net earnings attributable to noncontrolling												
interests			(21)		(21)							
			()		~ /							
Net earnings attributable to the Company	\$ 209	\$ 209	\$ 209	\$ (418)	\$ 209							
		Yea	r ended December	31, 2016								
		Guarantor	Non-Guarantor									
Comprehensive Income	Parent	Subsidiaries	Subsidiaries	Eliminations	Consolidated							
Net earnings	\$ 209	\$ 209	\$ 230	\$ (418)	\$ 230							
Other comprehensive income (loss)	(176)	(176)	(159)	352	(159)							
Total comprehensive income (loss)	33	33	71	(66)	71							
Comprehensive income attributable to noncontrolling interests			(17)		(17)							
Comprehensive income (loss) attributable to												
the Company	<u>\$ 33</u>	<u>\$ 33</u>	\$ 54	\$ (66)	\$ 54							
1 2				/								

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

				Yea	r ended	December	31, 20	15				
Results of Operations	Par	Guarantor D Parent Subsidiaries			Guarantor sidiaries	Eliminations		Сог	solidated			
Net sales	\$		\$		\$	6,156	\$		\$	6,156		
Cost of goods sold						(5,046)				(5,046)		
Gross profit						1,110				1,110		
Selling and administrative expense Research, development and engineering						(476)				(476)		
expense						(64)				(64)		
Net intercompany interest		20				(20)				(04)		
Interest expense, net.		(20)				(231)				(251)		
Equity earnings from subsidiaries		151		151		(231)		(302)		(231)		
		131		131		(0		(302)				
Other equity earnings		(10)				60 (05)				60		
Other expense, net		(16)				(95)				(111)		
Earnings before income taxes		135		151		284		(302)		268		
Provision for income taxes.						(106)		× ,		(106)		
										()		
Earnings from continuing operations		135		151		178		(302)		162		
Loss from discontinued operations						(4)				(4)		
Net earnings Net earnings attributable to noncontrolling		135		151		174		(302)		158		
interests						(23)				(23)		
Net earnings attributable to the Company	\$	135	\$	151	\$	151	\$	(302)	\$	135		
	Year ended December 31, 2015											
			Gua	rantor	Non-Guarantor							
Comprehensive Income	Par	ent	Subs	idiaries	Sub	sidiaries	Elim	inations	Cor	isolidated		
Net earnings	\$	135	\$	151	\$	174	\$	(302)	\$	158		
Other comprehensive income (loss)	(:	546)		(546)		(539)		1,092		(539)		
-												
Total comprehensive income (loss)	(•	411)		(395)		(365)		790		(381)		
Comprehensive income attributable to noncontrolling interests						(7)				(7)		
Comprehensive income (loss) attributable to the Company	\$ (*	411)	\$	(395)	\$	(372)	\$	790	\$	(388)		
r	<u>·</u>	/			<u> </u>				-			

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

	Year ended December 31, 2014							
Results of Operations	Parent	Guarantor Subsidiaries	Non-Guarantor Subsidiaries	Eliminations	Consolidated			
Net sales	\$	\$	\$ 6,784	\$	\$ 6,784			
Cost of goods sold			(5,531)		(5,531)			
Gross profit			1,253		1,253			
Selling and administrative expense Research, development and engineering			(523)		(523)			
expense	20		(63)		(63)			
Net intercompany interest	20		(20)		(220)			
Interest expense, net.	(20)	210	(210)	(120)	(230)			
Equity earnings from subsidiaries	210	210		(420)				
Other equity earnings	(10)		64		64			
Other expense, net	(46)		(148)		(194)			
Earnings before income taxes	164	210	353	(420)	307			
Provision for income taxes			(92)		(92)			
	164	210	2(1	(420)	215			
Earnings from continuing operations	164	210	261	(420)	215			
Loss from discontinued operations			(23)		(23)			
Net earnings Net earnings attributable to noncontrolling	164	210	238	(420)	192			
interests			(28)		(28)			
Net earnings attributable to the Company	\$ 164	\$ 210	\$ 210	\$ (420)	\$ 164			
	<u> </u>	φ 210	φ 210	φ <u>(420</u>)	φ 104			
	Year ended December 31, 2014							
	_	Guarantor	Non-Guarantor					
Comprehensive Income	Parent	Subsidiaries	Subsidiaries	Eliminations	Consolidated			
Net earnings	\$ 164	\$ 210	\$ 238	\$ (420)				
Other comprehensive income (loss)	(401)	(401)	(394)	802	(394)			
Total comprehensive income (loss)	(237)	(191)	(156)	382	(202)			
Comprehensive income attributable to noncontrolling interests			(7)		(7)			
Comprehensive income (loss) attributable to the Company	\$ (227)	<pre>\$ (101)</pre>	\$ (163)	\$ 382	\$ (209)			
uie Company	<u>\$ (237</u>)	<u>\$ (191</u>)	<u>\$ (105</u>)	φ 302	<u>\$ (209</u>)			

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

	Year ended December 31, 2016											
Cash Flows	Parent		arantor sidiaries		-Guarantor bsidiaries	Elimin	ations	Cons	solidated			
Cash provided by (utilized in) operating activities Cash utilized in investing activities	\$ (125)	\$	_	\$	876 (417)	\$	_	\$	751 (417)			
Cash provided by (utilized in) financing activities	125				(353)				(228)			
Effect of exchange rate change on cash					(13)				(13)			
Net change in cash					93 399		_		93 399			
Cash at end of period	\$	\$		\$	492	\$		\$	492			

		Ye	ar ended December	ed December 31, 2015												
Cash Flows	Parent	Guarantor Subsidiaries	Non-Guarantor Subsidiaries	Eliminations	Consolidated											
Cash provided by (utilized in) operating activities Cash utilized in investing activities	\$ (138)	\$ —	\$	*	\$ 608 (2,748)											
Cash provided by financing activities	138		1,919		2,057											
Effect of exchange rate change on cash			(30)		(30)											
Net change in cash		_	(113) 512	_	(113) 512											
Cash at end of period	\$	\$	\$ 399	\$	\$ 399											

Cash Flows			Yea	r ended December 31, 2014												
	Parent	Guaran Subsidia			Guarantor sidiaries	Eliminations		Cons	solidated							
Cash provided by (utilized in) operating activities Cash utilized in investing activities	\$ (148)	\$		\$	823 (455)	\$		\$	675 (455)							
Cash provided by (utilized in) financing activities	148				(218)				(70)							
Effect of exchange rate change on cash					(21)				(21)							
Net change in cash					129				129							
Cash at beginning of period					383				383							
Cash at end of period	\$	\$		\$	512	\$		\$	512							

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Tabular data dollars in millions, except per share amounts

Selected Quarterly Financial Data (unaudited) The following tables present selected financial data by quarter for the years ended December 31, 2016 and 2015:

	2016					
	First	Second	Third	Fourth	Total	
	Quarter	Quarter	Quarter	Quarter	Year	
Net sales	<u>\$ 1,588</u>	<u>\$1,760</u>	\$ 1,712	\$ 1,642	\$ 6,702	
Gross profit	<u>\$ 319</u>	<u>\$ 342</u>	<u>\$ 336</u>	<u>\$ 215</u>	\$ 1,212	
Earnings (loss) from continuing operations attributable to						
the Company (a)	\$ 68	\$ 107	\$ 111	\$ (70)	\$ 216	
Loss from discontinued operations attributable to						
the Company	(1)	(2)	(3)	(1)	(7)	
Net earnings (loss) attributable to the Company	<u>\$ 67</u>	<u>\$ 105</u>	<u>\$ 108</u>	<u>\$ (71</u>)	<u>\$ 209</u>	
Earnings per share of common stock (a) (b):						
Basic:						
Earnings (loss) from continuing operations	\$ 0.42	\$ 0.66	\$ 0.68	\$ (0.43)	\$ 1.33	
Loss from discontinued operations	(0.01)	(0.01)	(0.02)	(0.01)	(0.04)	
Net earnings (loss)	\$ 0.41	\$ 0.65	\$ 0.66	\$ (0.44)	\$ 1.29	
Diluted:						
Earnings (loss) from continuing operations	\$ 0.42	\$ 0.65	\$ 0.68	\$ (0.43)	\$ 1.32	
Loss from discontinued operations	(0.01)	(0.01)	(0.02)	(0.01)	(0.04)	
Net earnings (loss)	\$ 0.41	\$ 0.64	\$ 0.66	\$ (0.44)	\$ 1.28	

(a) Amounts management considers not representative of ongoing operations include:

For the first quarter, included net charges totaling \$10 million after-tax amount attributable to the Company. The effect of these charges was a reduction in earnings per share of \$0.06.

For the fourth quarter, included net charges totaling \$150 million after-tax amount attributable to the Company. The effect of these charges was a reduction in earnings per share of \$0.93.

(b) Earnings per share are computed independently for each period presented. As such, the sums of the amounts calculated separately for each quarter do not equal the year-to-date amount.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Tabular data dollars in millions, except per share amounts

	2015									
	First		~~	econd			Fourth			Fotal
		Quarter		uarter			Quarter			Year
Net sales	\$	1,421	\$	1,543	<u>\$</u>	1,566		1,626	<u>\$</u>	6,156
Gross profit	\$	268	\$	274	\$	276	\$	292	<u>\$</u>	1,110
Earnings from continuing operations attributable to the										
Company (c)	\$	71	\$	42	\$	18	\$	8	\$	139
Loss from discontinued operations attributable to the										
Company				(2)		(1)		(1)		(4)
Net earnings attributable to the Company	\$	71	\$	40	\$	17	\$	7	\$	135
Earnings per share of common stock (c) (d) Basic:										
Earnings from continuing operations	\$	0.44	\$	0.26	\$	0.11	\$	0.05	\$	0.86
Loss from discontinued operations		—		(0.01)		(0.01)		(0.01)		(0.03)
Net earnings	\$	0.44	\$	0.25	\$	0.10	\$	0.04	\$	0.83
Diluted:										
Earnings from continuing operations	\$	0.44	\$	0.26	\$	0.11	\$	0.04	\$	0.85
Loss from discontinued operations				(0.01)		(0.01)		(0.01)		(0.03)
Net earnings	\$	0.44	\$	0.25	\$	0.10	\$	0.03	\$	0.82

(c) Amounts management considers not representative of ongoing operations include:

For the second quarter, included net charges totaling \$55 million after-tax amount attributable to the Company. The effect of these charges was a reduction in earnings per share of \$0.34.

For the third quarter, included net charges totaling \$75 million after-tax amount attributable to the Company. The effect of these charges was a reduction in earnings per share of \$0.46.

For the fourth quarter, included net charges totaling \$56 million after-tax amount attributable to the Company. The effect of these charges was a reduction in earnings per share of \$0.35.

(d) Earnings per share are computed independently for each period presented. As such, the sums of the amounts calculated separately for each quarter do not equal the year-to-date amount.

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

None.

ITEM 9A. CONTROLS AND PROCEDURES

Disclosure Controls and Procedures

The Company maintains disclosure controls and procedures that are designed to ensure that information required to be disclosed in the Company's Exchange Act reports is recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission's rules and forms and that such information is accumulated and communicated to the Company's management, including its Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure. In designing and evaluating the disclosure controls and procedures, management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives, and management is required to apply its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Also, the Company has investments in certain unconsolidated entities. As the Company does not control or manage these entities, its disclosure controls and procedures with respect to such entities are necessarily substantially more limited than those maintained with respect to its consolidated subsidiaries.

As required by Rule 13a-15(b) of the Exchange Act, the Company carried out an evaluation, under the supervision and with the participation of management, including its Chief Executive Officer and Chief Financial Officer, of the effectiveness of the Company's disclosure controls and procedures as of the end of the period covered by this report. Based on the foregoing, the Company's Chief Executive Officer and Chief Financial Officer concluded that the Company's disclosure controls and procedures were effective at the reasonable assurance level as of December 31, 2016.

Management's Report on Internal Control over Financial Reporting

The management of Owens-Illinois, Inc. is responsible for establishing and maintaining adequate internal control over financial reporting. The Company's internal control over financial reporting is designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles in the United States. However, all internal control systems, no matter how well designed, have inherent limitations. Therefore, even those systems determined to be effective can provide only reasonable assurance with respect to financial statement preparation and reporting.

Management assessed the effectiveness of the Company's internal control over financial reporting as of December 31, 2016. In making this assessment management used the criteria for effective internal control over financial reporting as described in "Internal Control—Integrated Framework" issued by the Committee of Sponsoring Organizations of the Treadway Commission (the COSO framework) in 2013.

Based on this assessment, using the criteria above, management concluded that the Company's system of internal control over financial reporting was effective as of December 31, 2016.

The Company's independent registered public accounting firm, Ernst & Young LLP, that audited the Company's consolidated financial statements, has issued an attestation report on the Company's internal control over financial reporting which is included below.

Remediation of Previously Disclosed Material Weakness

In 2016, the Company completed several changes to its internal control over financial reporting and remediated the previously reported material weakness. A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting such that there is a reasonable possibility that a material misstatement of the Company's annual or interim financial statements will not be prevented or detected on a timely basis. In its Amendment No. 1 to Annual Report on Form 10-K/A for the year ended December 31, 2015, management reported a material weakness in the Company's design of its control activities for the estimation of liabilities related to probable losses for unasserted asbestos claims. Specifically, the Company did not have sufficient controls in place to provide reasonable assurance that a material error would be prevented or detected related to the application of ASC 450 to the estimation of probable losses from unasserted asbestos claims.

The following changes were made to the Company's internal control over financial reporting:

- 1. Established new policies, procedures and controls for the review, approval and application of generally accepted accounting principles related to, and disclosure with respect to, unasserted asbestos claims.
- 2. As a result of the new controls discussed above, the Company made certain process changes regarding the estimation of its probable asbestos-related liability. This included implementing a new model with actuarial inputs to estimate the total number of future asbestos-related claims to be filed against the Company.
- 3. The Company uses the estimate of total future claims, along with an estimation of related disposition costs and legal costs, as inputs to develop its best estimate of its probable asbestos-related liability.

The Company has completed the redesign of its controls related to estimating liabilities of probable losses for unasserted asbestos claims. The Company has assessed both the design and operation of the redesigned controls and found them to be both designed and operating effectively. The Company has determined that the remediation activities implemented are sufficient to allow it to conclude that the previously disclosed material weakness related to estimating liabilities of probable losses for unasserted asbestos claims has been remediated as of December 31, 2016.

Changes in Internal Control over Financial Reporting

As required by Rule 13a-15(d) of the Exchange Act, the Company carried out an evaluation, under the supervision and with the participation of management, including its Chief Executive Officer and Chief Financial Officer, of any change in the Company's internal control over financial reporting that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting.

Other than as described above in "Remediation of Previously Disclosed Material Weakness," there were no changes in the Company's internal control over financial reporting during the quarter ended December 31, 2016 that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The Board of Directors and Share Owners of Owens-Illinois, Inc.

We have audited Owens-Illinois, Inc.'s internal control over financial reporting as of December 31, 2016, based on criteria established in Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the COSO criteria). Owens-Illinois, Inc.'s management is responsible for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying Management's Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the company's internal control over financial reporting based on our audit.

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

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

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

In our opinion, Owens-Illinois, Inc. maintained, in all material respects, effective internal control over financial reporting as of December 31, 2016, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated balance sheets of Owens-Illinois, Inc. as of December 31, 2016 and 2015, 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, 2016 and our report dated February 10, 2017 expressed an unqualified opinion thereon.

/s/ Ernst & Young LLP Toledo, Ohio February 10, 2017

ITEM 9B. OTHER INFORMATION

None.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

Information with respect to non-officer directors and corporate governance is included in the 2017 Proxy Statement in the sections entitled "Election of Directors" and "Section 16(a) Beneficial Ownership Reporting Compliance" and such information is incorporated herein by reference.

Information with respect to executive officers is included herein in Item 1.

Code of Business Conduct and Ethics

The Company's Global Code of Business Conduct and Ethics, which is applicable to all directors, officers and employees of the Company, including the principal executive officer, the principal financial officer and the principal accounting officer, is available on the Investor Relations section of the Company's web site (www.o-i. com). A copy of the Code is also available in print to share owners upon request, addressed to the Corporate Secretary at Owens-Illinois, Inc., One Michael Owens Way, Perrysburg, Ohio 43551. The Company intends to post amendments to or waivers from its Code of Business Conduct and Ethics (to the extent applicable to the Company's directors, executive officers or principal financial officers) at this location on its web site.

ITEM 11. EXECUTIVE COMPENSATION

The section entitled "Executive Compensation," exclusive of the subsection entitled "Board Compensation Committee Report," which is included in the 2017 Proxy Statement, is incorporated herein by reference.

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

The section entitled "Security Ownership of Certain Beneficial Owners and Management" which is included in the 2017 Proxy Statement is incorporated herein by reference.

The following table summarizes securities authorized for issuance under equity compensation plans as of December 31, 2016.

	Equity Compensation Plan Information							
	(a)	(b)	(c) Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a)) (thousands)					
Plan Category	Number of securities to be issued upon exercise of outstanding options, warrants and rights(1) (thousands)	Weighted-average exercise price of outstanding options, warrants and rights						
Equity compensation plans approved by security holders	3,096	\$ 22.91	5,081					
Equity compensation plans not approved by security holders								
Total	3,096	\$ 22.91	5,081					

(1) Represents options to purchase shares of the Company's common stock. There are no outstanding warrants or rights.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

The section entitled "Director and Executive Compensation and Other Information," exclusive of the subsection entitled "Board Compensation Committee Report on Executive Compensation," which is included in the 2017 Proxy Statement, is incorporated herein by reference.

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

Information with respect to principal accountant fees and services is included in the 2017 Proxy Statement in the section entitled "Independent Registered Public Accounting Firm" and such information is incorporated herein by reference.

PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

FINANCIAL STATEMENTS AND FINANCIAL STATEMENT SCHEDULES

Index of Financial Statements and Financial Statement Schedules Covered by Report of Independent Auditors.

(a) DOCUMENTS FILED AS PART OF THIS REPORT

- 1. See Index to Consolidated Financial Statements on page 47 hereof.
- 2. See Quarterly Results (Unaudited) beginning on page 100 hereof.
- 3. Financial Statement Schedule:

	10-K Page
For the years ended December 31, 2016, 2015, and 2014:	
II—Valuation and Qualifying Accounts (Consolidated)	S-1
All other schedules have been omitted since the required information is not present or not	
present in amounts sufficient to require submission of the schedule.	
(ii) Separate Financial Statements of Affiliates Whose Securities Are Pledged As Collateral	114
4 See Exhibit Index beginning on more 100 horsef	

4. See Exhibit Index beginning on page 109 hereof.

EXHIBIT INDEX

S-K Item 601 No.		Document
2.1		Stock Purchase Agreement, dated as of May 12, 2015, by and between Owens- Brockway Glass Container Inc. and Vitro, S.A.B. de C.V., Distribuidora Alcali, S.A. de C.V. and Vitro Packaging, LLC (filed as Exhibit 2.1 to the Owens-Illinois, Inc.'s Form 8-K/A filed on May 13, 2015, File No. 1-9576, and incorporated herein by reference).
3.1		Third Restated Certificate of Incorporation of Owens-Illinois, Inc. (filed as Exhibit 3.1 to Owens-Illinois, Inc.'s Form 10-K for the year ended December 31, 2012, File No. 1-9576, and incorporated herein by reference).
3.2		Third Amended and Restated Bylaws of Owens-Illinois, Inc., (filed as Exhibit 3.1 to Owens-Illinois, Inc.'s Form 8-K dated April 23, 2009, File No. 1-9576, and incorporated herein by reference).
4.1	_	Indenture dated as of May 20, 1998, between Owens-Illinois, Inc. and The Bank of New York, as Trustee (filed as Exhibit 4.1 to Owens-Illinois, Inc.'s Form 8-K dated May 20, 1998, File No. 1-9576, and incorporated herein by reference).
4.2		Officers' Certificate, dated May 20, 1998, establishing the terms of the 7.80% Senior Notes due 2018; including the Form of 7.80% Senior Note due 2018 (filed as Exhibits 4.5 and 4.9, respectively, to Owens-Illinois, Inc.'s Form 8-K dated May 20, 1998, File No. 1-9576, and incorporated herein by reference).
4.3		Supplemental Indenture, dated as of June 26, 2001 among Owens-Illinois, Inc., Owens-Illinois Group, Inc., Owens-Brockway Packaging, Inc. and The Bank of New York, as Trustee (May 20, 1998 Indenture) (filed as Exhibit 4.1 to Owens-Illinois Inc.'s Form 10-Q for the quarter ended September 30, 2001, File No. 1-9576, and incorporated herein by reference).
4.4	_	Indenture, dated as of September 15, 2010, by and among OI European Group B.V.; the guarantors party thereto; Deutsche Trustee Company Limited as trustee; Deutsche Bank AG, London Branch as principal paying agent and transfer agent; and Deutsche Bank Luxembourg S.A. as the registrar, Luxembourg paying agent and transfer agent, including the form of the Senior Notes (filed as Exhibit 4.1 to Owens-Illinois Group, Inc.'s Form 8-K dated September 10, 2010, File No. 33-13061, and incorporated herein by reference).
4.5		Indenture dated as of March 22, 2013, by and among OI European Group B.V.; the guarantors party thereto; Deutsche Trustee Company Limited as trustee; Deutsche Bank AG, London Branch as principal paying agent and transfer agent; and Deutsche Bank Luxembourg S.A. as the registrar and Luxembourg transfer agent, including the form of Notes (filed as Exhibit 4.1 to Owens-Illinois Group, Inc.'s Form 8-K dated March 22, 2013, File No. 33-13061, and incorporated herein by reference).
4.6	_	Indenture dated as of December 3, 2014, by and among Owens-Brockway Glass Container Inc., the guarantors party thereto and U.S. Bank National Association, as trustee, including the form of 2022 Senior Notes and the form of 2025 Senior Notes (filed as Exhibit 4.1 to Owens-Illinois Group, Inc.'s Form 8-K dated December 3, 2014, File No. 33-13061, and incorporated herein by reference).
4.7		Indenture dated as of August 24, 2015, by and among Owens-Brockway Glass Container Inc., the guarantors party thereto and U.S. Bank National Association, as trustee, including the form of 2023 Senior Notes and the form of 2025 Senior Notes (filed as Exhibit 4.1 to Owens-Illinois Group, Inc.'s Form 8-K dated August 24, 2015, File No. 33-13061, and incorporated herein by reference).

S-K Item 601 No.	Document
4.8	Indenture, dated as of November 3, 2016, by and among OI European Group B.V., the guarantors party thereto, Deutsche Trustee Company Limited, as trustee, Deutsche Bank AG, London Branch, as principal paying agent and transfer agent, and Deutsche Bank Luxembourg S. A., as Luxembourg transfer agent and registrar, including the form of Notes (filed as Exhibit 4.1 to Owens-Illinois, Inc.'s and Owens-Illinois Group, Inc.'s combined Form 8-K dated November 3, 2016, File Nos. 1-9576 and 33-13061, and incorporated herein by reference).
4.9	— Amended and Restated Credit Agreement and Syndicated Facility Agreement, dated as of April 22, 2015, by and among the Borrowers named therein, Owens-Illinois General, Inc., as Borrowers' Agent, Deutsche Bank AG, New York Branch, as Administrative Agent, and the other Agents, Arrangers and Lenders named therein (filed as Exhibit 4.1 to Owens-Illinois Group, Inc.'s Form 8-K dated April 22, 2015, File No. 33-13061, and incorporated herein by reference).
4.10	— Amendment No. 1, dated July 24, 2015, to the Amended and Restated Credit Agreement and Syndicated Facility Agreement, dated April 22, 2015, by and among the Borrowers named therein, Owens-Illinois General Inc., as Borrowers' Agent, Deutsche Bank AG, New York Branch, as Administrative Agent, and the other Agents, Arrangers and Lenders named therein (filed as Exhibit 4.2 to Owens-Illinois Inc.'s Form 10-Q for the quarter ended September 30, 2015, File No. 1-9576, and incorporated herein by reference).
4.11	— Amendment No. 2, dated September 1, 2015, to the Amended and Restated Credit Agreement and Syndicated Facility Agreement, dated April 22, 2015, by and among the Borrowers named therein, Owens-Illinois General Inc., as Borrowers' Agent, Deutsche Bank AG, New York Branch, as Administrative Agent, and the other Agents, Arrangers and Lenders named therein (filed as Exhibit 10.1 to Owens-Illinois Inc.'s Form 8-K dated September 1, 2015, File No. 1-9576, and incorporated herein by reference).
4.12	— Amendment No. 3, dated September 29, 2015, to the Amended and Restated Credit Agreement and Syndicated Facility Agreement, dated April 22, 2015, by and among the Borrowers named therein, Owens-Illinois General Inc., as Borrowers' Agent, Deutsche Bank AG, New York Branch, as Administrative Agent, and the other Agents, Arrangers and Lenders named therein (filed as Exhibit 4.4 to Owens-Illinois Inc.'s Form 10-Q for the quarter ended September 30, 2015, File No. 1-9576, and incorporated herein by reference).
4.13	 Amendment No. 4, dated February 3, 2016, to the Amended and Restated Credit Agreement and Syndicated Facility Agreement, dated as of April 22, 2015, by and among the Borrowers named therein, Owens-Illinois General, Inc., as Borrowers' Agent, Deutsche Bank AG, New York Branch, as Administrative Agent, and the other Agents, Arrangers and Lenders named therein (filed as Exhibit 4.1 to Owens-Illinois, Inc.'s Form 8-K dated February 3, 2016, File No. 1-9576, and incorporated herein by reference).
4.14	 First Incremental Amendment, dated September 1, 2015, to the Amended and Restated Credit Agreement and Syndicated Facility Agreement, dated April 22, 2015, by and among the Borrowers named therein, Owens-Illinois General Inc., as Borrowers' Agent, Deutsche Bank AG, New York Branch, as Administrative Agent, and the other Agents, Arrangers and Lenders named therein (filed as Exhibit 10.2 to Owens-Illinois Inc.'s Form 8-K dated September 1, 2015, File No. 1-9576, and incorporated herein by reference).

S-K Item 601 No.		Document
4.15		Third Amended and Restated Intercreditor Agreement, dated as of May 19, 2011, by and among Deutsche Bank AG, New York Branch, as Administrative Agent for the lenders party to the Credit Agreement (as defined therein) and Deutsche Bank Trust Company Americas, as Collateral Agent (as defined therein) and any other parties thereto (filed as Exhibit 4.2 to Owens-Illinois Group, Inc.'s Form 8-K dated May 19, 2011, File No. 33-13061, and incorporated herein by reference).
4.16	_	Fourth Amended and Restated Pledge Agreement, dated as of April 22, 2015, between Owens-Illinois Group, Inc., Owens-Brockway Packaging, Inc., and Deutsche Bank AG, New York Branch, as Collateral Agent (as defined therein) and any other parties thereto (filed as Exhibit 4.2 to Owens-Illinois Group, Inc.'s Form 8-K dated April 22, 2015, File No. 33-13061, and incorporated herein by reference).
4.17		Amended and Restated Security Agreement, dated as of April 22, 2015, between Owens- Illinois Group, Inc., each of the direct and indirect subsidiaries of Owens-Illinois Group, Inc. signatory thereto, and Deutsche Bank AG, New York Branch, as Collateral Agent (as defined therein) (filed as Exhibit 4.3 to Owens-Illinois Group, Inc.'s Form 8-K dated April 22, 2015, File No. 33-13061, and incorporated herein by reference).
10.1*	—	Amended and Restated Owens-Illinois Supplemental Retirement Benefit Plan (filed as Exhibit 10.1 to Owens-Illinois, Inc.'s Form 10-Q for the quarter ended June 30, 1998, File No. 1-9576, and incorporated herein by reference).
10.2*		First Amendment to Amended and Restated Owens-Illinois Supplemental Retirement Benefit Plan (filed as Exhibit 10.3 to Owens-Illinois, Inc.'s Form 10-K for the year ended December 31, 2000, File No. 1-9576, and incorporated herein by reference).
10.3*	_	Second Amendment to Amended and Restated Owens-Illinois Supplemental Retirement Benefit Plan (filed as Exhibit 10.1 to Owens-Illinois, Inc.'s Form 10-Q for the quarter ended March 31, 2002, File No. 1-9576, and incorporated herein by reference).
10.4*	—	Third Amendment to Amended and Restated Owens-Illinois Supplemental Retirement Benefit Plan (filed as Exhibit 10.1 to Owens-Illinois, Inc.'s Form 10-Q for the quarter ended March 31, 2003, File No. 1-9576, and incorporated herein by reference).
10.5*		Owens-Illinois, Inc. Directors Deferred Compensation Plan (filed as Exhibit 10.26 to Owens-Illinois, Inc.'s Form 10-K for the year ended December 31, 1995, File No. 1-9576, and incorporated herein by reference).
10.6*	_	First Amendment to Owens-Illinois, Inc. Directors Deferred Compensation Plan (filed as Exhibit 10.27 to Owens-Illinois, Inc.'s Form 10-K for the year ended December 31, 1995, File No. 1-9576, and incorporated herein by reference).
10.7*	_	Second Amendment to Owens-Illinois, Inc. Directors Deferred Compensation Plan (filed as Exhibit 10.2 to Owens-Illinois, Inc.'s Form 10-Q for the quarter ended March 31, 1997, File No. 1-9576, and incorporated herein by reference).
10.8*	_	Amended and Restated 1997 Equity Participation Plan of Owens-Illinois, Inc. (filed as Exhibit 10.1 to Owens-Illinois, Inc.'s Form 10-Q for the quarter ended June 30, 1999, File No. 1-9576, and incorporated herein by reference).
10.9*	_	First Amendment to Amended and Restated 1997 Equity Participation Plan of Owens- Illinois, Inc. (filed as Exhibit 10.1 to Owens-Illinois, Inc.'s Form 10-Q for the quarter ended June 30, 2002, File No. 1-9576, and incorporated herein by reference).
10.10*		Owens-Illinois, Inc. Executive Deferred Savings Plan (filed herewith).
10.11*		2004 Equity Incentive Plan for Directors of Owens-Illinois, Inc. (filed as Exhibit 10.1 to Owens-Illinois, Inc.'s Form 10-Q for the quarter ended June 30, 2004, File No. 1-9576, and incorporated herein by reference).
10.12*		Owens-Illinois 2004 Executive Life Insurance Plan (filed as Exhibit 10.32 to Owens- Illinois, Inc.'s Form 10-K for the year ended December 31, 2004, File No. 1-9576, and incorporated herein by reference).

S-K Item 601 No.		Document
10.13*		Owens-Illinois 2004 Executive Life Insurance Plan for Non-U.S. Employees (filed as Exhibit 10.33 to Owens-Illinois, Inc.'s Form 10-K for the year ended December 31, 2004, File No. 1-9576, and incorporated herein by reference).
10.14*		Amended and Restated Owens-Illinois, Inc. 2005 Incentive Award Plan dated as of April 24, 2009 (filed as Exhibit 10.1 to Owens-Illinois, Inc.'s Form 10-Q for the quarter ended March 31, 2009, File No. 1-9576, and incorporated herein by reference).
10.15*		Form of Non-Qualified Stock Option Agreement for use under the Owens-Illinois, Inc. 2005 Incentive Award Plan (filed as Exhibit 10.25 to Owens-Illinois, Inc.'s Form 10-K for the year ended December 31, 2011, File No. 1-9576, and incorporated herein by reference).
10.16*		Form of Restricted Stock Agreement for use under the Owens-Illinois, Inc. 2005 Incentive Award Plan (filed as Exhibit 10.30 to Owens-Illinois, Inc.'s Form 10-K for the year ended December 31, 2005, File No. 1-9576, and incorporated herein by reference).
10.17*		Form of Phantom Stock Agreement for use under the Owens-Illinois, Inc. 2005 Incentive Award Plan (filed as Exhibit 10.31 to Owens-Illinois, Inc.'s Form 10-K for the year ended December 31, 2005, File No. 1-9576, and incorporated herein by reference).
10.18*		Form of Restricted Stock Unit Agreement for use under the Owens-Illinois, Inc. 2005 Incentive Award Plan (filed as Exhibit 10.28 to Owens-Illinois, Inc.'s Form 10-K for the year ended December 31, 2011, File No. 1-9576, and incorporated herein by reference).
10.19*		Form of Performance Share Unit Agreement for use under the Owens-Illinois, Inc. 2005 Incentive Award Plan (filed as Exhibit 10.29 to Owens-Illinois, Inc.'s Form 10-K for the year ended December 31, 2011, File No. 1-9576, and incorporated herein by reference).
10.20*	—	Amended and restated letter agreement between Owens-Illinois, Inc. and Albert P.L. Stroucken (filed as Exhibit 10.1 to Owens-Illinois, Inc.'s Form 8-K dated October 26, 2011, File No. 1-9576, and incorporated herein by reference).
10.21*		Second Amended and Restated Owens-Illinois, Inc. 2005 Incentive Award Plan (filed as Appendix B to Owens-Illinois, Inc.'s Definitive Proxy Statement on Schedule 14A filed March 31, 2014, File No. 1-9576, and incorporated herein by reference).
10.22*		Form of Non-Qualified Stock Option Agreement for use under Owens-Illinois, Inc.'s Second Amended and Restated 2005 Incentive Award Plan (filed as Exhibit 10.1 to Owens-Illinois, Inc.'s Form 8-K dated March 7, 2015, File No. 1-9576, and incorporated herein by reference).
10.23*		Form of Restricted Stock Unit Agreement for use under Owens-Illinois, Inc.'s Second Amended and Restated 2005 Incentive Award Plan (filed as Exhibit 10.2 to Owens- Illinois, Inc.'s Form 8-K dated March 7, 2015, File No. 1-9576, and incorporated herein by reference).
10.24*		Form of Performance Stock Unit Agreement for use under Owens-Illinois, Inc.'s Second Amended and Restated 2005 Incentive Award Plan (filed as Exhibit 10.3 to Owens-Illinois, Inc.'s Form 8-K dated March 7, 2015, File No. 1-9576, and incorporated herein by reference).
10.25*	—	Owens-Illinois, Inc. Executive Severance Policy (filed as Exhibit 10.4 to Owens-Illinois, Inc.'s Form 8-K dated March 7, 2015, File No. 1-9576, and incorporated herein by reference).
10.26*		Letter Agreement dated March 7, 2015, between Owens-Illinois, Inc. and Stephen P. Bramlage, Jr. (filed as Exhibit 10.5 to Owens-Illinois, Inc.'s Form 8-K dated March 7, 2015, File No. 1-9576, and incorporated herein by reference).
10.27*		Letter Agreement signed November 20, 2015, between Owens-Illinois, Inc. and Jan Bertsch (filed as Exhibit 10.1 to Owens-Illinois, Inc.'s Form 8-K dated November 23, 2015, File No. 1-9576, and incorporated herein by reference).

S-K Item 601 No.		Document
10.28*		Letter Agreement dated March 7, 2016, between Owens-Illinois, Inc. and James W.
		Baehren (filed as Exhibit 10.1 to Owens-Illinois, Inc.'s Form 8-K dated March 7, 2016,
		File No. 1-9576, and incorporated herein by reference).
12		Computation of Ratio of Earnings to Fixed Charges (filed herewith).
21		Subsidiaries of Owens-Illinois, Inc. (filed herewith).
23		Consent of Independent Registered Public Accounting Firm (filed herewith).
24		Owens-Illinois, Inc. Power of Attorney (filed herewith).
31.1		Certification of Principal Executive Officer pursuant to Section 302 of the
		Sarbanes-Oxley Act of 2002 (filed herewith).
31.2	—	Certification of Principal Financial Officer pursuant to Section 302 of the
		Sarbanes-Oxley Act of 2002 (filed herewith).
32.1**		Certification of Principal Executive Officer pursuant to 18 U.S.C. Section 1350
		(furnished herewith).
32.2**	—	Certification of Principal Financial Officer pursuant to 18 U.S.C. Section 1350
		(furnished herewith).
101	—	Financial statements from the Annual Report on Form 10-K of Owens-Illinois, Inc. for
		the year ended December 31, 2016, formatted in XBRL: (i) the Consolidated Results of
		Operations, (ii) the Consolidated Comprehensive Income, (iii) the Consolidated Balance
		Sheets, (iv) the Consolidated Share Owners' Equity, (v) the Consolidated Cash Flows
		and (vi) the Notes to Consolidated Financial Statements.

* Indicates a management contract or compensatory plan or arrangement required to be filed as an exhibit to this form pursuant to Item 15(c).

ITEM 16. FORM 10-K SUMMARY

None.

^{**} This exhibit shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, and is not incorporated by reference into any filing of the Company, whether made before or after the date hereof, regardless of any general incorporation language in such filing.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The Board of Directors and Share Owner of Owens-Brockway Packaging, Inc.

We have audited the accompanying consolidated balance sheets of Owens-Brockway Packaging, Inc. (the Company) as of December 31, 2016 and 2015, and the related consolidated statements of results of operations, comprehensive income, share owner's equity and cash flows for each of the three years in the period ended December 31, 2016. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements 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. We were not engaged to perform an audit of the Company's internal control over financial reporting. Our audits included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. 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-Brockway Packaging, Inc. at December 31, 2016 and 2015, and the consolidated results of its operations and its cash flows for each of the three years in the period ended December 31, 2016, in conformity with U.S. generally accepted accounting principles

/s/ Ernst & Young LLP Toledo, Ohio February 10, 2017

CONSOLIDATED RESULTS OF OPERATIONS

Years ended December 31,	2016	2015		2014
Net sales	\$ 6,702	\$	6,156	\$ 6,784
Cost of goods sold	(5,387)		(5,060)	(5,523)
Gross profit	1,315		1,096	1,261
Selling and administrative expense	(411)		(389)	(412
Research, development and engineering expense	(65)		(64	(63)
Equity earnings	60		60	64
Interest expense, net	(253)		(232)	(210)
Other expense, net	(78)		(77)	(138)
Earnings from continuing operations before income taxes	568		394	502
Provision for income taxes	(123)		(101)	(93)
Earnings from continuing operations	445		293	 409
Loss from discontinued operations	(7)		(4)	(4)
Net earnings	438		289	405
Net earnings attributable to noncontrolling interests	(21)		(23)	(28)
Net earnings attributable to the Company	\$ 417	\$	266	\$ 377
Amounts attributable to the Company:				
Earnings from continuing operations	\$ 424	\$	270	\$ 381
Loss from discontinued operations	 (7)		(4)	 (4)
Net earnings	\$ 417	\$	266	\$ 377

CONSOLIDATED COMPREHENSIVE INCOME

Dollars in millions

Years ended December 31,		2016		2015		2014	
Net earnings	\$	438	\$	289	\$	405	
Other comprehensive income (loss):							
Foreign currency translation adjustments		(224)		(529)		(305)	
Pension and other postretirement benefit adjustments, net of tax		(38)		13		112	
Change in fair value of derivative instruments, net of tax		13		(6)		1	
Other comprehensive loss		(249)		(522)		(192)	
Total comprehensive income (loss)		189		(233)		213	
Comprehensive income attributable to noncontrolling interests		(17)		(7)		(7)	
Comprehensive income (loss) attributable to the Company	\$	172	\$	(240)	\$	206	

See accompanying Notes to the Consolidated Financial Statements.

CONSOLIDATED BALANCE SHEETS

December 31,		2016		2015	
Assets					
Current assets:					
Cash and cash equivalents Trade receivables, net of allowances of \$32 million and \$29 million at	\$	465	\$	394	
December 31, 2016 and 2015, respectively		580		562	
Inventories		983		1,007	
Prepaid expenses and other current assets		183		352	
Total current assets		2,211		2,315	
Other assets:					
Equity investments		433		409	
Pension assets		40		32	
Other assets		538		527	
Intangibles		464		597	
Goodwill		2,462		2,489	
Total other assets		3,937		4,054	
Property, plant and equipment:					
Land, at cost		237		248	
Buildings and equipment, at cost:					
Buildings and building equipment		1,048		1,080	
Factory machinery and equipment		4,491		4,520	
Transportation, office and miscellaneous equipment		66		68	
Construction in progress		237		236	
Net property, plant and equipment		6,079		6,152	
Less accumulated depreciation		3,224		3,221	
Net property, plant and equipment		2,855		2,931	
Total assets	<u>\$</u>	9,003	<u>\$</u>	9,300	

CONSOLIDATED BALANCE SHEETS (Continued)

December 31,		2015		
Liabilities and Share Owner's Equity				
Current liabilities:				
Accounts payable including amount to related parties of \$7 million and				
\$3 million at December 31, 2016 and 2015, respectively	\$ 1,124	\$ 1,200		
Salaries and wages	156	139		
U.S. and foreign income taxes	58	34		
Other accrued liabilities	330	332		
Short-term loans	162	160		
Long-term debt due within one year	32	67		
Total current liabilities	1,862	1,932		
External long-term debt	4,876	5,087		
Deferred taxes	144	200		
Pension benefits	257	224		
Nonpension postretirement benefits	78	66		
Other liabilities	174	186		
Share owner's equity:				
Investment by and advances from Parent	2,562	2,311		
Accumulated other comprehensive loss	(1,059)	(814)		
Total share owner's equity of the Company	1,503	1,497		
Noncontrolling interests	109	108		
Total share owner's equity	1,612	1,605		
Total liabilities and share owner's equity	\$ 9,003	\$ 9,300		

CONSOLIDATED SHARE OWNER'S EQUITY

	Adva	nent by and nces from Parent	O Compr	nulated ther cehensive e (Loss)	No contr Inte	olling	0	al Share wner's Equity
Balance on January 1, 2014	\$	2,305	\$	(137)	\$	147	\$	2,315
Net intercompany transactions		(274)						(274)
Net earnings		377				28		405
Other comprehensive loss				(171)		(21)		(192)
Distributions to noncontrolling interests						(37)		(37)
Balance on December 31, 2014		2,408		(308)		117		2,217
Net intercompany transactions		(345)						(345)
Net earnings		266				23		289
Other comprehensive loss				(506)		(16)		(522)
Distributions to noncontrolling interests						(22)		(22)
Acquisitions of noncontrolling interests		(18)				6		(12)
Balance on December 31, 2015		2,311		(814)		108		1,605
Net intercompany transactions		(166)						(166)
Net earnings		417				21		438
Other comprehensive loss				(245)		(4)		(249)
Distributions to noncontrolling interests						(16)		(16)
Balance on December 31, 2016	\$	2,562	\$	(1,059)	\$	109	\$	1,612

CONSOLIDATED CASH FLOWS

Years ended December 31,	2016		2015	 2014	
Operating activities:					
Net earnings	\$ 43	8	\$ 289	\$ 405	
Loss from discontinued operations		7	4	4	
Non-cash charges (credits):					
Depreciation	37	1	319	331	
Amortization of intangibles and other deferred items	9	6	77	75	
Amortization of finance fees and debt discount	1	3	14	20	
Deferred tax provision (benefit)	(8)	7	(18)	
Restructuring, asset impairment and related charges	9	6	63	76	
Non-income tax charge				69	
Gain on China land sale	(7	1)			
Impairment of equity investment	2	5			
Cash paid for restructuring activities	(2	4)	(38)	(58)	
Change in components of working capital	8	8	101	158	
Other	(12	6)	41	(116)	
Cash provided by continuing operating activities	90	5	877	 946	
Cash utilized in discontinued operating activities	(7)	(4)	(4)	
Total cash provided by operating activities	89	8	873	 942	
Investing activities:					
Additions to property, plant and equipment	(45	2)	(400)	(369)	
Acquisitions, net of cash acquired	(5	6)	(2,351)	(113)	
Net cash proceeds related to sale of assets and other	8	4	1	16	
Net activity for non-controlling partner loans				9	
Net foreign exchange derivative activity		8	4		
Cash utilized in investing activities	(41	6)	(2,746)	 (457)	
Financing activities:					
Additions to long-term debt	1,23	5	4,538	1,226	
Repayments of long-term debt	(1,45	2)	(2,317)	(1,100)	
Increase (decrease) in short-term loans	1	0	51	(139	
Net receipts from (distribution to) parent	(16	6)	(346)	(276)	
Payment of finance fees		9)	(90)	(11)	
Distributions to noncontrolling interests	(1	· ·	(22)	(37)	
Cash provided by (utilized in) financing activities	(39		1,814	 (337)	
Effect of exchange rate fluctuations on cash	(1		(30)	(21)	
Increase (decrease) in cash	7		(89	 127	
Cash and cash equivalents at beginning of period	39	4	483	356	
Cash and cash equivalents at end of period	\$ 46		\$ 394	\$ 483	
		=		 	

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Tabular data dollars in millions

1. Significant Accounting Policies

Basis of Consolidated Statements The consolidated financial statements of Owens-Brockway Packaging, Inc. (the "Company") include the accounts of its subsidiaries. Newly acquired subsidiaries have been included in the consolidated financial statements from dates of acquisition.

The Company uses the equity method of accounting for investments in which it has a significant ownership interest, generally 20% to 50%. Other investments are accounted for at cost. The Company monitors other than temporary declines in fair value and records reductions in carrying values when appropriate.

Relationship with Owens-Illinois Group, Inc. and Owens-Illinois, Inc. The Company is a 100%-owned subsidiary of Owens-Illinois Group, Inc. ("OI Group") and an indirect subsidiary of Owens-Illinois, Inc. ("OI Inc."). Although OI Inc. does not conduct any operations, it has substantial obligations related to outstanding indebtedness and asbestos-related payments. OI Inc. relies primarily on distributions from its direct and indirect subsidiaries to meet these obligations.

For federal and certain state income tax purposes, the taxable income of the Company is included in the consolidated tax returns of OI Inc. and income taxes are allocated to the Company on a basis consistent with separate returns.

Nature of Operations The Company is a leading manufacturer of glass container products. The Company's principal product lines are glass containers for the food and beverage industries. The Company has glass container operations located in 23 countries. The principal markets and operations for the Company's products are in Europe, North America, Latin America and Asia Pacific.

Use of Estimates The preparation of financial statements in conformity with accounting principles generally accepted in the United States requires management of the Company to make estimates and assumptions that affect certain amounts reported in the financial statements and accompanying notes. Actual results may differ from those estimates, at which time the Company would revise its estimates accordingly.

Foreign Currency Translation The assets and liabilities of non-U.S. subsidiaries are translated into U.S. dollars at year-end exchange rates. Any related translation adjustments are recorded in accumulated other comprehensive income in share owner's equity.

Revenue Recognition The Company recognizes sales, net of estimated discounts and allowances, when the title to the products and risk of loss are transferred to customers. Provisions for rebates to customers are provided in the same period that the related sales are recorded.

Shipping and Handling Costs Shipping and handling costs are included with cost of goods sold in the Consolidated Results of Operations.

Cash The Company defines "cash" as cash and time deposits with maturities of three months or less when purchased. Outstanding checks in excess of funds on deposit are included in accounts payable.

Accounts Receivable Receivables are stated at amounts estimated by management to be the net realizable value. The Company charges off accounts receivable when it becomes apparent based upon age or customer circumstances that amounts will not be collected.

Allowance for Doubtful Accounts The allowance for doubtful accounts is established through charges to the provision for bad debts. The Company evaluates the adequacy of the allowance for doubtful accounts on a periodic basis. The evaluation includes historical trends in collections and write-offs, management's judgment of the probability of collecting accounts and management's evaluation of business risk.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Tabular data dollars in millions

Inventory Valuation Inventories are valued at the lower of average costs or market.

Goodwill Goodwill represents the excess of cost over fair value of net assets of businesses acquired. Goodwill is evaluated annually, as of October 1, for impairment or more frequently if an impairment indicator exists.

Intangible Assets and Other Long-Lived Assets Intangible assets are amortized over the expected useful life of the asset. Amortization expense directly attributed to the manufacturing of the Company's products is included in cost of goods sold. Amortization expense related to non-manufacturing activities is included in selling and administrative and other. The Company evaluates the recoverability of intangible assets and other long-lived assets based on undiscounted projected cash flows, excluding interest and taxes, when factors indicate that impairment may exist. If impairment exists, the asset is written down to fair value.

Property, Plant and Equipment Property, plant and equipment ("PP&E") is carried at cost and includes expenditures for new facilities and equipment and those costs which substantially increase the useful lives or capacity of existing PP&E. In general, depreciation is computed using the straight-line method and recorded over the estimated useful life of the asset. Factory machinery and equipment is depreciated over periods ranging from 5 to 25 years with the majority of such assets (principally glass-melting furnaces and forming machines) depreciated over 7 to 15 years. Buildings and building equipment are depreciated over periods ranging from 10 to 50 years. Depreciation expense directly attributed to the manufacturing of the Company's products is included in cost of goods sold. Depreciation expense related to non-manufacturing activities is included in selling and administrative. Depreciation expense includes the amortization of assets recorded under capital leases. Maintenance and repairs are expensed as incurred. Costs assigned to PP&E of acquired businesses are based on estimated fair values at the date of acquisition. The Company evaluates the recoverability of PP&E based on undiscounted projected cash flows, excluding interest and taxes, when factors indicate that impairment may exist. If impairment exists, the asset is written down to fair value.

Derivative Instruments The Company uses forward exchange contracts, options and commodity forward contracts to manage risks generally associated with foreign exchange rate and commodity market volatility. Derivative financial instruments are included on the balance sheet at fair value. When appropriate, derivative instruments are designated as and are effective as hedges, in accordance with accounting principles generally accepted in the United States. If the underlying hedged transaction ceases to exist, all changes in fair value of the related derivatives that have not been settled are recognized in current earnings. The Company does not enter into derivative financial instruments for trading purposes and is not a party to leveraged derivatives. Cash flows from forward exchange contracts not designated as hedges are classified as an investing activity. Cash flows of commodity forward contracts are classified as operating activities.

Fair Value Measurements Fair value is defined as the amount that would be received to sell an asset or paid to transfer a liability in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants. Generally accepted accounting principles defines a three-tier fair value hierarchy, which prioritizes the inputs used in measuring fair value as follows:

Level 1: Observable inputs such as quoted prices in active markets;

Level 2: Inputs, other than quoted prices in active markets, that are observable either directly or indirectly; and

Level 3: Unobservable inputs for which there is little or no market data, which requires the Company to develop assumptions.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Tabular data dollars in millions

The carrying amounts reported for cash and short-term loans approximate fair value. In addition, carrying amounts approximate fair value for certain long-term debt obligations subject to frequently redetermined interest rates. Fair values for the Company's significant fixed rate debt obligations are generally based on published market quotations.

The Company's derivative assets and liabilities consist of natural gas forwards and foreign exchange option and forward contracts. The Company uses an income approach to valuing these contracts. Natural gas forward rates and foreign exchange rates are the significant inputs into the valuation models. These inputs are observable in active markets over the terms of the instruments the Company holds, and accordingly, the Company classifies its derivative assets and liabilities as Level 2 in the hierarchy. The Company also evaluates counterparty risk in determining fair values.

Reclassifications Certain reclassifications of prior years' data have been made to conform to the current year presentation.

New Accounting Standards

Revenue from Contracts with Customers - In May 2014, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") No. 2014-09, "Revenue from Contracts with Customers," which requires an entity to recognize the amount of revenue to which it expects to be entitled for the transfer of promised goods or services to customers. In August 2015, the FASB issued ASU No. 2015-14, "Revenue from Contracts with Customers", which delayed by one year the effective date of the new revenue recognition standard, which will be effective for the Company on January 1, 2018. The Company has started an implementation process, including a review of customer contracts, to evaluate the effect this standard will have on its consolidated financial statements and related disclosures. At this time, the Company does not expect that the implementation of this standard in 2018 will have a significant impact on the timing in which it recognizes revenue. While the Company continues to assess the potential impacts of the new standard, the Company does not currently expect the adoption of the new standard to have a material impact on consolidated net income or the consolidated balance sheet. The Company plans to select the modified retrospective transition method upon adoption effective January 1, 2018.

Leases - In February 2016, the FASB issued ASU No. 2016-02, "Leases". Under this guidance, lessees will be required to recognize on the balance sheet a lease liability and a right-of-use asset for all leases, with the exception of short-term leases. The lease liability represents the lessee's obligation to make lease payments arising from a lease, and will be measured as the present value of the lease payments. The right-of-use asset represents the lessee's right to use a specified asset for the lease term, and will be measured at the lease liability amount, adjusted for lease prepayment, lease incentives received and the lessee's initial direct costs. The standard also requires a lessee to recognize a single lease cost allocated over the lease term, generally on a straight-line basis. The new guidance is effective for the Company on January 1, 2019. ASU No. 2016-02 is required to be applied using the modified retrospective approach for all leases existing as of the effective date and provides for certain practical expedients. Early adoption is permitted. The Company is currently evaluating the effects that the adoption of ASU No. 2016-02 will have on the Company's consolidated financial statements, and anticipates the new guidance will significantly impact its consolidated financial statements as the Company has a significant number of leases. As further described in Note 15, Operating Leases, as of December 31, 2016, the Company had minimum lease commitments under non-cancellable operating leases totaling \$205 million.

Credit Losses - In June 2016, the FASB issued ASU No. 2016-13, Financial Instruments - Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments. This guidance requires the measurement of all expected credit losses for financial assets held at the reporting date based on historical experience,

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Tabular data dollars in millions

current conditions and reasonable and supportable forecasts. This guidance also requires enhanced disclosures regarding significant estimates and judgments used in estimating credit losses. The new guidance is effective for the Company on January 1, 2020. Early adoption is permitted for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2018. The Company is currently evaluating the impact that the adoption of this guidance will have on its consolidated financial statements.

Stock Compensation - In March 2016, the FASB issued ASU No. 2016-09, "Improvements to Employee Share-Based Payment Accounting," which requires all excess tax benefits or deficiencies to be recognized as income tax expense or benefit in the income statement. In addition, excess tax benefits should be classified along with other income tax cash flows as an operating activity in the statement of cash flows. Application of the standard is required for the Company on January 1, 2017. The Company does not expect a significant impact in its Consolidated Financial Statements.

Pension Asset Value - In May 2015, the FASB issued ASU No. 2015-07, "Fair Value Measurement (Topic 820): Disclosures for Investments in Certain Entities that Calculate Net Asset Value per Share (or Its Equivalent)." Under the new guidance, investments measured at net asset value ("NAV"), as a practical expedient for fair value, are excluded from the fair value hierarchy. Removing investments measured using the practical expedient from the fair value hierarchy is intended to eliminate the diversity in practice that currently exists with respect to the categorization of these investments. The new guidance is effective for the Company on January 1, 2016. The guidance impacted the presentation of certain pension related assets that use NAV as a practical expedient. See Note 9 for additional information.

Participation in OI Inc. Stock Option Plans and Other Stock Based Compensation The Company participates in the equity compensation plans of OI Inc. under which employees of the Company may be granted options to purchase common shares of OI Inc., restricted common shares of OI Inc., or restricted share units of OI Inc.

Stock Options

In general, subject to change in control, options become exercisable 25% per year beginning on the first anniversary of grant. No options may be exercised in whole or in part during the first year after the date granted.

In general, options expire following termination of employment or the seventh anniversary of the option grant. The fair value of options is amortized over the vesting periods which range from one to four years.

Restricted Shares and Restricted Share Units

Shares granted after March 21, 2005 and prior to 2011, vest 25% per year beginning on the first anniversary and unvested shares are forfeited upon termination of employment. Restricted share units granted to employees after 2010 vest 25% per year beginning on the first anniversary. Holders of vested restricted share units receive one share of the Company's common stock for each unit as units vest. Granted but unvested restricted share units granted to directors vest after one year.

The fair value of the restricted shares and restricted share units is equal to the market price of the Company's common stock on the date of the grant. The fair value of restricted shares and restricted share units is amortized over the vesting periods which range from one to four years.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Tabular data dollars in millions

Performance Vested Restricted Share Units

Performance vested restricted share units vest on January 1 of the third year following the year in which they are granted. Holders of vested units may receive up to two shares of OI Inc.'s common stock for each unit, depending upon the attainment of consolidated performance goals established by the Compensation Committee of OI Inc.'s Board of Directors. If minimum goals are not met, no shares will be issued. Granted but unvested restricted share units are forfeited upon termination of employment, unless certain retirement criteria are met.

The fair value of each performance vested restricted share unit is equal to the product of the fair value of OI Inc.'s common stock on the date of grant and the estimated number of shares into which the performance vested restricted share unit will be converted. The fair value of performance vested restricted share units is amortized ratably over the vesting period. Should the estimated number of shares into which the performance vested restricted share unit will be converted change, an adjustment will be recorded to recognize the accumulated difference in amortization between the revised and previous estimates.

As discussed in Note 21, costs incurred under these plans by OI Inc. related to stock-based compensation awards granted directly to the Company's employees are included in the allocable costs charged to the Company and other operating subsidiaries of OI Inc. on an intercompany basis.

2. Segment Information

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 (see Note 17), the Company has renamed the former South America segment to the Latin America segment. These four segments are aligned with the Company's internal approach to managing, reporting, and evaluating performance of its global glass operations. Certain assets and activities not directly related to one of the regions or to glass manufacturing are reported with Retained corporate costs and other. These include licensing, equipment manufacturing, global engineering, and certain equity investments. Retained corporate costs and other also includes certain headquarters administrative and facilities costs and certain incentive compensation and other benefit plan costs that are global in nature and are not allocable to the reportable segments.

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 Company's management uses segment operating profit, in combination with selected cash flow information, to evaluate performance and to allocate resources. Segment operating profit for 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.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Tabular data dollars in millions

Financial information regarding the Company's reportable segments is as follows:

		2016	2015	2014
Net sales:				
Europe	\$	2,300	\$ 2,324	\$ 2,794
North America		2,220	2,039	2,003
Latin America		1,432	1,064	1,159
Asia Pacific		684	671	793
Reportable segment totals		6,636	6,098	6,749
Other		66	58	35
Net sales	\$	6,702	\$ 6,156	\$ 6,784
	2	2016	2015	2014
Segment operating profit:				
Europe	\$	237	\$ 209	\$ 353
North America		299	265	240
Latin America		269	183	227
Asia Pacific		77	 83	 88
Reportable segment totals		882	740	908
Items excluded from segment operating profit:				
Other income(expense)		(5)	2	(1)
Restructuring, asset impairment and other charges		(127)	(80)	(91)
Gain on China land sale		71		
Strategic transaction costs			(4)	
Acquisition-related fair value inventory adjustments			(22)	
Acquisition-related fair value intangible adjustments			(10)	
Non-income tax charge				(69)
Pension Settlement charges				(35)
Interest expense, net		(253)	 (232)	(210)
Earnings from continuing operations before income taxes	\$	568	\$ 394	\$ 502

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Tabular data dollars in millions

	1	Europe	North merica	Latin merica	1	Asia Pacific	S	portable egment Totals	C	Other	Co	nsolidated Totals
Total assets:			 	 								
2016	\$	2,793	\$ 2,515	\$ 2,536	\$	926	\$	8,770	\$	233	\$	9,003
2015		2,902	2,492	2,807		917		9,118		182		9,300
2014		3,215	1,963	1,300		1,018		7,496		181		7,677
Equity investments:												
2016	\$	78	\$ 21	\$ 	\$	117	\$	216	\$	217	\$	433
2015		78	22			145		245		164		409
2014		81	24			153		258		169		427
Equity earnings:												
2016	\$	15	\$ 12	\$ 	\$	4	\$	31	\$	29	\$	60
2015		16	19			7		42		18		60
2014		19	17			4		40		24		64
Capital expenditures:												
2016	\$	163	\$ 107	\$ 123	\$	59	\$	452	\$		\$	452
2015		164	97	89		50		400				400
2014		188	89	55		34		366		3		369
Depreciation and												
amortization expense:												
2016	\$	118	\$ 139	\$ 173	\$	37	\$	467	\$		\$	467
2015		120	128	107		40		395		1		396
2014		140	131	79		53		403		3		406

The Company's net property, plant and equipment by geographic segment are as follows:

	U.S.		Non-U.S.		Total	
2016	\$	722	\$	2,133	\$	2,855
2015		704	\$	2,227	\$	2,931
2014		678		1,734		2,412

The Company's net sales by geographic segment are as follows:

	U.S.	Ν	on-U.S.	Total		
2016	\$ 2,124	\$	4,578	\$	6,702	
2015	1,939		4,217		6,156	
2014	1,852		4,932		6,784	

Intercompany sales in Latin America totaled \$195 million, \$101 million and \$0 for the years ended December 31, 2016, 2015, and 2014, respectively.

Operations outside the U.S. that accounted for more than 10% of consolidated net sales from continuing operations were in France (2015 — 10%, 2014 — 11%).

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Tabular data dollars in millions

3. Inventories

Major classes of inventory are as follows:

	2016		2015	
Finished goods	\$	827	\$	858
Raw materials		118		113
Operating supplies		38		36
	\$	983	\$	1,007

4. Equity Investments

At December 31, 2016 the Company's ownership percentage in affiliates include:

	O-I Ownership	
Affiliates	Percentage	Business Type
BJC O-I Glass Pte. Ltd	50%	Glass container manufacturer
CO Vidrieria SARL ("COV")	50%	Glass container manufacturer
Rocky Mountain Bottle Company	50%	Glass container manufacturer
Tata Chemical (Soda Ash) Partners	25%	Soda ash supplier
Vetrerie Meridionali SpA ("VeMe")	50%	Glass container manufacturer
Vetri Speciali SpA	50%	Specialty glass manufacturer

Summarized information pertaining to the Company's equity affiliates follows:

	2016		2015		2014	
Equity in earnings:						
Non-U.S.	\$	28	\$	23	\$	23
U.S		32		37		41
Total	\$	60	\$	60	\$	64
Dividends received	\$	38	\$	53	\$	54

Summarized combined financial information for equity affiliates is as follows (unaudited):

		2016		2015
At end of year:				
Current assets	\$	451	\$	430
Non-current assets		1,025		959
Total assets		1,476		1,389
Current liabilities		200		203
Other liabilities and deferred items		368		211
Total liabilities and deferred items		568		414
Net assets	\$	908	\$	975

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Tabular data dollars in millions

	2016		2015		2	2014
For the year:						
Net sales	\$	755	\$	719	\$	752
Gross profit	\$	182	\$	193	\$	198
Net earnings	\$	134	\$	139	\$	150

Based on an evaluation of each of the Company's equity investments for the three years ending December 31, 2016, no investments exceeded the significant subsidiary thresholds per Rule 3-09 of Regulation S-X. As such, separate financial statements for the Company's equity investments are not required to be filed.

The Company made purchases of approximately \$176 million and \$161 million from equity affiliates in 2016 and 2015, respectively, and owed approximately \$76 million and \$66 million to equity affiliates as of December 31, 2016 and 2015, respectively.

There is a difference of approximately \$12 million as of December 31, 2016, between the amount at which certain investments are carried and the amount of underlying equity in net assets. The portion of the difference related to inventory or amortizable assets is amortized as a reduction of the equity earnings. The remaining difference is considered goodwill.

5. Goodwill and Intangible Assets

Goodwill

The changes in the carrying amount of goodwill for the years ended December 31, 2016, 2015 and 2014 are as follows:

	F	Europe	-	North nerica	_	atin Ierica	0	Other	Total
Balance as of January 1, 2014	\$	1,044	\$	734	\$	276	\$	5	\$ 2,059
Translation effects		(118)		(11)		(37)			(166)
Balance as of December 31, 2014		926		723		239		5	1,893
Acquisition related adjustments				316		480			796
Translation effects		(86)		(19)		(95)			(200)
Balance as of December 31, 2015		840		1,020		624		5	2,489
Acquisition related adjustments				15		26			41
Translation effects		(32)		3		(39)			(68)
Balance as of December 31, 2016	\$	808	\$	1,038	\$	611	\$	5	\$ 2,462

The acquisition related adjustments in 2016 and 2015 primarily relate to the Vitro Acquisition (see Note 17).

Goodwill for the Asia Pacific segment is \$0 and net of accumulated impairment losses of \$1,135 million as of December 31, 2016, 2015 and 2014.

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

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Tabular data dollars in millions

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 price trends, customer demand, material costs, discount rates and asset replacement costs, and are classified as Level 3 in the fair value hierarchy.

During the fourth quarter of 2016, the Company completed its annual impairment testing and determined that no impairment existed.

Intangible assets

On September 1, 2015, the Company acquired customer list intangibles as part of the Vitro Acquisition (see Note 17).

Customer list intangible assets are amortized using the accelerated amortization method over their 20 year lives. Net intangible asset values were \$464 million and \$597 million for the years ended December 31, 2016 and 2015, respectively. Amortization expense for intangible assets was \$39 million, \$21 million and \$1 million for the years ended December 31, 2016, 2015 and 2014, respectively. Estimated amortization related to intangible assets through 2021 is as follows: 2017, \$44 million; 2018, \$44 million; 2019, \$42 million; 2020, \$41 million; and 2021, \$39 million. No impairment existed on these assets at December 31, 2016.

The Company has determined that the fair value measurements related to the customer list intangibles are based on significant unobservable inputs and are classified as Level 3 in the fair value hierarchy.

6. Prepaid Expenses and Other Assets

Prepaid expenses and other current assets at December 31, 2016 and 2015 are as follows:

	2016		2015	
Prepaid expenses	\$	38	\$	42
Value added taxes		46		195
Other		99		115
	\$	183	\$	352

Other assets (noncurrent) consist of the following at December 31, 2016 and 2015:

	2	2016	 2015
Deferred tax assets	\$	189	\$ 177
Deferred returnable packaging costs		115	110
Repair part inventories		107	118
Value added taxes		22	17
Capitalized software		31	28
Deferred finance fees		5	6
Other		69	71
	\$	538	\$ 527

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Capitalized software includes costs related to the acquisition and development of internal-use software. These costs are amortized over the estimated useful life of the software. Amortization expense for capitalized software was \$6 million, \$9 million and \$8 million for 2016, 2015 and 2014, respectively. Estimated amortization related to capitalized software through 2021 is as follows: 2017, \$6 million; 2018, \$6 million; 2019, \$5 million; 2020, \$5 million; and 2021, \$4 million.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Tabular data dollars in millions

7. Derivative Instruments

The Company has certain derivative assets and liabilities which consist of natural gas forwards and foreign exchange option and forward contracts. The Company uses an income approach to value these contracts. Natural gas forward rates and foreign exchange rates are the significant inputs into the valuation models. These inputs are observable in active markets over the terms of the instruments the Company holds, and accordingly, the Company classifies its derivative assets and liabilities as Level 2 in the hierarchy. The Company also evaluates counterparty risk in determining fair values.

Commodity Forward Contracts Designated as Cash Flow Hedges

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, 2016 and 2015, the Company had entered into commodity forward contracts covering approximately 12,300,000 MM BTUs and 7,300,000 MM BTUs, respectively, primarily related to customer requests to lock the price of natural gas.

The Company accounts for the above forward contracts as cash flow hedges at December 31, 2016 and recognizes them on the balance sheet at fair value. The effective portion of changes in the fair value of a derivative that is designated as, and meets the required criteria for, a cash flow hedge is recorded in the Accumulated Other Comprehensive Income component of share owners' equity ("OCI") and reclassified into earnings in the same period or periods during which the underlying hedged item affects earnings. An unrecognized gain of \$6 million at December 31, 2016 and an unrecognized loss of \$4 million at December 31, 2015 related to the commodity forward contracts were included in Accumulated OCI, and will be reclassified into earnings over the next twelve to twenty-four months. Any material portion of the change in the fair value of a derivative designated as a cash flow hedge that is deemed to be ineffective is recognized in current earnings. The ineffectiveness related to these natural gas hedges for the year ended December 31, 2016 and 2015 was not material.

	Amount of	gain (loss) R	ecognized in O	CI on			Ú Ý	ss) Reclassified fr DCI into Income	om	
Commodity Forward Contracts (Effective Portion)					(reported in cost of goods sold) (Effective Portion)					
	2016	201	5	2014		2016	2	015	2014	_
\$	7	\$	(4) \$		3 \$		- \$	(1) \$		2

The effect of the commodity forward contracts on the results of operations for the years ended December 31, 2016, 2015 and 2014 is as follows:

Foreign Exchange Derivative Contracts and not Designated as Hedging Instruments

The Company may enter into short-term forward exchange or option agreements to purchase foreign currencies at set rates in the future. These agreements are used to limit exposure to fluctuations in foreign currency exchange rates for significant planned purchases of fixed assets or commodities that are denominated in currencies other than the subsidiaries' functional currency. The Company may also use forward exchange

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Tabular data dollars in millions

agreements to offset the foreign currency risk for receivables and payables, including intercompany receivables, payables and loans, not denominated in, or indexed to, their functional currencies. The Company records these short-term forward exchange agreements on the balance sheet at fair value and changes in the fair value are recognized in current earnings.

At December 31, 2016 and 2015, the Company had outstanding forward exchange and option agreements denominated in various currencies covering the equivalent of approximately \$490 million and \$790 million, respectively, related primarily to intercompany transactions and loans.

The effect of the foreign exchange derivative contracts on the results of operations for the years ended December 31, 2016, 2015 and 2014 is as follows:

	Amount of Gain (Loss)					
Location of Gain (Loss)	Recognized in Income on					
Recognized in Income on	Foreign Exchange Contracts					
Foreign Exchange Contracts	20	16	20)15	20	14
Other expense, net	\$	6	\$	10	\$	(8)

Balance Sheet Classification

The Company records the fair values of derivative financial instruments on the balance sheet as follows: (a) receivables if the instrument has a positive fair value and maturity within one year, (b) deposits, receivables, and other assets if the instrument has a positive fair value and maturity after one year, and (c) other accrued liabilities or other liabilities (current) if the instrument has a negative fair value and maturity within one year.

The following table shows the amount and classification (as noted above) of the Company's derivatives as of December 31, 2016 and 2015:

	Fair Value					
	Balance Sheet Location	2016		2	2015	
Asset Derivatives:				-		
Derivatives designated as hedging instruments:						
Commodity futures contracts	b	\$	6	\$		
Derivatives not designated as hedging instruments:						
Foreign exchange derivative contracts	а	\$	9	\$	14	
Total asset derivatives		\$	15	\$	14	
Liability Derivatives:						
Derivatives designated as hedging instruments:						
Commodity futures contracts	с	\$		\$	3	
Derivatives not designated as hedging instruments:						
Foreign exchange derivative contracts	с		5		2	
Total liability derivatives		\$	5	\$	5	
		-		-		

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Tabular data dollars in millions

8. Restructuring Accruals, Asset Impairments and Other Costs Related to Closed Facilities

The Company continually reviews its manufacturing footprint and operating cost structure and may decide to close operations or reduce headcount to gain efficiencies, integrate acquired operations, reduce future expenses and other market factors. The Company incurs costs associated with these actions including employee severance and benefits, other exit costs such as those related to contract terminations, and asset impairment charges. The Company incur other costs related to closed facilities including environmental remediation, clean up, dismantling and preparation for sale or other disposition.

The Company accounts for restructuring and other costs under applicable provisions of generally accepted accounting principles. Charges for employee severance and related benefits are generally accrued based on contractual arrangements with employees or their representatives. Other exit costs are accrued based on the estimated cost to settle related contractual arrangements. Estimated environmental remediation costs are accrued when specific claims have been received or are probable of being received.

The Company's decisions to curtail selected production capacity have resulted in write downs of certain long-lived assets to the extent their carrying amounts exceeded fair value or fair value less cost to sell. The Company classified the significant assumptions used to determine the fair value of the impaired assets as Level 3 in the fair value hierarchy as set forth in the general accounting principles for fair value measurements.

When a decision is made to take these actions, the Company manages and accounts for them programmatically apart from the on-going operations of the business. Information related to major programs (as in the case of the European Asset Optimization and Asia Pacific Restructuring programs below) are presented separately. Minor initiatives are presented on a combined basis as Other Restructuring Actions. These restructuring initiatives taken by the Company are not related to the European Asset Optimization program or the Asia Pacific restructuring plan. When charges related to major programs are completed, remaining accrual balances are classified with Other Restructuring Actions.

European Asset Optimization

In 2011, the Company initiated the European Asset Optimization program to increase the efficiency and capability of its European operations and to better align its European manufacturing footprint with market and customer needs. This program involved making additional investments in certain facilities and addressing assets with higher cost structures. As part of this program, the Company recorded charges of \$0, \$0, and \$1 million for the years ended 2016, 2015 and 2014, respectively for employee costs, write-down of assets, and environmental remediation related to decisions to close furnaces and manufacturing facilities in Europe. The Company recorded total cumulative charges of \$127 million and does not expect to execute any further actions under this program.

Asia Pacific Restructuring

Since 2011, the Company has implemented a restructuring plan in its Asia Pacific segment, primarily related to aligning its supply base with lower demand in the region. As part of this plan, the Company recorded charges of \$4 million, \$5 million and \$73 million for the years ended 2016, 2015 and 2014, respectively, for employee costs, write-down of assets, and pension charges related to furnace closures and additional restructuring activities. The Company recorded total cumulative charges of \$224 million and does not expect to execute any further actions under this program.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Tabular data dollars in millions

Other Restructuring Actions

In 2016, the Company recorded charges of \$92 million for other restructuring actions. These charges primarily represented employee costs, write-down of assets, and other exit costs of \$64 million for a plant closures in Latin America, Europe and North America and \$28 million related to other restructuring actions. The Company took certain other restructuring actions and recorded charges in 2015 of \$58 million. These charges primarily related to employee costs, write-down of assets and other exit costs totaling \$14 million for a plant closure and furnace closure in Latin America, \$38 million for a plant closure in North America and \$6 million for other restructuring actions. In 2014, the Company took certain other restructuring actions and recorded charges of \$2 million for employee costs related to global headcount reduction initiatives.

The following table presents information related to restructuring, asset impairment and other costs related to closed facilities from January 1, 2015 through December 31, 2015:

	European Asset Asia Pacific Optimization Restructuring		Restr	ther ucturing tions	Total Restructuring		
Balance at January 1, 2015	\$	12	\$ 12	\$	36	\$	60
Charges			5		58		63
Write-down of assets to net realizable value			(4)		(27)		(31)
Net cash paid, principally severance and							
related benefits		(5)	(5)		(28)		(38)
Other, including foreign exchange translation		(4)	(1)		(6)		(11)
Balance at December 31, 2015	\$	3	\$ 7	\$	33	\$	43

The following table presents information related to restructuring, asset impairment and other costs related to closed facilities from January 1, 2016 through December 31, 2016:

	Asia Pacific	Other ructuring	т	otal
	Restructuring	ctions		icturing
Balance at January 1, 2016	\$ 7	\$ 36	\$	43
Charges	4	92		96
Write-down of assets to net realizable value		(28)		(28)
Net cash paid, principally severance and related benefits	(3)	(21)		(24)
Other, including foreign exchange translation	(1)	(3)		(4)
Balance at December 31, 2016	\$ 7	\$ 76	\$	83

The restructuring accrual balance represents the Company's estimates of the remaining future cash amounts to be paid related to the actions noted above. As of December 31, 2016, the Company's estimates include approximately \$65 million for employee benefits costs, \$16 million for environmental remediation costs, and \$2 million for other exit costs.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Tabular data dollars in millions

9. Pension Benefit Plans and Other Postretirement Benefits

Pension Benefit Plans

The Company participates in OI Inc.'s defined benefit pension plans for a substantial number of employees located in the United States. Benefits generally are based on compensation for salaried employees and on length of service for hourly employees. OI Inc.'s policy is to fund pension plans such that sufficient assets will be available to meet future benefit requirements. Independent actuaries determine pension costs for each subsidiary of OI Inc. included in the plans; however, accumulated benefit obligation information and plan assets pertaining to each subsidiary have not been separately determined. As such, the accumulated benefit obligation and the plan assets related to the pension plans for domestic employees have been retained by another subsidiary of OI Inc. Net expense to results of operations for the Company's allocated portion of the domestic pension costs amounted to \$23 million in 2016, \$24 million in 2015 and \$19 million in 2014.

OI Inc. also sponsors several defined contribution plans for all salaried and hourly U.S. employees of the Company. Participation is voluntary and participants' contributions are based on their compensation. OI Inc. matches contributions of participants, up to various limits, in substantially all plans. OI Inc. charges the Company for its share of the match. The Company's share of the contributions to these plans amounted to \$32 million in 2016, \$27 million in 2015 and \$17 million in 2014.

The Company also has defined benefit pension plans covering a substantial number of employees in several non-U.S. jurisdictions. Benefits generally are based on compensation for salaried employees and on length of service for hourly employees. The Company's policy is to fund pension plans such that sufficient assets will be available to meet future benefit requirements. The Company's defined benefit pension plans use a December 31 measurement date.

	 2016	 2015
Obligations at beginning of year	\$ 1,210	\$ 1,311
Change in benefit obligations:		
Service cost	16	15
Interest cost	44	44
Actuarial (gain) loss, including the effect of change in discount rates	160	(9)
Acquisitions		37
Participant contributions	2	1
Benefit payments	(71)	(58)
Other	3	
Foreign currency translation	(129)	(131)
Net change in benefit obligations	25	(101)
Obligations at end of year	\$ 1,235	\$ 1,210

The changes in the non-U.S. pension benefit obligations for the year are as follows:

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Tabular data dollars in millions

The changes in the fair value of the non-U.S. pension plans' assets for the year are as follows:

	2016	2015
Fair value at beginning of year	\$ 1,012	\$ 1,094
Change in fair value:		
Actual gain (loss) on plan assets	139	42
Benefit payments	(71)	(58)
Employer contributions	38	15
Participant contributions	2	1
Acquisitions		22
Foreign currency translation	(111)	(104)
Other	2	
Net change in fair value of assets	(1)	(82)
Fair value at end of year	\$ 1,011	\$ 1,012

The funded status of the non-U.S. pension plans at year end are as follows:

	 2016	 2015
Plan assets at fair value	\$ 1,011	\$ 1,012
Projected benefit obligations	 1,235	 1,210
Plan assets less than projected benefit obligations	(224)	(198)
Items not yet recognized in pension expense:		
Actuarial loss	352	320
Prior service cost (credit)	 (1)	 (1)
	351	319
Net amount recognized	\$ 127	\$ 121

The following changes in plan assets and benefit obligations were recognized in accumulated other comprehensive income at December 31, 2016 and 2015 as follows (amounts are pretax):

	2	2016	2015
Pension assets	\$	40	\$ 32
Current pension liability, included with other accrued liabilities		(7)	(6)
Pension benefits		(257)	(224)
Accumulated other comprehensive loss		351	319
Net amount recognized	\$	127	\$ 121

The following changes in plan assets and benefit obligations were recognized in accumulated other comprehensive income at December 31, 2016 and 2015 as follows (amounts are pretax):

	2	016	2	2015
Current year actuarial (gain) loss	\$	87	\$	15
Amortization of actuarial loss		(12)		(15)
Settlement				
		75		_
Translation		(43)		(31)
	\$	32	\$	(31)

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Tabular data dollars in millions

The components of the non-U.S. pension plans' net pension expense for the year are as follows:

	2016		2015		2014	
Service cost	\$	16	\$	15	\$	23
Interest cost		44		44		69
Expected asset return		(65)		(67)		(86)
Amortization:						
Actuarial loss		13		15		18
Prior service credit						
Net amortization		13		15		18
Net expense	\$	8	\$	7	\$	24

On October 1, 2014, the Company settled the liability associated with its pension plan in the Netherlands, resulting in a settlement charge of approximately \$35 million. Non-U.S. pension expense excludes \$3 million of pension settlement costs that were recorded in restructuring expense in 2014. The table above excludes these charges.

Amounts that are expected to be amortized from accumulated other comprehensive income into net pension expense during 2017:

Amortization:

Actuarial loss	\$ 16
Prior service cost	
Net amortization	\$ 16

The following information is for plans with projected and accumulated benefit obligations in excess of the fair value of plan assets at year end:

	Projected Benefit Obligation Exceeds Fair Value of Plan Assets			Obligation Exceeds Fair Value			n Exc alue o	ted Benefit n Exceeds alue of Assets	
	2	2016 20		2015	2016		2015		
Projected benefit obligations	\$	897	\$	876	\$	897	\$	876	
Accumulated benefit obligation		867		850		867		850	
Fair value of plan assets		632		645		632		645	

The weighted average assumptions used to determine benefit obligations are as follows:

	2016	2015
Discount rate	2.94%	3.68%
Rate of compensation increase	2.90%	2.84%

The weighted average assumptions used to determine net periodic pension costs are as follows:

	2016	2015	2014
Discount rate	3.68%	3.65%	4.14%
Rate of compensation increase	2.84%	2.89%	3.31%
Expected long-term rate of return on assets	7.15%	7.21%	7.23%

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

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Future benefits are assumed to increase in a manner consistent with past experience of the plans, which, to the extent benefits are based on compensation, includes assumed salary increases as presented above.

For 2016, the Company's weighted average expected long-term rate of return on assets was 7.15% for the non-U.S. plans. In developing this assumption, the Company considered its historical 10-year average return (through December 31, 2016) and evaluated input from its third party pension plan asset consultants, including their review of asset class return expectations

It is the Company's policy to invest pension plan assets in a diversified portfolio consisting of an array of asset classes within established target asset allocation ranges. The investment risk of the assets is limited by appropriate diversification both within and between asset classes. The assets of the group trust and the Company's non-U.S. plans are primarily invested in a broad mix of domestic and international equities, domestic and international bonds, and real estate, subject to the target asset allocation ranges. The assets are managed with a view to ensuring that sufficient liquidity will be available to meet expected cash flow requirements.

The investment valuation policy of the Company is to value investments at fair value. All investments are valued at their respective net asset values. Equity securities for which market quotations are readily available are valued at the last reported sales price on their principal exchange on valuation date or official close for certain markets. Fixed income investments are valued by an independent pricing service. Investments in registered investment companies or collective pooled funds are valued at their respective net asset values. Short-term investments are stated at amortized cost, which approximates fair value. The fair value of real estate is determined by periodic appraisals.

In accordance with the Company's adoption of ASU No. 2015-07 in 2016, certain investments measured at net asset value ("NAV"), as a practical expedient for fair value, have been excluded from the fair value hierarchy. The fair value measurements tables presented below have been amended to conform to the current year presentation under ASU No. 2015-07. See Note 1 for more information.

In 2016, the non-U.S. plan assets consisted of approximately 41% equity securities, 42% debt securities, and 17% real estate and other. The following table sets forth by level, within the fair value hierarchy, the Company's non-U.S. pension plan assets at fair value as of December 31, 2016 and 2015:

	2016										20	15				
	Level 1		Le	Level 2 Level 3		Т	otal	Le	vel 1	Le	vel 2	Le	vel 3	Т	otal	
Cash and cash equivalents	\$	24	\$		\$		\$	24	\$	30	\$		\$		\$	30
Equity securities																
Debt securities		37		2				39		16						16
Real estate						4		4						5		5
Other				37		6		43				24		6		30
Total	\$	61	\$	39	\$	10			\$	46	\$	24	\$	11		
Investments measured at																
net asset value							\$	901							\$	931
Total non-U.S. assets at																
fair value							\$ 1	,011							\$ 1	,012

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Tabular data dollars in millions

The following is a reconciliation of the Company's pension plan assets recorded at fair value using significant unobservable inputs (Level 3):

	2016		2015	
Beginning balance	\$	11	\$	5
Net increase (decrease)		(1)		6
Ending balance	\$	10	\$	11

The net increase (decrease) in the fair value of the Company's Level 3 pension plan assets is primarily due to purchases and sales of unlisted real estate funds. The change in the fair value of Level 3 pension plan assets due to actual return on those assets was immaterial in 2016.

In order to maintain minimum funding requirements, the Company is required to make contributions to its non-U.S. defined benefit pension plans of approximately \$24 million in 2017.

The following estimated future benefit payments, which reflect expected future service, as appropriate, are expected to be paid in the years indicated:

Year(s)

017	\$
018	
019	
020	
021	
022 - 2026	3

Postretirement Benefits Other Than Pensions

OI Inc. provides retiree health care and life insurance benefits covering certain U.S. salaried and hourly employees. Benefits provided by the Company for hourly retirees are determined by collective bargaining. Employees are generally eligible for benefits upon retirement and completion of a specified number of years of creditable service. OI Inc. uses a December 31 measurement date to measure its postretirement benefit obligations.

The Company's net periodic postretirement benefit income, as allocated by OI Inc., for domestic employees was \$2 million, \$2 million, and \$1 million at December 31, 2016, 2015 and 2014, respectively.

The Company also has postretirement benefit plans covering substantially all employees in Canada. The following tables relate to the Company's postretirement benefit plans in Canada.

The changes in the postretirement benefit obligations for the year are as follows:

	20)16	2	015
Obligations at beginning of year	\$	68	\$	81
Change in benefit obligations:				
Service cost		1		1
Interest cost		3		3
Actuarial (gain) loss, including the effect of changing discount rates		9		(1)
Benefit payments		(2)		(3)
Foreign currency translation		2		(13)
Net change in benefit obligations		13		(13)
Obligations at end of year	\$	81	\$	68

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Tabular data dollars in millions

The funded status of the postretirement benefit plans at year end is as follows:

	2016		2015
Postretirement benefit obligations	\$	(81)	\$ (68)
Items not yet recognized in net postretirement benefit cost:			
Actuarial gain (loss)		(6)	3
Net amount recognized	\$	(87)	\$ (65)

The net amount recognized is included in the Consolidated Balance Sheets at December 31, 2016 and 2015 as follows:

	2	2016	2015
Current nonpension postretirement benefit, included with Other accrued liabilities	\$	(3)	\$ (2)
Nonpension postretirement benefits		(78)	(66)
Accumulated other comprehensive income (loss)		(6)	3
Net amount recognized	\$	(87)	\$ (65)

The following changes in benefit obligations were recognized in accumulated other comprehensive income at December 31, 2016 and 2015 as follows (amounts are pretax):

	2016		2	2015
Current year actuarial (gain) loss	\$	9	\$	

The components of the net postretirement benefit cost for the year are as follows:

	2016		2015		2014	
Service cost	\$	1	\$	1	\$	1
Interest cost		3		3		4
Net postretirement benefit cost	\$	4	\$	4	\$	5

The weighted average discount rates used to determine the accumulated postretirement benefit obligation and net postretirement benefit cost are as follows:

	2016	2015	2014
Accumulated postretirement benefit obligation	3.55%	3.80%	3.75%
Net postretirement benefit cost	3.80%	3.75%	4.47%

The weighted average assumed health care cost trend rates at December 31 are as follows:

	2016	2015
Health care cost trend rate assumed for next year	5.00%	5.00%
Rate to which the cost trend rate is assumed to decline (ultimate trend rate)	5.00%	5.00%
Year that the rate reaches the ultimate trend rate	N/A	N/A

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Tabular data dollars in millions

Assumed health care cost trend rates affect the amounts reported for the postretirement benefit plans. A one-percentage-point change in assumed health care cost trend rates would have the following effects:

	1	-Percent	age Poi	int
	Inc	rease	Dec	rease
Effect on total of service and interest cost	\$	1	\$	(1)
Effect on accumulated postretirement benefit obligations		13		(10)

Amortization included in net postretirement benefit cost is based on the average remaining service of employees.

The following estimated future benefit payments, which reflect expected future service, as appropriate, are expected to be paid in the years indicated:

Year(s)

2017	\$
2018	
2019	
2020	
2021	
2022 - 2026	

10. Income Taxes

The provision for income taxes was calculated based on the following components of earnings (loss) before income taxes:

Continuing operations	2016		2015		2	2014
U.S	\$	185	\$	125	\$	231
Non-U.S.		383		269		271
	\$	568	\$	394	\$	502
	-				-	
Discontinued operations		2016	2	2015	2	2014
Discontinued operations U.S.	\$	2016	\$	2015	<u>2</u> \$	2014
A	\$	2016 (7)	\$	2015 (4)	\$	2014 (4)

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

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

	2016		1	2015		2014
Current:						
U.S	\$	8	\$	9	\$	8
Non-U.S.		123		85		103
		131		94		111
Deferred:						
U.S		(1)		5		
Non-U.S.		(7)		2		(18)
		(8)		7		(18)
Total:						
U.S		7		14		8
Non-U.S.		116		87		85
Total	\$	123	\$	101	\$	93

A reconciliation of the provision for income taxes based on the statutory U.S. Federal tax rate of 35% to the provision for income taxes is as follows:

	2	2016		2015	15 2	
Tax provision on pretax earnings (loss) from continuing operations at statutory U.S. Federal tax rate Increase (decrease) in provision for income taxes due to:	\$	199	\$	138	\$	177
Non-U.S. tax rates under U.S. rates		(22)		(12)		(22)
Changes in valuation allowance		8		21		(24)
Withholding tax, net		20		18		18
Non-deductible acquisition costs						
U.S. tax on intercompany dividends and interest		3		16		1
U.S. tax consolidation benefit		(74)		(70)		(47)
Tax exempt income		(2)		(3)		(5)
Tax law changes		(3)		(3)		
Tax credit		(17)		(14)		(3)
Change in tax reserves		8		5		(13)
Mexico inflationary adjustments		6		3		
Other items		(3)		2		11
Provision for income taxes	\$	123	\$	101	_	93

Deferred income taxes reflect: (1) the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes; and (2) carryovers and credits for income tax purposes.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Tabular data dollars in millions

Significant components of the Company's deferred tax assets and liabilities at December 31, 2016 and 2015 are as follows:

	2016	2015	
Deferred tax assets:			
Accrued postretirement benefits	\$ 21	\$ 18	
Foreign tax credit	414	389	
Operating and capital loss carryovers	280	296	
Other credit carryovers	14	13	
Accrued liabilities	75	68	
Pension liability	30	27	
Other	51	38	
Total deferred tax assets	885	849	
Deferred tax liabilities:			
Property, plant and equipment	112	112	
Intangibles and deferred software	119	131	
Other	9	26	
Total deferred tax liabilities	240	269	
Valuation allowance	(600)	(603)	
Net deferred taxes	\$ 45	<u>\$ (23</u>)	

Deferred taxes are included in the Consolidated Balance Sheets at December 31, 2016 and 2015 as follows:

	2	2016	2015
Other assets	\$	189	\$ 177
Deferred taxes		(144)	(200)
Net deferred taxes	\$	45	\$ (23)

The Company reviews the likelihood that it will realize the benefit of its deferred tax assets and therefore the need for valuation allowances on a quarterly basis, or whenever events indicate that a review is required. In determining the requirement for a valuation allowance, the historical and projected financial results of the legal entity or consolidated group recording the net deferred tax asset is considered, along with other positive and negative evidence.

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.

At December 31, 2016, before valuation allowance, the Company had unused foreign tax credits of \$414 million expiring in 2017 through 2026, and research tax credit of \$14 million expiring from 2019 to 2036, which will be available to offset future income tax. Approximately \$151 million of the deferred tax assets related to operating and capital loss carryforwards can be carried over indefinitely, with the remaining \$129 million expiring between 2017 and 2036.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Tabular data dollars in millions

At December 31, 2016, the Company's equity in the undistributed earnings of foreign subsidiaries for which income taxes had not been provided approximated \$2.2 billion. The Company intends to reinvest these earnings indefinitely in the non-U.S. operations. It is not practicable to estimate the U.S. and foreign tax which would be payable should these earnings be distributed. Deferred taxes are provided for earnings of non-U.S. jurisdictions when the Company plans to remit those earnings.

The Company is included in OI Inc.'s consolidated tax returns for U.S. federal and certain state income tax purposes. The consolidated group has net operating losses, capital losses, alternative minimum tax credits, foreign tax credits and research and development credits available to offset future U.S. Federal income tax. Income taxes are allocated to the Company on a basis consistent with separate returns.

The Company records a liability for unrecognized tax benefits related to uncertain tax positions. The Company accrues interest and penalties associated with unrecognized tax benefits as a component of its income tax expense. The following is a reconciliation of the Company's total gross unrecognized tax benefits for the years ended December 31, 2016, 2015 and 2014:

	2016		2016		2015		2014	
Balance at January 1	\$	74	\$	77	\$	100		
Additions and reductions for tax positions of prior years				1		(13)		
Additions based on tax positions related to the current year		15		10		10		
Reductions due to the lapse of the applicable statute of limitations		(3)		(5)		(8)		
Reductions due to settlements		(12)		(1)		(1)		
Foreign currency translation				(8)		(11)		
Balance at December 31	\$	74	\$	74	\$	77		
Unrecognized tax benefits, which if recognized, would impact the								
Company's effective income tax rate	\$	66	\$	67	\$	70		
Accrued interest and penalties at December 31	\$	23	\$	25	\$	29		
Interest and penalties included in tax expense for the years ended								
December 31	\$	(2)	\$	(1)	\$	(2)		

Based upon the outcome of tax examinations, judicial proceedings, or expiration of statute of limitations, it is reasonably possible that the ultimate resolution of these unrecognized tax benefits may result in a payment that is materially different from the current estimate of the tax liabilities. The Company believes that it is reasonably possible that the estimated liability could decrease up to \$11 million within the next 12 months. This is primarily the result of audit settlements or statute expirations in several taxing jurisdictions.

The Company is currently under examination in various tax jurisdictions in which it operates, including Argentina, Bolivia, Brazil, China, Canada, Colombia, Ecuador, France, Germany, Indonesia, and Italy. The years under examination range from 2006 through 2014. The Company has received tax assessments in excess of established reserves. The Company believes that adequate provisions for all income tax uncertainties have been made. However, if tax assessments are settled against the Company at amounts in excess of established reserves, it could have a material impact to the Company's results of operations, financial position or cash flows. During 2016, the Company concluded income tax audits in several jurisdictions, including the Czech Republic, Germany, Italy, and Hungary.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Tabular data dollars in millions

11. External Debt

The following table summarizes the external long-term debt of the Company at December 31, 2016 and 2015:

	2016	2015
Secured Credit Agreement:		
Revolving Credit Facility:		
Revolving Loans	\$	\$
Term Loans:		
Term Loan A	1,395	1,546
Term Loan A (€279 million at December 31, 2016)	282	301
Term Loan B		563
Senior Notes:		
6.75%, due 2020 (€500 million)	523	542
4.875%, due 2021 (€330 million)	345	357
5.00%, due 2022	495	494
5.875%, due 2023	682	680
3.125%, due 2024 (€500 million)	520	
5.375%, due 2025	297	296
6.375%, due 2025	294	293
Capital leases	55	52
Other	20	30
Total long-term debt	4,908	5,154
Less amounts due within one year	32	67
Long-term debt	\$ 4,876	\$ 5,087

On April 22, 2015, the Company entered into a Senior Secured Credit Facility, which subsequently has been amended several times with the most recent amendment being entered into on February 3, 2016 (the "Amended Agreement"). In connection with the closing of the Vitro Acquisition on September 1, 2015 (see Note 17), the Company incurred \$1,250 million of senior secured incremental term loan facilities, comprised of (i) a \$675 million term loan A facility on substantially the same terms and conditions (including as to maturity) as the term loan A facility in the Amended Agreement and (ii) a \$575 million term loan B facility, which was subsequently repaid in full in November 2016 as described below.

At December 31, 2016, 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 (\$1,395 million net of debt issuance costs), and a \notin 279 million term loan A facility (\$282 million net of debt issuance costs), each of which has a final maturity date of April 22, 2020. At December 31, 2016, the Company had unused credit of \$884 million available under the Amended Agreement. The weighted average interest rate on borrowings outstanding under the Amended Agreement at December 31, 2016 was 2.39%.

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.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Tabular data dollars in millions

The Amended Agreement also contains one financial covenant, a Total Leverage Ratio, that requires the Company not to exceed a ratio calculated by dividing consolidated total debt, less cash and cash equivalents, by consolidated EBITDA, as defined in the Amended Agreement. 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 of (i) 4.5x for the four fiscal quarters ending December 31, 2016, March 31, 2017, June 30, 2017 and September 30, 2017, and (ii) 4.0x for the fourth fiscal quarter ending December 31, 2017 and each fiscal quarter thereafter.

Failure to comply with these covenants and restrictions could result in an event of default under the Amended Agreement. In such an event, the Company would be unable to 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 and the lenders cause all of the outstanding debt 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, 2016, 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 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.

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.

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 November 2016, the Company issued senior notes with a face value of \in 500 million that bear interest at 3.125% and are due November 15, 2024. The notes were issued via a private placement and are guaranteed by certain of the Company's domestic subsidiaries. The net proceeds, after deducting the debt discount and debt issuance costs, totaled approximately \$520 million and were used to repay the term loan B facility under the Amended Agreement.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Tabular data dollars in millions

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 March 2019, subject to periodic renewal of backup credit lines.

Information related to the Company's accounts receivable securitization program as of December 31, 2016 and 2015 is as follows:

	2016			2015
Balance (included in short-term loans)	\$	152	\$	158
Weighted average interest rate		0.74%	ó	1.21%

The carrying amounts reported for the accounts receivable securitization program, and certain long-term debt obligations subject to frequently redetermined interest rates, approximate fair value. Fair values for the Company's significant fixed rate debt obligations are based on published market quotations, and are classified as Level 1 in the fair value hierarchy.

Annual maturities for all of the Company's long-term debt through 2021 are as follows: 2017, \$33 million; 2018, \$287 million; 2019, \$101 million; 2020, \$2,074 million; and 2021, \$354 million.

Fair values at December 31, 2016, of the Company's significant fixed rate debt obligations are as follows:

	Principal Amount		Indicated Market Price		Fair	Value
Senior Notes:						
6.75%, due 2020 (€500 million)	\$	526	\$	120.63	\$	635
4.875%, due 2021 (€330 million)		347		114.00		396
5.00%, due 2022		500		103.49		517
5.875%, due 2023		700		105.37		738
3.125%, due 2024 (€500 million)		526		100.01		526
5.375%, due 2025		300		101.17		304
6.375%, due 2025		300		106.28		319

12. Contingencies

Certain litigation is pending against the Company, in many cases involving ordinary and routine claims incidental to the business of the Company and in others presenting allegations that are nonroutine and involve compensatory, punitive or treble damage claims as well as other types of relief. The Company records a liability for such matters when it is both probable that the liability has been incurred and the amount of the liability can be reasonably estimated. Recorded amounts are reviewed and adjusted to reflect changes in the factors upon which the estimates are based including additional information, negotiations, settlements, and other events. The ultimate legal and financial liability of the Company in respect to this pending litigation cannot reasonably be estimated. However, the Company believes, based on its examination and review of such matters and experience to date, that such ultimate liability will not have a material adverse effect on its results of operations or financial condition.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Tabular data dollars in millions

The Company's joint venture in China had been involved in litigation with its partner regarding whether the joint venture should be dissolved. Following an ownership change in 2016 with respect to the joint venture partner, this litigation has been withdrawn.

Other litigation is pending against the Company, in many cases involving ordinary and routine claims incidental to the business of the Company and in others presenting allegations that are non-routine and involve compensatory, punitive or treble damage claims as well as other types of relief. The Company records a liability for such matters when it is both probable that the liability has been incurred and the amount of the liability can be reasonably estimated. Recorded amounts are reviewed and adjusted to reflect changes in the factors upon which the estimates are based, including additional information, negotiations, settlements and other events.

13. Accumulated Other Comprehensive Income (Loss)

The components of comprehensive income are: (a) net earnings; (b) change in fair value of certain derivative instruments; (c) pension and other postretirement benefit adjustments; and (d) foreign currency translation adjustments. The net effect of exchange rate fluctuations generally reflects changes in the relative strength of the U.S. dollar against major foreign currencies between the beginning and end of the year.

The following table lists the beginning balance, annual activity and ending balance of each component of accumulated other comprehensive income (loss):

	Net Effect of Exchange Rate Fluctuations				Employee Benefit Plans		Total cumulated Other prehensive Loss
Balance on January 1, 2015	\$	(55)	\$ 2	\$	6 (255)	\$	(308)
Change before reclassifications	(5	513)	(4))	27		(490)
Amounts reclassified from accumulated							
other comprehensive income			(1)	(a)	15 (t)	14
Translation effect					(31)		(31)
Tax effect			(1)) _	2		1
Other comprehensive income (loss)							
attributable to the Company	(5	513)	(6)) _	13		(506)
Balance on December 31, 2015	(5	68)	<u>\$ (4)</u>) §	6 (242)	\$	(814)
Change before reclassifications	(2	220)	7		(96)		(309)
Amounts reclassified from accumulated other comprehensive income			6	(a)	18 (1)	24
Translation effect					25		25
Tax effect					15		15
Other comprehensive income (loss)				_			
attributable to the Company	(2	220)	13		(38)		(245)
Balance on December 31, 2016	\$ (7	(88)	9	=	(280)		(1,059)

(a) Amount is included in Cost of goods sold on the Consolidated Results of Operations (see Note 7 for additional information).

(b) Amount is included in the computation of net periodic pension cost and net postretirement benefit cost (see Note 9 for additional information).

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Tabular data dollars in millions

14. Other Expense, net

Other expense, net for the years ended December 31, 2016, 2015 and 2014 included the following:

	 2016	 2015	 2014
Restructuring, asset impairment and other charges	\$ 102	\$ 75	\$ 68
Intangible amortization expense	39	21	1
Impairment of equity investment	25		
Gain on China land compensation	(71)		
Royalty income	(13)	(12)	(12)
Strategic transaction costs		4	
Acquisition-related fair value intangible adjustments		10	
Non-income tax charge			69
Foreign currency exchange loss (gain)	6	(10)	(2)
Other expense (income)	(10)	(11)	15
	\$ 78	\$ 77	\$ 138

In 2016, the Company evaluated the future estimated earnings and cash flow of an equity investment and determined that it was other-than-temporarily impaired. As such, the Company recorded an impairment charge of \$25 million to reduce its carrying value down to its estimated fair value. The Company classified the significant assumptions used to determine the fair value of the impaired assets as Level 3 in the fair value hierarchy as set forth in the general accounting principles for fair value measurements.

In 2014, the Company recorded a charge of \$69 million resulting from a non-income tax assessment from a foreign tax authority.

15. Operating Leases

Rent expense attributable to all warehouse, office buildings, and equipment operating leases was \$76 million in 2016, \$68 million in 2015 and \$53 million in 2014. Minimum future rentals under operating leases are as follows: 2017, \$61 million; 2018, \$42 million; 2019, \$28 million; 2020, \$18 million; 2021, \$12 million; and 2022 and thereafter, \$18 million.

16. Supplemental Cash Flow Information

Changes in the components of working capital related to operations (net of the effects related to acquisitions and divestitures) were as follows:

	2016		2015		 2014
Decrease (increase) in current assets:					
Receivables	\$	(25)	\$	(20)	\$ 83
Inventories		13		(13)	(27)
Prepaid expenses and other		148		(8)	29
Increase (decrease) in current liabilities:					
Accounts payable and accrued liabilities		(91)		139	48
Salaries and wages		20		16	12
U.S. and foreign income taxes.		23		(13)	13
	\$	88	\$	101	\$ 158

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Tabular data dollars in millions

The Company uses various factoring programs to sell certain receivables to financial institutions as part of managing its cash flows. At December 31, 2016 and 2015, the amount of receivables sold by the Company was \$318 million and \$317 million, respectively. Any continuing involvement with the sold receivables is immaterial.

	2016		2016		2016 2015		2014
Interest paid in cash	\$	241	\$	207	\$ 179		
Income taxes paid in cash (all non-U.S)		99		101	101		

Cash interest for the years ended December 31, 2016, 2015 and 2014 includes \$9 million, \$32 million and \$9 million of note repurchase premiums, respectively.

17. Business Combinations

On September 1, 2015, the Company completed the Vitro Acquisition in a cash transaction valued at approximately \$2.297 billion in cash, 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 and contributed approximately \$608 million of incremental net sales and \$122 million of incremental segment operating profit in the year ended December 31, 2016. 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 a senior notes offering, cash on hand and the incremental term loan facilities (see Note 11).

The total purchase price was allocated to the tangible and identifiable intangible assets and liabilities based upon their respective fair values. The purchase agreement contained customary provisions for working capital adjustments, which the Company resolved with the seller in the first quarter of 2016. The Company completed the purchase price allocation process in the third quarter of 2016. The following table summarizes the fair value of the assets and liabilities assumed on September 1, 2015 and subsequent adjustments identified through the purchase price allocation process and recorded through the measurement period:

	September 1, 2015	Measurement Period Adjustments	September 30, 2016
Cash	\$ 17	\$	\$ 17
Other current assets	344	(10)	334
Goodwill	1,073	(236)	837
Customer list intangibles	406	202	608
Net property, plant and equipment	597	48	645
Total assets	2,437	4	2,441
Current liabilities	93	(7)	86
Long-term debt	11		11
Long-term liabilities	36	11	47
Net assets acquired	\$ 2,297	\$	\$ 2,297

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Tabular data dollars in millions

The fair value of the tangible assets was estimated utilizing income and market approaches, considering remaining useful life. The customer list intangible asset includes the Company's established relationships with its customers and the ability of these customers to generate future economic profits for the Company. The value assigned to customer list intangibles is based on the present value of future earnings attributable to the asset group after recognition of required returns to other contributory assets.

Recognized goodwill is attributable to the assembled workforce, expected synergies and other intangible assets that do not qualify for separate recognition. The Vitro Acquisition goodwill is not deductible for tax purposes.

The balance sheet adjustments identified above did not result in any significant adjustments to the periods' income statements.

18. Pro Forma Information - Vitro Acquisition

Had the Vitro Acquisition, described in Note 17 and the related financing described in Note 11, occurred at the beginning of each respective period, unaudited pro forma consolidated net sales and earnings from continuing operations would have been as follows:

	Year Ending December 31, 2015							
	R	1		Acquisition Adjustments		ancing istments		o Forma Adjusted
Net sales	\$	6,156	\$	574	\$		\$	6,730
Earnings from continuing operations attributable to the Company	\$	270	\$	79	\$	(46)	\$	303

19. Discontinued Operations

On April 4, 2016, the annulment committee formed by the World Bank's International Centre for Settlement of Investment Disputes ("ICSID") ruled that a subsidiary of the Company is free to pursue the enforcement of a prior arbitration award against Venezuela. That award amounts to more than \$485 million after including interest from the date of the expropriation by Venezuela (October 26, 2010). Venezuela's application to annul the award is still pending, although the annulment proceedings were suspended in October 2016 because Venezuela has not paid its fees owed to ICSID. If the proceeding is stayed for non-payment for a consecutive period in excess of six months, ICSID's Secretary General could move that the committee discontinue the annulment proceeding altogether. The Company intends to take appropriate steps to vigorously enforce and collect the award, which is enforceable in approximately 150 member states that are party to the ICSID Convention. However, even with the lifting of the stay of enforcement, the Company recognizes that the collection of the award may present significant practical challenges. Because the award has yet to be satisfied and the annulment proceeding is pending, the Company is unable at this stage to reasonably predict the efforts that will be necessary to successfully enforce collection of the award in its financial statements.

The loss from discontinued operations of \$7 million, \$4 million and \$4 million, for the years ended December 31, 2016, 2015 and 2014, respectively, relates to ongoing costs for the Venezuelan expropriation.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Tabular data dollars in millions

20. Guarantees of Debt

OI Group and the Company guarantee OI Inc.'s senior debentures on a subordinated basis. The fair value of the OI Inc. debt being guaranteed was \$266 at December 31, 2016.

21. Related Party Transactions

Charges for administrative services are allocated to the Company by OI Inc. based on an annual utilization level. Such services include compensation and benefits administration, payroll processing, use of certain general accounting systems, auditing, income tax planning and compliance, and treasury services.

Allocated costs also include charges associated with OI Inc.'s equity compensation plans. A substantial number of the options, restricted share units and performance vested restricted share units granted under these plans have been granted to key employees of another subsidiary of OI Inc., some of whose compensation costs, including stock-based compensation, are included in an allocation of costs to all operating subsidiaries of OI Inc., including the Company.

Management believes that such transactions are on terms no less favorable to the Company than those that could be obtained from unaffiliated third parties.

The following information summarizes the Company's significant related party transactions:

	Year ended December 31,						
		2016	ź	2015		2014	
Revenues:							
Sales to affiliated companies	\$		\$		\$		
Expenses:							
Administrative services	\$	2	\$	2	\$	2	
Corporate management fee		75		74		75	
Total expenses	\$	77	\$	76	\$	77	

The above expenses are recorded in the results of operations as follows:

				ended nber 31,		
	2	2016	2015		2014	
Cost of goods sold	\$		\$		\$	
Selling, general and administrative expenses		77		76		77
Total expenses	\$	77	\$	76	\$	77

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The Board of Directors and Share Owner of Owens-Brockway Glass Container, Inc.

We have audited the accompanying consolidated balance sheets of Owens-Brockway Glass Container, Inc. (the Company) as of December 31, 2016 and 2015, and the related consolidated statements of results of operations, comprehensive income, share owner's equity and cash flows for each of the three years in the period ended December 31, 2016. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements 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. We were not engaged to perform an audit of the Company's internal control over financial reporting. Our audits included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. 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-Brockway Glass Container, Inc. at December 31, 2016 and 2015, and the consolidated results of its operations and its cash flows for each of the three years in the period ended December 31, 2016, in conformity with U.S. generally accepted accounting principles.

/s/ Ernst & Young LLP Toledo, Ohio February 10, 2017

CONSOLIDATED RESULTS OF OPERATIONS

Years ended December 31,	2016		2015		2014
Net sales	\$	6,702	\$ 6,156	\$	6,784
Cost of goods sold		(5,387)	(5,060)		(5,523)
Gross profit		1,315	 1,096		1,261
Selling and administrative expense		(411)	(389)		(412)
Research, development and engineering expense		(65)	(64)		(63)
Equity earnings		60	60		64
Interest expense, net		(253)	(232)		(210)
Other expense, net		(78)	(77)		(138)
Earnings from continuing operations before income taxes		568	394		502
Provision for income taxes		(123)	(101)		(93)
Earnings from continuing operations		445	293		409
Loss from discontinued operations		(7)	(4)		(4)
Net earnings		438	289		405
Net earnings attributable to noncontrolling interests		(21)	(23)		(28)
Net earnings attributable to the Company	\$	417	\$ 266	\$	377
Amounts attributable to the Company:			 		
Earnings from continuing operations	\$	424	\$ 270	\$	381
Loss from discontinued operations		(7)	 (4)		(4)
Net earnings	\$	417	\$ 266	\$	377

CONSOLIDATED COMPREHENSIVE INCOME

Years ended December 31,	2016		2015		2014
Net earnings	\$	438	\$	289	\$ 405
Other comprehensive income (loss):					
Foreign currency translation adjustments		(224)		(529)	(305)
Pension and other postretirement benefit adjustments, net of tax		(38)		13	112
Change in fair value of derivative instruments, net of tax		13		(6)	1
Other comprehensive loss		(249)		(522)	(192)
Total comprehensive income (loss)		189		(233)	 213
Comprehensive income attributable to noncontrolling interests		(17)		(7)	(7)
Comprehensive income (loss) attributable to the Company	\$	172	\$	(240)	\$ 206

CONSOLIDATED BALANCE SHEETS

cember 31,		2016	2015	
Assets				
Current assets:				
Cash and cash equivalents Trade receivables, net of allowances of \$32 million and \$29 million at	\$	465	\$ 394	
December 31, 2016 and 2015, respectively		580	562	
Inventories		983	1,007	
Prepaid expenses and other current assets		183	352	
Total current assets		2,211	 2,315	
Other assets:				
Equity investments		433	409	
Pension assets		40	32	
Other assets		538	527	
Intangibles		464	597	
Goodwill		2,462	 2,489	
Total other assets		3,937	4,054	
Property, plant and equipment:				
Land, at cost		237	248	
Buildings and equipment, at cost:				
Buildings and building equipment		1,048	1,080	
Factory machinery and equipment		4,491	4,520	
Transportation, office and miscellaneous equipment		66	68	
Construction in progress		237	 236	
Net property, plant and equipment		6,079	6,152	
Less accumulated depreciation		3,224	 3,221	
Net property, plant and equipment		2,855	 2,931	
Total assets	\$	9,003	\$ 9,300	

CONSOLIDATED BALANCE SHEETS (Continued)

December 31,	2016	2015
Liabilities and Share Owner's Equity		
Current liabilities:		
Accounts payable including amount to related parties of \$7 million and		
\$3 million at December 31, 2016 and 2015, respectively	\$ 1,124	\$ 1,200
Salaries and wages	156	139
U.S. and foreign income taxes	58	34
Other accrued liabilities	330	332
Short-term loans	162	160
Long-term debt due within one year	32	67
Total current liabilities	1,862	1,932
External long-term debt	4,876	5,087
Deferred taxes	144	200
Pension benefits	257	224
Nonpension postretirement benefits	78	66
Other liabilities	174	186
Share owner's equity:		
Investment by and advances from Parent	2,562	2,311
Accumulated other comprehensive loss	(1,059)	(814)
Total share owner's equity of the Company	1,503	1,497
Noncontrolling interests	109	108
Total share owner's equity	1,612	1,605
Total liabilities and share owner's equity	\$ 9,003	\$ 9,300

CONSOLIDATED SHARE OWNER'S EQUITY

Dollars in millions

		Accumulated		
	Investment by and Advances from Parent	Other Comprehensive Income (Loss)	Non- controlling Interests	Total Share Owner's Equity
Balance on January 1, 2014	\$ 2,305	\$ (137)	\$ 147	\$ 2,315
Net intercompany transactions	(274)			(274)
Net earnings	377		28	405
Other comprehensive loss		(171)	(21)	(192)
Distributions to noncontrolling				
interests			(37)	(37)
Balance on December 31, 2014	2,408	(308)	117	2,217
Net intercompany transactions	(345)			(345)
Net earnings	266		23	289
Other comprehensive loss		(506)	(16)	(522)
Distributions to noncontrolling				
interests			(22)	(22)
Acquisitions of noncontrolling				
interests	(18)		6	(12)
Balance on December 31, 2015	2,311	(814)	108	1,605
Net intercompany transactions	(166)			(166)
Net earnings	417		21	438
Other comprehensive loss		(245)	(4)	(249)
Distributions to noncontrolling				
interests			(16)	(16)
Balance on December 31, 2016	\$ 2,562	\$ (1,059)	\$ 109	\$ 1,612

See accompanying Notes to the Consolidated Financial Statements.

CONSOLIDATED CASH FLOWS

Oneverting estivities:		2015	2014
Operating activities:			
Net earnings	\$ 438	\$ 289	\$ 405
Loss from discontinued operations	7	4	4
Non-cash charges (credits):			
Depreciation	371	319	331
Amortization of intangibles and other deferred items	96	77	75
Amortization of finance fees and debt discount	13	14	20
Deferred tax provision (benefit)	(8)	7	(18)
Restructuring, asset impairment and related charges	96	63	76
Non-income tax charge			69
Gain on China land sale	(71)		
Impairment of equity investment	25		
Cash paid for restructuring activities	(24)	(38)	(58)
Change in components of working capital	88	101	158
Other	(126)	41	(116)
Cash provided by continuing operating activities	905	877	946
Cash utilized in discontinued operating activities	(7)	(4)	(4)
Total cash provided by operating activities	898	873	942
Investing activities:			
Additions to property, plant and equipment	(452)	(400)	(369)
Acquisitions, net of cash acquired	(56)	(2,351)	(113)
Net cash proceeds related to sale of assets and other	84	1	16
Net activity for non-controlling partner loans			9
Net foreign exchange derivative activity	8	4	
Cash utilized in investing activities	(416)	(2,746)	(457)
Financing activities:			
Additions to long-term debt	1,235	4,538	1,226
Repayments of long-term debt	(1,452)	(2,317)	(1,100)
Increase (decrease) in short-term loans	10	51	(139)
Net receipts from (distribution to) parent	(166)	(346)	(276)
Payment of finance fees	(9)	(90)	(11)
Distributions to noncontrolling interests	(16)	(22)	(37)
Cash provided by (utilized in) financing activities	(398)	1,814	(337)
Effect of exchange rate fluctuations on cash	(13)	(30)	(21)
Increase (decrease) in cash	71	(89)	127
Cash and cash equivalents at beginning of period	394	483	356
Cash and cash equivalents at end of period	\$ 465	\$ 394	\$ 483

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Tabular data dollars in millions

1. Significant Accounting Policies

Basis of Consolidated Statements The consolidated financial statements of Owens-Brockway Glass Container, Inc. (the "Company") include the accounts of its subsidiaries. Newly acquired subsidiaries have been included in the consolidated financial statements from dates of acquisition.

The Company uses the equity method of accounting for investments in which it has a significant ownership interest, generally 20% to 50%. Other investments are accounted for at cost. The Company monitors other than temporary declines in fair value and records reductions in carrying values when appropriate.

Relationship with Owens-Brockway Packaging, Inc., Owens-Illinois Group, Inc. and Owens-Illinois, Inc. The Company is a 100%-owned subsidiary of Owens-Brockway Packaging, Inc. ("OB Packaging"), and an indirect subsidiary of Owens-Illinois Group, Inc. ("OI Group") and Owens-Illinois, Inc. ("OI Inc."). Although OI Inc. does not conduct any operations, it has substantial obligations related to outstanding indebtedness and asbestos-related payments. OI Inc. relies primarily on distributions from its direct and indirect subsidiaries to meet these obligations.

For federal and certain state income tax purposes, the taxable income of the Company is included in the consolidated tax returns of OI Inc. and income taxes are allocated to the Company on a basis consistent with separate returns.

Nature of Operations The Company is a leading manufacturer of glass container products. The Company's principal product lines are glass containers for the food and beverage industries. The Company has glass container operations located in 23 countries. The principal markets and operations for the Company's products are in Europe, North America, Latin America and Asia Pacific.

Use of Estimates The preparation of financial statements in conformity with accounting principles generally accepted in the United States requires management of the Company to make estimates and assumptions that affect certain amounts reported in the financial statements and accompanying notes. Actual results may differ from those estimates, at which time the Company would revise its estimates accordingly.

Foreign Currency Translation The assets and liabilities of non-U.S. subsidiaries are translated into U.S. dollars at year-end exchange rates. Any related translation adjustments are recorded in accumulated other comprehensive income in share owner's equity.

Revenue Recognition The Company recognizes sales, net of estimated discounts and allowances, when the title to the products and risk of loss are transferred to customers. Provisions for rebates to customers are provided in the same period that the related sales are recorded.

Shipping and Handling Costs Shipping and handling costs are included with cost of goods sold in the Consolidated Results of Operations.

Cash The Company defines "cash" as cash and time deposits with maturities of three months or less when purchased. Outstanding checks in excess of funds on deposit are included in accounts payable.

Accounts Receivable Receivables are stated at amounts estimated by management to be the net realizable value. The Company charges off accounts receivable when it becomes apparent based upon age or customer circumstances that amounts will not be collected.

Allowance for Doubtful Accounts The allowance for doubtful accounts is established through charges to the provision for bad debts. The Company evaluates the adequacy of the allowance for doubtful accounts on a periodic basis. The evaluation includes historical trends in collections and write-offs, management's judgment of the probability of collecting accounts and management's evaluation of business risk.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Tabular data dollars in millions

Inventory Valuation Inventories are valued at the lower of average costs or market.

Goodwill Goodwill represents the excess of cost over fair value of net assets of businesses acquired. Goodwill is evaluated annually, as of October 1, for impairment or more frequently if an impairment indicator exists.

Intangible Assets and Other Long-Lived Assets Intangible assets are amortized over the expected useful life of the asset. Amortization expense directly attributed to the manufacturing of the Company's products is included in cost of goods sold. Amortization expense related to non-manufacturing activities is included in selling and administrative and other. The Company evaluates the recoverability of intangible assets and other long-lived assets based on undiscounted projected cash flows, excluding interest and taxes, when factors indicate that impairment may exist. If impairment exists, the asset is written down to fair value.

Property, Plant and Equipment Property, plant and equipment ("PP&E") is carried at cost and includes expenditures for new facilities and equipment and those costs which substantially increase the useful lives or capacity of existing PP&E. In general, depreciation is computed using the straight-line method and recorded over the estimated useful life of the asset. Factory machinery and equipment is depreciated over periods ranging from 5 to 25 years with the majority of such assets (principally glass-melting furnaces and forming machines) depreciated over 7 to 15 years. Buildings and building equipment are depreciated over periods ranging from 10 to 50 years. Depreciation expense directly attributed to the manufacturing of the Company's products is included in cost of goods sold. Depreciation expense related to non-manufacturing activities is included in selling and administrative. Depreciation expense includes the amortization of assets recorded under capital leases. Maintenance and repairs are expensed as incurred. Costs assigned to PP&E of acquired businesses are based on estimated fair values at the date of acquisition. The Company evaluates the recoverability of PP&E based on undiscounted projected cash flows, excluding interest and taxes, when factors indicate that impairment may exist. If impairment exists, the asset is written down to fair value.

Derivative Instruments The Company uses forward exchange contracts, options and commodity forward contracts to manage risks generally associated with foreign exchange rate and commodity market volatility. Derivative financial instruments are included on the balance sheet at fair value. When appropriate, derivative instruments are designated as and are effective as hedges, in accordance with accounting principles generally accepted in the United States. If the underlying hedged transaction ceases to exist, all changes in fair value of the related derivatives that have not been settled are recognized in current earnings. The Company does not enter into derivative financial instruments for trading purposes and is not a party to leveraged derivatives. Cash flows from forward exchange contracts not designated as hedges are classified as an investing activity. Cash flows of commodity forward contracts are classified as operating activities.

Fair Value Measurements Fair value is defined as the amount that would be received to sell an asset or paid to transfer a liability in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants. Generally accepted accounting principles defines a three-tier fair value hierarchy, which prioritizes the inputs used in measuring fair value as follows:

Level 1: Observable inputs such as quoted prices in active markets;

Level 2: Inputs, other than quoted prices in active markets, that are observable either directly or indirectly; and

Level 3: Unobservable inputs for which there is little or no market data, which requires the Company to develop assumptions.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Tabular data dollars in millions

The carrying amounts reported for cash and short-term loans approximate fair value. In addition, carrying amounts approximate fair value for certain long-term debt obligations subject to frequently redetermined interest rates. Fair values for the Company's significant fixed rate debt obligations are generally based on published market quotations.

The Company's derivative assets and liabilities consist of natural gas forwards and foreign exchange option and forward contracts. The Company uses an income approach to valuing these contracts. Natural gas forward rates and foreign exchange rates are the significant inputs into the valuation models. These inputs are observable in active markets over the terms of the instruments the Company holds, and accordingly, the Company classifies its derivative assets and liabilities as Level 2 in the hierarchy. The Company also evaluates counterparty risk in determining fair values.

Reclassifications Certain reclassifications of prior years' data have been made to conform to the current year presentation.

New Accounting Standards

Revenue from Contracts with Customers - In May 2014, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") No. 2014-09, "Revenue from Contracts with Customers," which requires an entity to recognize the amount of revenue to which it expects to be entitled for the transfer of promised goods or services to customers. In August 2015, the FASB issued ASU No. 2015-14, "Revenue from Contracts with Customers", which delayed by one year the effective date of the new revenue recognition standard, which will be effective for the Company on January 1, 2018. The Company has started an implementation process, including a review of customer contracts, to evaluate the effect this standard will have on its consolidated financial statements and related disclosures. At this time, the Company does not expect that the implementation of this standard in 2018 will have a significant impact on the timing in which it recognizes revenue. While the Company continues to assess the potential impacts of the new standard, the Company does not currently expect the adoption of the new standard to have a material impact on consolidated net income or the consolidated balance sheet. The Company plans to select the modified retrospective transition method upon adoption effective January 1, 2018.

Leases - In February 2016, the FASB issued ASU No. 2016-02, "Leases". Under this guidance, lessees will be required to recognize on the balance sheet a lease liability and a right-of-use asset for all leases, with the exception of short-term leases. The lease liability represents the lessee's obligation to make lease payments arising from a lease, and will be measured as the present value of the lease payments. The right-of-use asset represents the lessee's right to use a specified asset for the lease term, and will be measured at the lease liability amount, adjusted for lease prepayment, lease incentives received and the lessee's initial direct costs. The standard also requires a lessee to recognize a single lease cost allocated over the lease term, generally on a straight-line basis. The new guidance is effective for the Company on January 1, 2019. ASU No. 2016-02 is required to be applied using the modified retrospective approach for all leases existing as of the effective date and provides for certain practical expedients. Early adoption is permitted. The Company is currently evaluating the effects that the adoption of ASU No. 2016-02 will have on the Company's consolidated financial statements, and anticipates the new guidance will significantly impact its consolidated financial statements as the Company has a significant number of leases. As further described in Note 15, Operating Leases, as of December 31, 2016, the Company had minimum lease commitments under non-cancellable operating leases totaling \$205 million.

Credit Losses - In June 2016, the FASB issued ASU No. 2016-13, Financial Instruments - Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments. This guidance requires the measurement of all expected credit losses for financial assets held at the reporting date based on historical experience,

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Tabular data dollars in millions

current conditions and reasonable and supportable forecasts. This guidance also requires enhanced disclosures regarding significant estimates and judgments used in estimating credit losses. The new guidance is effective for the Company on January 1, 2020. Early adoption is permitted for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2018. The Company is currently evaluating the impact that the adoption of this guidance will have on its consolidated financial statements.

Stock Compensation - In March 2016, the FASB issued ASU No. 2016-09, "Improvements to Employee Share-Based Payment Accounting," which requires all excess tax benefits or deficiencies to be recognized as income tax expense or benefit in the income statement. In addition, excess tax benefits should be classified along with other income tax cash flows as an operating activity in the statement of cash flows. Application of the standard is required for the Company on January 1, 2017. The Company does not expect a significant impact in its Consolidated Financial Statements.

Pension Asset Value - In May 2015, the FASB issued ASU No. 2015-07, "Fair Value Measurement (Topic 820): Disclosures for Investments in Certain Entities that Calculate Net Asset Value per Share (or Its Equivalent)." Under the new guidance, investments measured at net asset value ("NAV"), as a practical expedient for fair value, are excluded from the fair value hierarchy. Removing investments measured using the practical expedient from the fair value hierarchy is intended to eliminate the diversity in practice that currently exists with respect to the categorization of these investments. The new guidance is effective for the Company on January 1, 2016. The guidance impacted the presentation of certain pension related assets that use NAV as a practical expedient. See Note 9 for additional information.

Participation in OI Inc. Stock Option Plans and Other Stock Based Compensation The Company participates in the equity compensation plans of OI Inc. under which employees of the Company may be granted options to purchase common shares of OI Inc., restricted common shares of OI Inc., or restricted share units of OI Inc.

Stock Options

In general, subject to change in control, options become exercisable 25% per year beginning on the first anniversary of grant. No options may be exercised in whole or in part during the first year after the date granted.

In general, options expire following termination of employment or the seventh anniversary of the option grant. The fair value of options is amortized over the vesting periods which range from one to four years.

Restricted Shares and Restricted Share Units

Shares granted after March 21, 2005 and prior to 2011, vest 25% per year beginning on the first anniversary and unvested shares are forfeited upon termination of employment. Restricted share units granted to employees after 2010 vest 25% per year beginning on the first anniversary. Holders of vested restricted share units receive one share of the Company's common stock for each unit as units vest. Granted but unvested restricted share units granted to directors vest after one year.

The fair value of the restricted shares and restricted share units is equal to the market price of the Company's common stock on the date of the grant. The fair value of restricted shares and restricted share units is amortized over the vesting periods which range from one to four years.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Tabular data dollars in millions

Performance Vested Restricted Share Units

Performance vested restricted share units vest on January 1 of the third year following the year in which they are granted. Holders of vested units may receive up to two shares of OI Inc.'s common stock for each unit, depending upon the attainment of consolidated performance goals established by the Compensation Committee of OI Inc.'s Board of Directors. If minimum goals are not met, no shares will be issued. Granted but unvested restricted share units are forfeited upon termination of employment, unless certain retirement criteria are met.

The fair value of each performance vested restricted share unit is equal to the product of the fair value of OI Inc.'s common stock on the date of grant and the estimated number of shares into which the performance vested restricted share unit will be converted. The fair value of performance vested restricted share units is amortized ratably over the vesting period. Should the estimated number of shares into which the performance vested restricted share unit will be converted change, an adjustment will be recorded to recognize the accumulated difference in amortization between the revised and previous estimates.

As discussed in Note 21, costs incurred under these plans by OI Inc. related to stock-based compensation awards granted directly to the Company's employees are included in the allocable costs charged to the Company and other operating subsidiaries of OI Inc. on an intercompany basis.

2. Segment Information

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 (see Note 17), the Company has renamed the former South America segment to the Latin America segment. These four segments are aligned with the Company's internal approach to managing, reporting, and evaluating performance of its global glass operations. Certain assets and activities not directly related to one of the regions or to glass manufacturing are reported with Retained corporate costs and other. These include licensing, equipment manufacturing, global engineering, and certain equity investments. Retained corporate costs and other also includes certain headquarters administrative and facilities costs and certain incentive compensation and other benefit plan costs that are global in nature and are not allocable to the reportable segments.

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 Company's management uses segment operating profit, in combination with selected cash flow information, to evaluate performance and to allocate resources. Segment operating profit for 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.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Tabular data dollars in millions

Financial information regarding the Company's reportable segments is as follows:

	 2016	2015		 2014
Net sales:				
Europe	\$ 2,300	\$	2,324	\$ 2,794
North America	2,220		2,039	2,003
Latin America	1,432		1,064	1,159
Asia Pacific	 684		671	 793
Reportable segment totals	6,636		6,098	6,749
Other	 66		58	 35
Net sales	\$ 6,702	\$	6,156	\$ 6,784
	2016		2015	2014
Segment operating profit:				
Europe	\$ 237	\$	209	\$ 353
North America	299		265	240
Latin America	269		183	227
Asia Pacific	77		83	88
Reportable segment totals	882		740	908
Items excluded from segment operating profit:				
Other income(expense)	(5)		2	(1)
Restructuring, asset impairment and other charges	(127)		(80)	(91)
Gain on China land sale	71			
Strategic transaction costs			(4)	
Acquisition-related fair value inventory adjustments			(22)	
Acquisition-related fair value intangible adjustments			(10)	
Non-income tax charge				(69)
Pension Settlement charges				(35)
Interest expense, net	(253)		(232)	(210)
Earnings from continuing operations before income taxes	\$ 568	\$	394	\$ 502

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Tabular data dollars in millions

				North		T			portable			C	
	I			America		Latin merica	1	Asia Pacific	egment Totals	C	Other		nsolidated Totals
Total assets:									 				
2016	\$	2,793	\$	2,515	\$	2,536	\$	926	\$ 8,770	\$	233	\$	9,003
2015		2,902		2,492		2,807		917	9,118		182		9,300
2014		3,215		1,963		1,300		1,018	7,496		181		7,677
Equity investments:													
2016	\$	78	\$	21	\$		\$	117	\$ 216	\$	217	\$	433
2015		78		22				145	245		164		409
2014		81		24				153	258		169		427
Equity earnings:													
2016	\$	15	\$	12	\$		\$	4	\$ 31	\$	29	\$	60
2015		16		19				7	42		18		60
2014		19		17				4	40		24		64
Capital expenditures:													
2016	\$	163	\$	107	\$	123	\$	59	\$ 452	\$		\$	452
2015		164		97		89		50	400				400
2014		188		89		55		34	366		3		369
Depreciation and													
amortization expense:													
2016	\$	118	\$	139	\$	173	\$	37	\$ 467	\$	—	\$	467
2015		120		128		107		40	395		1		396
2014		140		131		79		53	403		3		406

The Company's net property, plant and equipment by geographic segment are as follows:

	U.S.		Non-U.S.		Total	
2016	\$ 722	\$	2,133	\$	2,855	
2015	704	\$	2,227	\$	2,931	
2014	678		1,734		2,412	

The Company's net sales by geographic segment are as follows:

	U.S.	Non-U.S.		Total	
2016	\$ 2,124	\$	4,578	\$	6,702
2015	1,939		4,217		6,156
2014	1,852		4,932		6,784

Intercompany sales in Latin America totaled \$195 million, \$101 million and \$0 for the years ended December 31, 2016, 2015, and 2014, respectively.

Operations outside the U.S. that accounted for more than 10% of consolidated net sales from continuing operations were in France (2015 - 10%, 2014 - 11%).

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Tabular data dollars in millions

3. Inventories

Major classes of inventory are as follows:

	2016		2015	
Finished goods	\$	827	\$	858
Raw materials		118		113
Operating supplies		38		36
	\$	983	\$	1,007

4. Equity Investments

At December 31, 2016 the Company's ownership percentage in affiliates include:

	O-I Ownership	
Affiliates	Percentage	Business Type
BJC O-I Glass Pte. Ltd.	50%	Glass container manufacturer
CO Vidrieria SARL ("COV")	50%	Glass container manufacturer
Rocky Mountain Bottle Company	50%	Glass container manufacturer
Tata Chemical (Soda Ash) Partners	25%	Soda ash supplier
Vetrerie Meridionali SpA ("VeMe")	50%	Glass container manufacturer
Vetri Speciali SpA	50%	Specialty glass manufacturer

Summarized information pertaining to the Company's equity affiliates follows:

	2016		2015		2014
Equity in earnings:					
Non-U.S.	\$	28	\$	23	\$ 23
U.S		32		37	41
Total	\$	60	\$	60	\$ 64
Dividends received	\$	38	\$	53	\$ 54

Summarized combined financial information for equity affiliates is as follows (unaudited):

	 2016	2015	
At end of year:			
Current assets	\$ 451	\$	430
Non-current assets	1,025		959
Total assets	1,476		1,389
Current liabilities	200		203
Other liabilities and deferred items	368		211
Total liabilities and deferred items	 568		414
Net assets	\$ 908	\$	975

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Tabular data dollars in millions

	2016		 2015	2014	
For the year:					
Net sales	\$	755	\$ 719	<u>\$</u>	752
Gross profit	\$	182	\$ 193	\$	198
Net earnings	\$	134	\$ 139	\$	150

Based on an evaluation of each of the Company's equity investments for the three years ending December 31, 2016, no investments exceeded the significant subsidiary thresholds per Rule 3-09 of Regulation S-X. As such, separate financial statements for the Company's equity investments are not required to be filed.

The Company made purchases of approximately \$176 million and \$161 million from equity affiliates in 2016 and 2015, respectively, and owed approximately \$76 million and \$66 million to equity affiliates as of December 31, 2016 and 2015, respectively.

There is a difference of approximately \$12 million as of December 31, 2016, between the amount at which certain investments are carried and the amount of underlying equity in net assets. The portion of the difference related to inventory or amortizable assets is amortized as a reduction of the equity earnings. The remaining difference is considered goodwill.

5. Goodwill and Intangible Assets

Goodwill

The changes in the carrying amount of goodwill for the years ended December 31, 2016, 2015 and 2014 are as follows:

	F	Europe	-	North merica	 atin Ierica	0	ther	Total
Balance as of January 1, 2014	\$	1,044	\$	734	\$ 276	\$	5	\$ 2,059
Translation effects		(118)		(11)	(37)			(166)
Balance as of December 31, 2014		926		723	239		5	1,893
Acquisition related adjustments				316	480			796
Translation effects		(86)		(19)	(95)			(200)
Balance as of December 31, 2015		840		1,020	624		5	2,489
Acquisition related adjustments				15	26			41
Translation effects		(32)		3	(39)			(68)
Balance as of December 31, 2016	\$	808	\$	1,038	\$ 611	\$	5	\$ 2,462

The acquisition related adjustments in 2016 and 2015 primarily relate to the Vitro Acquisition (see Note 17).

Goodwill for the Asia Pacific segment is \$0 and net of accumulated impairment losses of \$1,135 million as of December 31, 2016, 2015 and 2014.

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

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Tabular data dollars in millions

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 price trends, customer demand, material costs, discount rates and asset replacement costs, and are classified as Level 3 in the fair value hierarchy.

During the fourth quarter of 2016, the Company completed its annual impairment testing and determined that no impairment existed.

Intangible assets

On September 1, 2015, the Company acquired customer list intangibles as part of the Vitro Acquisition (see Note 17).

Customer list intangible assets are amortized using the accelerated amortization method over their 20 year lives. Net intangible asset values were \$464 million and \$597 million for the years ended December 31, 2016 and 2015, respectively. Amortization expense for intangible assets was \$39 million, \$21 million and \$1 million for the years ended December 31, 2016, 2015 and 2014, respectively. Estimated amortization related to intangible assets through 2021 is as follows: 2017, \$44 million; 2018, \$44 million; 2019, \$42 million; 2020, \$41 million; and 2021, \$39 million. No impairment existed on these assets at December 31, 2016.

The Company has determined that the fair value measurements related to the customer list intangibles are based on significant unobservable inputs and are classified as Level 3 in the fair value hierarchy.

6. Prepaid Expenses and Other Assets

Prepaid expenses and other current assets at December 31, 2016 and 2015 are as follows:

	2	016	2015
Prepaid expenses	\$	38	\$ 42
Value added taxes		46	195
Other		99	115
	\$	183	\$ 352

Other assets (noncurrent) consist of the following at December 31, 2016 and 2015:

	2	2016	1	2015
Deferred tax assets	\$	189	\$	177
Deferred returnable packaging costs		115		110
Repair part inventories		107		118
Value added taxes		22		17
Capitalized software		31		28
Deferred finance fees		5		6
Other		69		71
	\$	538	\$	527

Capitalized software includes costs related to the acquisition and development of internal-use software. These costs are amortized over the estimated useful life of the software. Amortization expense for capitalized software was \$6 million, \$9 million and \$8 million for 2016, 2015 and 2014, respectively. Estimated amortization related to capitalized software through 2021 is as follows: 2017, \$6 million; 2018, \$6 million; 2019, \$5 million; 2020, \$5 million; and 2021, \$4 million.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Tabular data dollars in millions

7. Derivative Instruments

The Company has certain derivative assets and liabilities which consist of natural gas forwards and foreign exchange option and forward contracts. The Company uses an income approach to value these contracts. Natural gas forward rates and foreign exchange rates are the significant inputs into the valuation models. These inputs are observable in active markets over the terms of the instruments the Company holds, and accordingly, the Company classifies its derivative assets and liabilities as Level 2 in the hierarchy. The Company also evaluates counterparty risk in determining fair values.

Commodity Forward Contracts Designated as Cash Flow Hedges

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, 2016 and 2015, the Company had entered into commodity forward contracts covering approximately 12,300,000 MM BTUs and 7,300,000 MM BTUs, respectively, primarily related to customer requests to lock the price of natural gas.

The Company accounts for the above forward contracts as cash flow hedges at December 31, 2016 and recognizes them on the balance sheet at fair value. The effective portion of changes in the fair value of a derivative that is designated as, and meets the required criteria for, a cash flow hedge is recorded in the Accumulated Other Comprehensive Income component of share owners' equity ("OCI") and reclassified into earnings in the same period or periods during which the underlying hedged item affects earnings. An unrecognized gain of \$6 million at December 31, 2016 and an unrecognized loss of \$4 million at December 31, 2015 related to the commodity forward contracts were included in Accumulated OCI, and will be reclassified into earnings over the next twelve to twenty-four months. Any material portion of the change in the fair value of a derivative designated as a cash flow hedge that is deemed to be ineffective is recognized in current earnings. The ineffectiveness related to these natural gas hedges for the year ended December 31, 2016 and 2015 was not material.

Amount of ga	in (loss) Recog	nized in OCI on	Amount of gain (loss) Reclassified from Accumulated OCI into Income								
Commodity Forward Contracts (Effective Portion)					(reported in cost of goods sold) (Effective Portion)						
2016	2015	20)14	2016		2015	2014				
\$ 7 \$		(4) \$	3	\$	— \$	(1)	\$	2			

The effect of the commodity forward contracts on the results of operations for the years ended December 31, 2016, 2015 and 2014 is as follows:

Foreign Exchange Derivative Contracts and not Designated as Hedging Instruments

The Company may enter into short-term forward exchange or option agreements to purchase foreign currencies at set rates in the future. These agreements are used to limit exposure to fluctuations in foreign currency exchange rates for significant planned purchases of fixed assets or commodities that are denominated in currencies other than the subsidiaries' functional currency. The Company may also use forward exchange

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

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agreements to offset the foreign currency risk for receivables and payables, including intercompany receivables, payables and loans, not denominated in, or indexed to, their functional currencies. The Company records these short-term forward exchange agreements on the balance sheet at fair value and changes in the fair value are recognized in current earnings.

At December 31, 2016 and 2015, the Company had outstanding forward exchange and option agreements denominated in various currencies covering the equivalent of approximately \$490 million and \$790 million, respectively, related primarily to intercompany transactions and loans.

The effect of the foreign exchange derivative contracts on the results of operations for the years ended December 31, 2016, 2015 and 2014 is as follows:

	Amount of Gain (Loss)						
Location of Gain (Loss)		Recognized in Income on					
Recognized in Income on	Foreign Exchange Contracts						
Foreign Exchange Contracts	20	16	20	015	2014		
Other expense, net	\$	6	\$	10	\$	(8)	

Balance Sheet Classification

The Company records the fair values of derivative financial instruments on the balance sheet as follows: (a) receivables if the instrument has a positive fair value and maturity within one year, (b) deposits, receivables, and other assets if the instrument has a positive fair value and maturity after one year, and (c) other accrued liabilities or other liabilities (current) if the instrument has a negative fair value and maturity within one year.

The following table shows the amount and classification (as noted above) of the Company's derivatives as of December 31, 2016 and 2015:

	Fair Value					
	Balance Sheet Location	2016			2015	
Asset Derivatives:						
Derivatives designated as hedging instruments:						
Commodity futures contracts	b	\$	6	\$		
Derivatives not designated as hedging instruments:						
Foreign exchange derivative contracts	а	\$	9	\$	14	
Total asset derivatives		\$	15	\$	14	
Liability Derivatives:						
Derivatives designated as hedging instruments:						
Commodity futures contracts	с	\$		\$	3	
Derivatives not designated as hedging instruments:						
Foreign exchange derivative contracts	с		5		2	
Total liability derivatives		\$	5	\$	5	

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

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8. Restructuring Accruals, Asset Impairments and Other Costs Related to Closed Facilities

The Company continually reviews its manufacturing footprint and operating cost structure and may decide to close operations or reduce headcount to gain efficiencies, integrate acquired operations, reduce future expenses and other market factors. The Company incurs costs associated with these actions including employee severance and benefits, other exit costs such as those related to contract terminations, and asset impairment charges. The Company incur other costs related to closed facilities including environmental remediation, clean up, dismantling and preparation for sale or other disposition.

The Company accounts for restructuring and other costs under applicable provisions of generally accepted accounting principles. Charges for employee severance and related benefits are generally accrued based on contractual arrangements with employees or their representatives. Other exit costs are accrued based on the estimated cost to settle related contractual arrangements. Estimated environmental remediation costs are accrued when specific claims have been received or are probable of being received.

The Company's decisions to curtail selected production capacity have resulted in write downs of certain long-lived assets to the extent their carrying amounts exceeded fair value or fair value less cost to sell. The Company classified the significant assumptions used to determine the fair value of the impaired assets as Level 3 in the fair value hierarchy as set forth in the general accounting principles for fair value measurements.

When a decision is made to take these actions, the Company manages and accounts for them programmatically apart from the on-going operations of the business. Information related to major programs (as in the case of the European Asset Optimization and Asia Pacific Restructuring programs below) are presented separately. Minor initiatives are presented on a combined basis as Other Restructuring Actions. These restructuring initiatives taken by the Company are not related to the European Asset Optimization program or the Asia Pacific restructuring plan. When charges related to major programs are completed, remaining accrual balances are classified with Other Restructuring Actions.

European Asset Optimization

In 2011, the Company initiated the European Asset Optimization program to increase the efficiency and capability of its European operations and to better align its European manufacturing footprint with market and customer needs. This program involved making additional investments in certain facilities and addressing assets with higher cost structures. As part of this program, the Company recorded charges of \$0, \$0, and \$1 million for the years ended 2016, 2015 and 2014, respectively for employee costs, write-down of assets, and environmental remediation related to decisions to close furnaces and manufacturing facilities in Europe. The Company recorded total cumulative charges of \$127 million and does not expect to execute any further actions under this program.

Asia Pacific Restructuring

Since 2011, the Company has implemented a restructuring plan in its Asia Pacific segment, primarily related to aligning its supply base with lower demand in the region. As part of this plan, the Company recorded charges of \$4 million, \$5 million and \$73 million for the years ended 2016, 2015 and 2014, respectively, for employee costs, write-down of assets, and pension charges related to furnace closures and additional restructuring activities. The Company recorded total cumulative charges of \$224 million and does not expect to execute any further actions under this program.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

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Other Restructuring Actions

In 2016, the Company recorded charges of \$92 million for other restructuring actions. These charges primarily represented employee costs, write-down of assets, and other exit costs of \$64 million for a plant closures in Latin America, Europe and North America and \$28 million related to other restructuring actions. The Company took certain other restructuring actions and recorded charges in 2015 of \$58 million. These charges primarily related to employee costs, write-down of assets and other exit costs totaling \$14 million for a plant closure and furnace closure in Latin America, \$38 million for a plant closure in North America and \$6 million for other restructuring actions. In 2014, the Company took certain other restructuring actions and recorded charges of \$2 million for employee costs related to global headcount reduction initiatives.

The following table presents information related to restructuring, asset impairment and other costs related to closed facilities from January 1, 2015 through December 31, 2015:

	iropean Asset imization	Other Asia Pacific Restructuring Restructuring Actions			Asia Pacific Restructuring			Restructuring		Total Restructuring		
Balance at January 1, 2015	\$ 12	\$	12	\$	36	\$	60					
Charges			5		58		63					
Write-down of assets to net realizable value			(4)		(27)		(31)					
Net cash paid, principally severance and												
related benefits	(5)		(5)		(28)		(38)					
Other, including foreign exchange translation	(4)		(1)		(6)		(11)					
Balance at December 31, 2015	\$ 3	\$	7	\$	33	\$	43					

The following table presents information related to restructuring, asset impairment and other costs related to closed facilities from January 1, 2016 through December 31, 2016:

	Asia Pacific Restructuring		Other estructuring Actions	Total Restructuring	
Balance at January 1, 2016	\$ 7	\$	36	\$	43
Charges	4		92		96
Write-down of assets to net realizable value			(28)		(28)
Net cash paid, principally severance and related benefits	(3))	(21)		(24)
Other, including foreign exchange translation	(1))	(3)		(4)
Balance at December 31, 2016	\$ 7	\$	76	\$	83

The restructuring accrual balance represents the Company's estimates of the remaining future cash amounts to be paid related to the actions noted above. As of December 31, 2016, the Company's estimates include approximately \$65 million for employee benefits costs, \$16 million for environmental remediation costs, and \$2 million for other exit costs.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Tabular data dollars in millions

9. Pension Benefit Plans and Other Postretirement Benefits

Pension Benefit Plans

The Company participates in OI Inc.'s defined benefit pension plans for a substantial number of employees located in the United States. Benefits generally are based on compensation for salaried employees and on length of service for hourly employees. OI Inc.'s policy is to fund pension plans such that sufficient assets will be available to meet future benefit requirements. Independent actuaries determine pension costs for each subsidiary of OI Inc. included in the plans; however, accumulated benefit obligation information and plan assets pertaining to each subsidiary have not been separately determined. As such, the accumulated benefit obligation and the plan assets related to the pension plans for domestic employees have been retained by another subsidiary of OI Inc. Net expense to results of operations for the Company's allocated portion of the domestic pension costs amounted to \$23 million in 2016, \$24 million in 2015 and \$19 million in 2014.

OI Inc. also sponsors several defined contribution plans for all salaried and hourly U.S. employees of the Company. Participation is voluntary and participants' contributions are based on their compensation. OI Inc. matches contributions of participants, up to various limits, in substantially all plans. OI Inc. charges the Company for its share of the match. The Company's share of the contributions to these plans amounted to \$32 million in 2016, \$27 million in 2015 and \$17 million in 2014.

The Company also has defined benefit pension plans covering a substantial number of employees in several non-U.S. jurisdictions. Benefits generally are based on compensation for salaried employees and on length of service for hourly employees. The Company's policy is to fund pension plans such that sufficient assets will be available to meet future benefit requirements. The Company's defined benefit pension plans use a December 31 measurement date.

	2016		2015		
Obligations at beginning of year	\$	1,210	\$	1,311	
Change in benefit obligations:					
Service cost		16		15	
Interest cost		44		44	
Actuarial (gain) loss, including the effect of change in discount rates		160		(9)	
Acquisitions				37	
Participant contributions		2		1	
Benefit payments		(71)		(58)	
Other		3			
Foreign currency translation		(129)		(131)	
Net change in benefit obligations		25		(101)	
Obligations at end of year	\$	1,235	\$	1,210	

The changes in the non-U.S. pension benefit obligations for the year are as follows:

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Tabular data dollars in millions

The changes in the fair value of the non-U.S. pension plans' assets for the year are as follows:

	2016		2015	
Fair value at beginning of year	\$	1,012	\$	1,094
Change in fair value:				
Actual gain (loss) on plan assets		139		42
Benefit payments		(71)		(58)
Employer contributions		38		15
Participant contributions		2		1
Acquisitions				22
Foreign currency translation		(111)		(104)
Other		2		
Net change in fair value of assets		(1)		(82)
Fair value at end of year	\$	1,011	\$	1,012

The funded status of the non-U.S. pension plans at year end are as follows:

	2016		2015	
Plan assets at fair value	\$	1,011	\$	1,012
Projected benefit obligations		1,235		1,210
Plan assets less than projected benefit obligations		(224)		(198)
Items not yet recognized in pension expense:				
Actuarial loss		352		320
Prior service cost (credit)		(1)		(1)
		351		319
Net amount recognized	\$	127	\$	121

The following changes in plan assets and benefit obligations were recognized in accumulated other comprehensive income at December 31, 2016 and 2015 as follows (amounts are pretax):

	2	2016	2015
Pension assets	\$	40	\$ 32
Current pension liability, included with other accrued liabilities		(7)	(6)
Pension benefits		(257)	(224)
Accumulated other comprehensive loss		351	319
Net amount recognized	\$	127	\$ 121

The following changes in plan assets and benefit obligations were recognized in accumulated other comprehensive income at December 31, 2016 and 2015 as follows (amounts are pretax):

	2016		2015	
Current year actuarial (gain) loss	\$	87	\$	15
Amortization of actuarial loss		(12)		(15)
Settlement				
		75		
Translation		(43)		(31)
	\$	32	\$	(31)

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Tabular data dollars in millions

The components of the non-U.S. pension plans' net pension expense for the year are as follows:

	2016		2016 2015		2014	
Service cost	\$	16	\$	15	\$	23
Interest cost		44		44		69
Expected asset return		(65)		(67)		(86)
Amortization:						
Actuarial loss		13		15		18
Prior service credit						
Net amortization		13		15		18
Net expense	\$	8	\$	7	\$	24

On October 1, 2014, the Company settled the liability associated with its pension plan in the Netherlands, resulting in a settlement charge of approximately \$35 million. Non-U.S. pension expense excludes \$3 million of pension settlement costs that were recorded in restructuring expense in 2014. The table above excludes these charges.

Amounts that are expected to be amortized from accumulated other comprehensive income into net pension expense during 2017:

Amortization:

Actuarial loss	\$ 16
Prior service cost	
Net amortization	\$ 16

The following information is for plans with projected and accumulated benefit obligations in excess of the fair value of plan assets at year end:

		Projecte Obligatio Fair of Plan	n Exc Value	eeds		Accumula Obligatio Fair V Plan	n Exc alue o	eeds f
	2	2016 2015		2016		2015		
Projected benefit obligations	\$	897	\$	876	\$	897	\$	876
Accumulated benefit obligation		867		850		867		850
Fair value of plan assets		632		645		632		645

The weighted average assumptions used to determine benefit obligations are as follows:

	2016	2015
Discount rate	2.94%	3.68%
Rate of compensation increase	2.90%	2.84%

The weighted average assumptions used to determine net periodic pension costs are as follows:

	2016	2015	2014
Discount rate	3.68%	3.65%	4.14%
Rate of compensation increase	2.84%	2.89%	3.31%
Expected long-term rate of return on assets	7.15%	7.21%	7.23%

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

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Future benefits are assumed to increase in a manner consistent with past experience of the plans, which, to the extent benefits are based on compensation, includes assumed salary increases as presented above. For 2016, the Company's weighted average expected long-term rate of return on assets was 7.15% for the non-U.S. plans. In developing this assumption, the Company considered its historical 10-year average return (through December 31, 2016) and evaluated input from its third party pension plan asset consultants, including their review of asset class return expectations

It is the Company's policy to invest pension plan assets in a diversified portfolio consisting of an array of asset classes within established target asset allocation ranges. The investment risk of the assets is limited by appropriate diversification both within and between asset classes. The assets of the group trust and the Company's non-U.S. plans are primarily invested in a broad mix of domestic and international equities, domestic and international bonds, and real estate, subject to the target asset allocation ranges. The assets are managed with a view to ensuring that sufficient liquidity will be available to meet expected cash flow requirements.

The investment valuation policy of the Company is to value investments at fair value. All investments are valued at their respective net asset values. Equity securities for which market quotations are readily available are valued at the last reported sales price on their principal exchange on valuation date or official close for certain markets. Fixed income investments are valued by an independent pricing service. Investments in registered investment companies or collective pooled funds are valued at their respective net asset values. Short-term investments are stated at amortized cost, which approximates fair value. The fair value of real estate is determined by periodic appraisals.

In accordance with the Company's adoption of ASU No. 2015-07 in 2016, certain investments measured at net asset value ("NAV"), as a practical expedient for fair value, have been excluded from the fair value hierarchy. The fair value measurements tables presented below have been amended to conform to the current year presentation under ASU No. 2015-07. See Note 1 for more information.

In 2016, the non-U.S. plan assets consisted of approximately 41% equity securities, 42% debt securities, and 17% real estate and other. The following table sets forth by level, within the fair value hierarchy, the Company's non-U.S. pension plan assets at fair value as of December 31, 2016 and 2015:

			2016				2015									
	Le	vel 1	Le	vel 2	Le	vel 3	Т	otal	Le	vel 1	Le	vel 2	Le	vel 3	To	otal
Cash and cash equivalents	\$	24	\$		\$	_	\$	24	\$	30	\$	_	\$	_	\$	30
Equity securities																—
Debt securities		37		2				39		16						16
Real estate						4		4						5		5
Other				37		6		43				24		6		30
Total	\$	61	\$	39	\$	10			\$	46	\$	24	\$	11		
Investments measured at																
net asset value							\$	901							\$	931
Total non-U.S. assets at																
fair value							\$ 1	,011							<u>\$ 1</u>	,012

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Tabular data dollars in millions

The following is a reconciliation of the Company's pension plan assets recorded at fair value using significant unobservable inputs (Level 3):

	2016		2015	
Beginning balance	\$	11	\$	5
Net increase (decrease)		(1)		6
Ending balance	\$	10	\$	11

The net increase (decrease) in the fair value of the Company's Level 3 pension plan assets is primarily due to purchases and sales of unlisted real estate funds. The change in the fair value of Level 3 pension plan assets due to actual return on those assets was immaterial in 2016.

In order to maintain minimum funding requirements, the Company is required to make contributions to its non-U.S. defined benefit pension plans of approximately \$24 million in 2017.

The following estimated future benefit payments, which reflect expected future service, as appropriate, are expected to be paid in the years indicated:

Year(s)

2017	\$ 53
2018	51
2019	54
2020	57
2021	60
2022 - 2026	343

Postretirement Benefits Other Than Pensions

OI Inc. provides retiree health care and life insurance benefits covering certain U.S. salaried and hourly employees. Benefits provided by the Company for hourly retirees are determined by collective bargaining. Employees are generally eligible for benefits upon retirement and completion of a specified number of years of creditable service. OI Inc. uses a December 31 measurement date to measure its postretirement benefit obligations.

The Company's net periodic postretirement benefit income, as allocated by OI Inc., for domestic employees was \$2 million, \$2 million, and \$1 million at December 31, 2016, 2015 and 2014, respectively.

The Company also has postretirement benefit plans covering substantially all employees in Canada. The following tables relate to the Company's postretirement benefit plans in Canada.

The changes in the postretirement benefit obligations for the year are as follows:

	20	2016		2016		015
Obligations at beginning of year	\$	68	\$	81		
Change in benefit obligations:						
Service cost		1		1		
Interest cost		3		3		
Actuarial (gain) loss, including the effect of changing discount rates		9		(1)		
Benefit payments		(2)		(3)		
Foreign currency translation		2		(13)		
Net change in benefit obligations		13		(13)		
Obligations at end of year	\$	81	\$	68		

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Tabular data dollars in millions

The funded status of the postretirement benefit plans at year end is as follows:

	2	016	2015	
Postretirement benefit obligations	\$	(81)	\$ (68)	
Items not yet recognized in net postretirement benefit cost:				
Actuarial gain (loss)		(6)	3	
Net amount recognized	\$	(87)	\$ (65)	

The net amount recognized is included in the Consolidated Balance Sheets at December 31, 2016 and 2015 as follows:

	2	2016	 2015
Current nonpension postretirement benefit, included with Other accrued liabilities	\$	(3)	\$ (2)
Nonpension postretirement benefits		(78)	(66)
Accumulated other comprehensive income (loss)		(6)	3
Net amount recognized	\$	(87)	\$ (65)

The following changes in benefit obligations were recognized in accumulated other comprehensive income at December 31, 2016 and 2015 as follows (amounts are pretax):

	2016)	2015		
Current year actuarial (gain) loss	\$	9	\$		

The components of the net postretirement benefit cost for the year are as follows:

	2016		20	015	2014	
Service cost	\$	1	\$	1	\$	1
Interest cost		3		3		4
Net postretirement benefit cost	\$	4	\$	4	\$	5

The weighted average discount rates used to determine the accumulated postretirement benefit obligation and net postretirement benefit cost are as follows:

	2016	2015	2014
Accumulated postretirement benefit obligation	3.55%	3.80%	3.75%
Net postretirement benefit cost	3.80%	3.75%	4.47%

The weighted average assumed health care cost trend rates at December 31 are as follows:

	2016	2015
Health care cost trend rate assumed for next year	5.00%	5.00%
Rate to which the cost trend rate is assumed to decline (ultimate trend rate)	5.00%	5.00%
Year that the rate reaches the ultimate trend rate	N/A	N/A

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Tabular data dollars in millions

Assumed health care cost trend rates affect the amounts reported for the postretirement benefit plans. A one-percentage-point change in assumed health care cost trend rates would have the following effects:

	1	-Percent	age Poi	int
	Inc	rease	Decrease	
Effect on total of service and interest cost	\$	1	\$	(1)
Effect on accumulated postretirement benefit obligations		13		(10)

Amortization included in net postretirement benefit cost is based on the average remaining service of employees.

The following estimated future benefit payments, which reflect expected future service, as appropriate, are expected to be paid in the years indicated:

Year(s)

2017	\$ 3
2018	3
2019	3
2020	3
2021	3
2022 - 2026	18

10. Income Taxes

The provision for income taxes was calculated based on the following components of earnings (loss) before income taxes:

Continuing operations		2016	2	2015	2	2014
U.S	\$	185	\$	125	\$	231
Non-U.S.		383		269		271
	\$	568	\$	394	\$	502
Discontinued operations		2016	-	2015	2	2014
U.S	\$		\$		\$	
Non-U.S.		(7)		(4)		(4)
	¢	(7)	¢	(4)	¢	(4)

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

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

	2016		2	2015	2014	
Current:						
U.S	\$	8	\$	9	\$	8
Non-U.S.		123		85		103
		131		94		111
Deferred:						
U.S		(1)		5		
Non-U.S.		(7)		2		(18)
		(8)		7		(18)
Total:						
U.S		7		14		8
Non-U.S.		116		87		85
Total	\$	123	\$	101	\$	93

A reconciliation of the provision for income taxes based on the statutory U.S. Federal tax rate of 35% to the provision for income taxes is as follows:

	 2016		2015		2014
Tax provision on pretax earnings (loss) from continuing operations at statutory U.S. Federal tax rate Increase (decrease) in provision for income taxes due to:	\$ 199	\$	138	\$	177
Non-U.S. tax rates under U.S. rates	(22)		(12)		(22)
Changes in valuation allowance	8		21		(24)
Withholding tax, net.	20		18		18
Non-deductible acquisition costs					
U.S. tax on intercompany dividends and interest	3		16		1
U.S. tax consolidation benefit	(74)		(70)		(47)
Tax exempt income	(2)		(3)		(5)
Tax law changes	(3)		(3)		
Tax credit	(17)		(14)		(3)
Change in tax reserves	8		5		(13)
Mexico inflationary adjustments	6		3		
Other items	 (3)		2		11
Provision for income taxes	\$ 123	\$	101	_	93

Deferred income taxes reflect: (1) the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes; and (2) carryovers and credits for income tax purposes.

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Significant components of the Company's deferred tax assets and liabilities at December 31, 2016 and 2015 are as follows:

	2016		2015	
Deferred tax assets:				
Accrued postretirement benefits	\$	21	\$	18
Foreign tax credit		414		389
Operating and capital loss carryovers		280		296
Other credit carryovers		14		13
Accrued liabilities		75		68
Pension liability		30		27
Other		51		38
Total deferred tax assets		885		849
Deferred tax liabilities:				
Property, plant and equipment		112		112
Intangibles and deferred software		119		131
Other		9		26
Total deferred tax liabilities		240		269
Valuation allowance		(600)		(603)
Net deferred taxes	\$	45	\$	(23)

Deferred taxes are included in the Consolidated Balance Sheets at December 31, 2016 and 2015 as follows:

	2016		2015	
Other assets	\$	189	\$	177
Deferred taxes		(144)		(200)
Net deferred taxes	\$	45	\$	(23)

The Company reviews the likelihood that it will realize the benefit of its deferred tax assets and therefore the need for valuation allowances on a quarterly basis, or whenever events indicate that a review is required. In determining the requirement for a valuation allowance, the historical and projected financial results of the legal entity or consolidated group recording the net deferred tax asset is considered, along with other positive and negative evidence.

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.

At December 31, 2016, before valuation allowance, the Company had unused foreign tax credits of \$414 million expiring in 2017 through 2026, and research tax credit of \$14 million expiring from 2019 to 2036, which will be available to offset future income tax. Approximately \$151 million of the deferred tax assets related to operating and capital loss carryforwards can be carried over indefinitely, with the remaining \$129 million expiring between 2017 and 2036.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Tabular data dollars in millions

At December 31, 2016, the Company's equity in the undistributed earnings of foreign subsidiaries for which income taxes had not been provided approximated \$2.2 billion. The Company intends to reinvest these earnings indefinitely in the non-U.S. operations. It is not practicable to estimate the U.S. and foreign tax which would be payable should these earnings be distributed. Deferred taxes are provided for earnings of non-U.S. jurisdictions when the Company plans to remit those earnings.

The Company is included in OI Inc.'s consolidated tax returns for U.S. federal and certain state income tax purposes. The consolidated group has net operating losses, capital losses, alternative minimum tax credits, foreign tax credits and research and development credits available to offset future U.S. Federal income tax. Income taxes are allocated to the Company on a basis consistent with separate returns.

The Company records a liability for unrecognized tax benefits related to uncertain tax positions. The Company accrues interest and penalties associated with unrecognized tax benefits as a component of its income tax expense. The following is a reconciliation of the Company's total gross unrecognized tax benefits for the years ended December 31, 2016, 2015 and 2014:

	2016		2	2015		2014	
Balance at January 1	\$	74	\$	77	\$	100	
Additions and reductions for tax positions of prior years				1		(13)	
Additions based on tax positions related to the current year		15		10		10	
Reductions due to the lapse of the applicable statute of limitations		(3)		(5)		(8)	
Reductions due to settlements		(12)		(1)		(1)	
Foreign currency translation				(8)		(11)	
Balance at December 31	\$	74	\$	74	\$	77	
Unrecognized tax benefits, which if recognized, would impact the							
Company's effective income tax rate	\$	66	\$	67	\$	70	
Accrued interest and penalties at December 31	\$	23	\$	25	\$	29	
Interest and penalties included in tax expense for the years ended							
December 31	\$	(2)	<u>\$</u>	(1)	<u>\$</u>	(2)	

Based upon the outcome of tax examinations, judicial proceedings, or expiration of statute of limitations, it is reasonably possible that the ultimate resolution of these unrecognized tax benefits may result in a payment that is materially different from the current estimate of the tax liabilities. The Company believes that it is reasonably possible that the estimated liability could decrease up to \$11 million within the next 12 months. This is primarily the result of audit settlements or statute expirations in several taxing jurisdictions.

The Company is currently under examination in various tax jurisdictions in which it operates, including Argentina, Bolivia, Brazil, China, Canada, Colombia, Ecuador, France, Germany, Indonesia, and Italy. The years under examination range from 2006 through 2014. The Company has received tax assessments in excess of established reserves. The Company believes that adequate provisions for all income tax uncertainties have been made. However, if tax assessments are settled against the Company at amounts in excess of established reserves, it could have a material impact to the Company's results of operations, financial position or cash flows. During 2016, the Company concluded income tax audits in several jurisdictions, including the Czech Republic, Germany, Italy, and Hungary.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Tabular data dollars in millions

11. External Debt

The following table summarizes the external long-term debt of the Company at December 31, 2016 and 2015:

	2016	2015
Secured Credit Agreement:		
Revolving Credit Facility:		
Revolving Loans	\$	\$
Term Loans:		
Term Loan A	1,395	1,546
Term Loan A (€279 million at December 31, 2016)	282	301
Term Loan B		563
Senior Notes:		
6.75%, due 2020 (€500 million)	523	542
4.875%, due 2021 (€330 million)	345	357
5.00%, due 2022	495	494
5.875%, due 2023	682	680
3.125%, due 2024 (€500 million)	520	
5.375%, due 2025	297	296
6.375%, due 2025	294	293
Capital leases	55	52
Other	20	30
Total long-term debt	4,908	5,154
Less amounts due within one year	32	67
Long-term debt	\$ 4,876	\$ 5,087

On April 22, 2015, the Company entered into a Senior Secured Credit Facility, which subsequently has been amended several times with the most recent amendment being entered into on February 3, 2016 (the "Amended Agreement"). In connection with the closing of the Vitro Acquisition on September 1, 2015 (see Note 17), the Company incurred \$1,250 million of senior secured incremental term loan facilities, comprised of (i) a \$675 million term loan A facility on substantially the same terms and conditions (including as to maturity) as the term loan A facility in the Amended Agreement and (ii) a \$575 million term loan B facility, which was subsequently repaid in full in November 2016 as described below.

At December 31, 2016, 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 (\$1,395 million net of debt issuance costs), and a \notin 279 million term loan A facility (\$282 million net of debt issuance costs), each of which has a final maturity date of April 22, 2020. At December 31, 2016, the Company had unused credit of \$884 million available under the Amended Agreement. The weighted average interest rate on borrowings outstanding under the Amended Agreement at December 31, 2016 was 2.39%.

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.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Tabular data dollars in millions

The Amended Agreement also contains one financial covenant, a Total Leverage Ratio, that requires the Company not to exceed a ratio calculated by dividing consolidated total debt, less cash and cash equivalents, by consolidated EBITDA, as defined in the Amended Agreement. 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 of (i) 4.5x for the four fiscal quarters ending December 31, 2016, March 31, 2017, June 30, 2017 and September 30, 2017, and (ii) 4.0x for the fourth fiscal quarter ending December 31, 2017 and each fiscal quarter thereafter.

Failure to comply with these covenants and restrictions could result in an event of default under the Amended Agreement. In such an event, the Company would be unable to 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 and the lenders cause all of the outstanding debt 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, 2016, 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 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.

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.

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 November 2016, the Company issued senior notes with a face value of \in 500 million that bear interest at 3.125% and are due November 15, 2024. The notes were issued via a private placement and are guaranteed by certain of the Company's domestic subsidiaries. The net proceeds, after deducting the debt discount and debt issuance costs, totaled approximately \$520 million and were used to repay the term loan B facility under the Amended Agreement.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Tabular data dollars in millions

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 March 2019, subject to periodic renewal of backup credit lines.

Information related to the Company's accounts receivable securitization program as of December 31, 2016 and 2015 is as follows:

	2	2016		2015
Balance (included in short-term loans)	\$	152	\$	158
Weighted average interest rate		0.74%	ó	1.21%

The carrying amounts reported for the accounts receivable securitization program, and certain long-term debt obligations subject to frequently redetermined interest rates, approximate fair value. Fair values for the Company's significant fixed rate debt obligations are based on published market quotations, and are classified as Level 1 in the fair value hierarchy.

Annual maturities for all of the Company's long-term debt through 2021 are as follows: 2017, \$33 million; 2018, \$287 million; 2019, \$101 million; 2020, \$2,074 million; and 2021, \$354 million.

Fair values at December 31, 2016, of the Company's significant fixed rate debt obligations are as follows:

	ncipal 10unt	Indicated Market Price		Fair Value	
Senior Notes:					
6.75%, due 2020 (€500 million)	\$ 526	\$	120.63	\$	635
4.875%, due 2021 (€330 million)	347		114.00		396
5.00%, due 2022	500		103.49		517
5.875%, due 2023	700		105.37		738
3.125%, due 2024 (€500 million)	526		100.01		526
5.375%, due 2025	300		101.17		304
6.375%, due 2025	300		106.28		319

12. Contingencies

Certain litigation is pending against the Company, in many cases involving ordinary and routine claims incidental to the business of the Company and in others presenting allegations that are nonroutine and involve compensatory, punitive or treble damage claims as well as other types of relief. The Company records a liability for such matters when it is both probable that the liability has been incurred and the amount of the liability can be reasonably estimated. Recorded amounts are reviewed and adjusted to reflect changes in the factors upon which the estimates are based including additional information, negotiations, settlements, and other events. The ultimate legal and financial liability of the Company in respect to this pending litigation cannot reasonably be estimated. However, the Company believes, based on its examination and review of such matters and experience to date, that such ultimate liability will not have a material adverse effect on its results of operations or financial condition.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Tabular data dollars in millions

The Company's joint venture in China had been involved in litigation with its partner regarding whether the joint venture should be dissolved. Following an ownership change in 2016 with respect to the joint venture partner, this litigation has been withdrawn.

Other litigation is pending against the Company, in many cases involving ordinary and routine claims incidental to the business of the Company and in others presenting allegations that are non-routine and involve compensatory, punitive or treble damage claims as well as other types of relief. The Company records a liability for such matters when it is both probable that the liability has been incurred and the amount of the liability can be reasonably estimated. Recorded amounts are reviewed and adjusted to reflect changes in the factors upon which the estimates are based, including additional information, negotiations, settlements and other events.

13. Accumulated Other Comprehensive Income (Loss)

The components of comprehensive income are: (a) net earnings; (b) change in fair value of certain derivative instruments; (c) pension and other postretirement benefit adjustments; and (d) foreign currency translation adjustments. The net effect of exchange rate fluctuations generally reflects changes in the relative strength of the U.S. dollar against major foreign currencies between the beginning and end of the year.

The following table lists the beginning balance, annual activity and ending balance of each component of accumulated other comprehensive income (loss):

	Excha	Effect of ange Rate tuations	Chang Certa Deriva Instrum	in tive		nployee efit Plans	Acco Comj	Total umulated Other orehensive Loss
Balance on January 1, 2015	\$	(55)	\$	2	\$	(255)	\$	(308)
Change before reclassifications		(513)		(4)		27		(490)
Amounts reclassified from accumulated								
other comprehensive income				(1)(a))	15 (b)		14
Translation effect						(31)		(31)
Tax effect				(1)		2		1
Other comprehensive income (loss)								
attributable to the Company		(513)		(6)		13		(506)
Balance on December 31, 2015		(568)	\$	(4)	\$	(242)	\$	(814)
Change before reclassifications		(220)		7		(96)		(309)
Amounts reclassified from accumulated								
other comprehensive income				6 (a))	18 (b)		24
Translation effect						25		25
Tax effect						15		15
Other comprehensive income (loss)								
attributable to the Company		(220)		13		(38)		(245)
Balance on December 31, 2016	\$	(788)		9		(280)		(1,059)

(a) Amount is included in Cost of goods sold on the Consolidated Results of Operations (see Note 7 for additional information).

(b) Amount is included in the computation of net periodic pension cost and net postretirement benefit cost (see Note 9 for additional information).

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Tabular data dollars in millions

14. Other Expense, net

Other expense, net for the years ended December 31, 2016, 2015 and 2014 included the following:

	 2016	 2015	 2014
Restructuring, asset impairment and other charges	\$ 102	\$ 75	\$ 68
Intangible amortization expense	39	21	1
Impairment of equity investment	25		
Gain on China land compensation	(71)		
Royalty income	(13)	(12)	(12)
Strategic transaction costs		4	
Acquisition-related fair value intangible adjustments		10	
Non-income tax charge			69
Foreign currency exchange loss (gain)	6	(10)	(2)
Other expense (income)	(10)	(11)	15
	\$ 78	\$ 77	\$ 138

In 2016, the Company evaluated the future estimated earnings and cash flow of an equity investment and determined that it was other-than-temporarily impaired. As such, the Company recorded an impairment charge of \$25 million to reduce its carrying value down to its estimated fair value. The Company classified the significant assumptions used to determine the fair value of the impaired assets as Level 3 in the fair value hierarchy as set forth in the general accounting principles for fair value measurements.

In 2014, the Company recorded a charge of \$69 million resulting from a non-income tax assessment from a foreign tax authority.

15. Operating Leases

Rent expense attributable to all warehouse, office buildings, and equipment operating leases was \$76 million in 2016, \$68 million in 2015 and \$53 million in 2014. Minimum future rentals under operating leases are as follows: 2017, \$61 million; 2018, \$42 million; 2019, \$28 million; 2020, \$18 million; 2021, \$12 million; and 2022 and thereafter, \$18 million.

16. Supplemental Cash Flow Information

Changes in the components of working capital related to operations (net of the effects related to acquisitions and divestitures) were as follows:

	2016		2016 2015		2014	
Decrease (increase) in current assets:						
Receivables	\$	(25)	\$	(20)	\$	83
Inventories		13		(13)		(27)
Prepaid expenses and other		148		(8)		29
Increase (decrease) in current liabilities:						
Accounts payable and accrued liabilities		(91)		139		48
Salaries and wages		20		16		12
U.S. and foreign income taxes		23		(13)		13
	\$	88	\$	101	\$	158

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Tabular data dollars in millions

The Company uses various factoring programs to sell certain receivables to financial institutions as part of managing its cash flows. At December 31, 2016 and 2015, the amount of receivables sold by the Company was \$318 million and \$317 million, respectively. Any continuing involvement with the sold receivables is immaterial.

	2	2016	2015	2014
Interest paid in cash	\$	241	\$ 207	\$ 179
Income taxes paid in cash (all non-U.S)		99	101	101

Cash interest for the years ended December 31, 2016, 2015 and 2014 includes \$9 million, \$32 million and \$9 million of note repurchase premiums, respectively.

17. Business Combinations

On September 1, 2015, the Company completed the Vitro Acquisition in a cash transaction valued at approximately \$2.297 billion in cash, 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 and contributed approximately \$608 million of incremental net sales and \$122 million of incremental segment operating profit in the year ended December 31, 2016. 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 a senior notes offering, cash on hand and the incremental term loan facilities (see Note 11).

The total purchase price was allocated to the tangible and identifiable intangible assets and liabilities based upon their respective fair values. The purchase agreement contained customary provisions for working capital adjustments, which the Company resolved with the seller in the first quarter of 2016. The Company completed the purchase price allocation process in the third quarter of 2016. The following table summarizes the fair value of the assets and liabilities assumed on September 1, 2015 and subsequent adjustments identified through the purchase price allocation process and recorded through the measurement period:

	Sep	tember 1, 2015	Pe	urement eriod stments	Sep	otember 30, 2016
Cash	\$	17	\$		\$	17
Other current assets		344		(10)		334
Goodwill		1,073		(236)		837
Customer list intangibles		406		202		608
Net property, plant and equipment		597		48		645
Total assets		2,437		4		2,441
Current liabilities		93		(7)		86
Long-term debt		11				11
Long-term liabilities		36		11		47
Net assets acquired	\$	2,297	\$		\$	2,297

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Tabular data dollars in millions

The fair value of the tangible assets was estimated utilizing income and market approaches, considering remaining useful life. The customer list intangible asset includes the Company's established relationships with its customers and the ability of these customers to generate future economic profits for the Company. The value assigned to customer list intangibles is based on the present value of future earnings attributable to the asset group after recognition of required returns to other contributory assets.

Recognized goodwill is attributable to the assembled workforce, expected synergies and other intangible assets that do not qualify for separate recognition. The Vitro Acquisition goodwill is not deductible for tax purposes.

The balance sheet adjustments identified above did not result in any significant adjustments to the periods' income statements.

18. Pro Forma Information - Vitro Acquisition

Had the Vitro Acquisition, described in Note 17 and the related financing described in Note 11, occurred at the beginning of each respective period, unaudited pro forma consolidated net sales and earnings from continuing operations would have been as follows:

	Year Ending December 31, 2015									
		As eported		uisition Istments		nancing ustments	Pro Forma As Adjusted			
Net sales	\$	6,156	\$	574	\$		\$	6,730		
Earnings from continuing operations attributable to the Company	\$	270	\$	79	<u>\$</u>	(46)	\$	303		

19. Discontinued Operations

On April 4, 2016, the annulment committee formed by the World Bank's International Centre for Settlement of Investment Disputes ("ICSID") ruled that a subsidiary of the Company is free to pursue the enforcement of a prior arbitration award against Venezuela. That award amounts to more than \$485 million after including interest from the date of the expropriation by Venezuela (October 26, 2010). Venezuela's application to annul the award is still pending, although the annulment proceedings were suspended in October 2016 because Venezuela has not paid its fees owed to ICSID. If the proceeding is stayed for non-payment for a consecutive period in excess of six months, ICSID's Secretary General could move that the committee discontinue the annulment proceeding altogether. The Company intends to take appropriate steps to vigorously enforce and collect the award, which is enforceable in approximately 150 member states that are party to the ICSID Convention. However, even with the lifting of the stay of enforcement, the Company recognizes that the collection of the award may present significant practical challenges. Because the award has yet to be satisfied and the annulment proceeding is pending, the Company is unable at this stage to reasonably predict the efforts that will be necessary to successfully enforce collection of the award in its financial statements.

The loss from discontinued operations of \$7 million, \$4 million and \$4 million, for the years ended December 31, 2016, 2015 and 2014, respectively, relates to ongoing costs for the Venezuelan expropriation.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Tabular data dollars in millions

20. Guarantees of Debt

OI Group and the Company guarantee OI Inc.'s senior debentures on a subordinated basis. The fair value of the OI Inc. debt being guaranteed was \$266 at December 31, 2016.

21. Related Party Transactions

Charges for administrative services are allocated to the Company by OI Inc. based on an annual utilization level. Such services include compensation and benefits administration, payroll processing, use of certain general accounting systems, auditing, income tax planning and compliance, and treasury services.

Allocated costs also include charges associated with OI Inc.'s equity compensation plans. A substantial number of the options, restricted share units and performance vested restricted share units granted under these plans have been granted to key employees of another subsidiary of OI Inc., some of whose compensation costs, including stock-based compensation, are included in an allocation of costs to all operating subsidiaries of OI Inc., including the Company.

Management believes that such transactions are on terms no less favorable to the Company than those that could be obtained from unaffiliated third parties.

The following information summarizes the Company's significant related party transactions:

	Year ended December 31,					
		2016	2	2015	2	2014
Revenues:						
Sales to affiliated companies	\$		\$		\$	
Expenses:						
Administrative services	\$	2	\$	2	\$	2
Corporate management fee		75		74		75
Total expenses	\$	77	\$	76	\$	77

The above expenses are recorded in the results of operations as follows:

				ended enber 31,		
	2	016	2	015	2	014
Cost of goods sold	\$		\$		\$	
Selling, general and administrative expenses		77		76		77
Total expenses	\$	77	\$	76	\$	77

SIGNATURES

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

OWENS-ILLINOIS, INC. (Registrant)

By: /s/ MARY BETH WILKINSON Mary Beth Wilkinson Attorney-in-fact

Date: February 10, 2017

Signatures

Signatures	Title
Andres A. Lopez	President and Chief Executive Officer (Principal Executive Officer)
Jan A. Bertsch	Senior Vice President and Chief Financial Officer (Principal Financial Officer; Principal Accounting Officer)
Carol A. Williams	Chairman of the Board
Gary F. Colter	Director
Joseph D. DeAngelo	Director
Gordon J. Hardie	Director
Peter S. Hellman	Director
Anastasia D. Kelly	Director
John J. McMackin, Jr.	Director
Alan J. Murray	Director
Hari N. Nair	Director
Hugh H. Roberts	Director
Dennis K. Williams	Director
	By: /s/ MARY BETH WILKINSON Mary Beth Wilkinson Attorney-in-fact

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of Owens-Illinois, Inc. and in the capacities and on the dates indicated.

Date: February 10, 2017

INDEX TO FINANCIAL STATEMENT SCHEDULE

Financial Statement Schedule of Owens-Illinois, Inc. and Subsidiaries:

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

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OWENS-ILLINOIS, INC.

SCHEDULE II – VALUATION AND QUALIFYING ACCOUNTS (CONSOLIDATED)

Years ended December 31, 2016, 2015, and 2014

(Millions of Dollars)

Reserves deducted from assets in the balance sheets:

Allowances for losses and discounts on receivables

	Additions									
	Balance at beginning of period		Charged to costs and expenses		Other		Deductions (Note 1)		Balance at end of period	
2016	\$	29	\$	15	\$	(2)	\$	(10)	\$	32
2015	\$	34	\$	12	\$	(5)	\$	(12)	\$	29
2014	\$	39	\$	15	\$	(12)	\$	(8)	\$	34

(1) Deductions from allowances for losses and discounts on receivables represent uncollectible notes and accounts written off.

Valuation allowance on net deferred tax assets

	begir	ance at nning of eriod	rged to	Charged to other comprehensive income		Foreign currency translation			Other		Balance at end of period	
2016	\$	1,135	\$ 3	\$	(32)	\$	(3)	\$	(9)	\$	1,094	
2015	\$	1,223	\$ 1	\$	5	\$	(20)	\$	(74)	\$	1,135	
2014	\$	1,209	\$ (2)	\$	55	\$	(15)	\$	(24)	\$	1,223	

OWENS-ILLINOIS, INC. COMPUTATION OF RATIO OF EARNINGS TO FIXED CHARGES (Millions of dollars, except ratios)

	Years ended December 31,							
	2016		2015		2014		2013	
Earnings from continuing operations before income taxes	\$	356	\$	268	\$	307	\$	468
Less: Equity earnings		(60)		(60)		(64)		(67)
Add: Total fixed charges deducted from earnings		284		264		238		242
Dividends received from equity investees		38		53		54		67
Earnings available for payment of fixed charges	\$	618	<u>\$</u>	525	\$	535	\$	710
Fixed charges (including the Company's proportional share of 50% owned associates):								
Interest expense	\$	279	\$	259	\$	235	\$	239
Portion of operating lease rental deemed to be interest Total fixed charges deducted from earnings	<u></u>	<u>5</u> 284	\$	<u>5</u> 264	<u></u>	$\frac{3}{238}$	<u></u>	$\frac{3}{242}$
Ratio of earnings to fixed charges		2.2	<u> </u>	2.0	<u> </u>	2.2		2.9

SUBSIDIARIES OF OWENS-ILLINOIS, INC.

Owens-Illinois, Inc. had the following subsidiaries at December 31, 2016 (subsidiaries are indented following their respective parent companies):

ame	State/Country of Incorporatio or Organization
Dwens-Illinois Group, Inc.	
OI General Finance Inc.	
OI General FTS Inc.	
OI Castalia STS Inc.	
OI Levis Park STS Inc	. Delaware
Owens-Illinois General Inc.	. Delaware
Owens Insurance, Ltd.	. Bermuda
Universal Materials, Inc	
OI Advisors, Inc.	
OI Securities, Inc.	
OI Transfer, Inc.	. Delaware
Maumee Air Associates Inc.	
OI Australia Inc.	. Delaware
Continental PET Holdings Pty. Ltd.	
ACI America Holdings Inc.	
ACI Ventures, Inc.	
Owens-Brockway Packaging, Inc.	
Owens-Brockway Glass Container Inc.	
O-I Americas Holding LLC	
O-I Packaging Solutions LLC.	
O-I Bolivia Holdings Limited.	
Vidrio Lux S.A.	-
OI Andover Group, Inc.	
The Andover Group Inc.	
Brockway Realty Corporation	
NHW Auburn, LLC.	-
OI Auburn Inc.	
SeaGate, Inc.	
SeaGate II, Inc.	
SeaGate III, Inc.	
OIB Produvisa Inc.	
OI California Containers Inc.	
OI Puerto Rico STS Inc.	
O-I Caribbean Sales & Distibution Inc.	
O-I Latam HQ, Inc.	
Bolivian Investments, Inc.	
Fabrica Boliviana de Vidrios S.A.	
OI International Holdings Inc.	
O-I Glass C.V.	
O-I Holding LLC	
O-I Global Holdings LLC.	
O-I Global Holdings C.V.	
O-I Americas LLC	

Name

State/Country of Incorporation or Organization O-I Americas C.V. Netherlands O-I Mexico Holdings I B.V. Netherlands O-I Mexico Holdings II B.V. Netherlands Envases de Vidrio de las Americas, S. de R.L. de C.V. Mexico Especialidades Operativas de America, S. de R.L. de C.V. ... Mexico Glass International OISPV, S.A.P.I. de C.V. Mexico Owens America, S. de R.L. de C.V. Mexico Owens Vimosa, S. de R.L. de C.V. Mexico Owens Vigusa, S. de R.L. de C.V. Mexico Owens Virreyes, S. de R.L. de C.V. Mexico Owens Viquesa, S. de R.L. de C.V. Mexico Owens Vitolsa, S. de R.L. de C.V. Mexico OI Global C.V. Netherlands Delaware OI Hungary LLC..... O-I Manufacturing Hungary Limited Hungary O-I Sales & Distribution Hungary Kft..... Hungary O-I Ecuador LLC Ohio Cristaleria del Ecuador, S.A.... Ecuador OI European Group B.V. Netherlands Owens-Illinois Singapore Pte. Ltd. Singapore Delaware Wuhan Owens Glass Container Company Limited China ACI Beijing Limited Hong Kong OI (Tianjin) Glass Co. Ltd..... China Owens-Illinois Services H.K. Limited Hong Kong ACI Guangdong Limited Hong Kong ACI Guangdong Glass Company Limited China ACI Shanghai Limited Hong Kong ACI (Shanghai) Glass Company Limited..... China Owens-Illinois (HK) Limited Hong Kong O-I (Shanghai) Management Co Ltd. China O-I Zhaoqing Glass Co. Ltd..... China O-I Sihui Glass Recycling Co. Ltd. China Owens-Illinois (Australia) Pty Ltd Australia ACI Packaging Services Pty Ltd. Australia ACI Operations Pty. Ltd. Australia ACI International Pty Ltd Australia ACI Glass Packaging Penrith Pty Ltd. Australia PT Kangar Consolidated Industries Indonesia ACI Operations NZ Limited New Zealand Mauritius O-I Asia-Pacific Holdings..... O-I Sales and Distribution Netherlands B.V. Netherlands O-I Europe Sarl Switzerland O-I Sales and Distribution UK Limited..... United Kingdom O-I Sales and Distribution Poland Sp Z.o.o. Poland O-I Business Service Center Sp. Z.o.o. Poland O-I Manufacturing Poland S.A. Poland UGG Holdings Ltd. United Kingdom

	of Incorporation or Organization
O-I Overseas Management Company Ltd.	Delaware
United Glass Group Ltd.	United Kingdom
O-I Manufacturing (UK) Limited	United Kingdom
O-I Sales and Distribution Spain SL.	Spain
Vidrieria Rovira, S. L.	Spain
OI Spanish Holdings B.V.	Netherlands
Owens-Illinois Peru S. A.	Peru
O-I Manufacturing Italy S.p.A.	Italy
O-I Manufacturing Czech Republic A.S.	Czech Republic
O-I Sales and Distribution Czech Republic s.r.o.	Czech Republic
San Domenico Vetraria S.r.l.	Italy
O-I Sales and Distribution Italy S.r.l.	Italy
O-I Manufacturing Netherlands B.V.	Netherlands
Veglarec B.V.	Netherlands
O-I Europe SAS	France
O-I Manufacturing France SAS	France
O-I Sales and Distribution France SAS	France
O-I Distribution SO.	France
Champagne Emballage	France
O-I Glasspack Beteiligungs & Verwaltungsgesellschaft GmbH	Germany
OI Glasspack GmbH & Co. KG	Germany
O-I Sales and Distribution Germany GmbH	Germany
OI Canada Holdings B.V.	Netherlands
O-I Canada Corp	Canada
Manufacturera de Vidrios Planos, C.A.	Venezuela
Owens-Illinois de Venezuela, C. A.	Venezuela
Fabrica de Vidrio Los Andes, C. A.	Venezuela
CMC S.A.	Colombia
O-I Latam Services S.A.S.	Colombia
Cristaleria Peldar, S.A.	Colombia
Cristar S.A.	Colombia
Industria de Materias Primas S.A.	Colombia
Vidrieria Fenicia	Colombia
Owens-Illinois do Brasil Industria e Comercio S.A.	Brazil
Mineracao Silminas Ltda	Brazil
Mineracao Descalvado Ltda.	Brazil
OI Finnish Holdings Oy	Finland
O-I Sales and Distribution Finland OY.	Finland
O-I Sales and Distribution LT.	Lithuania
O-I Production Estonia AS	Estonia
O-I Sales and Distribution Estonia OU	Estonia
O-I GMEC Lurin srl	Peru
O-I Jaroslaw Machine Service Center	Poland
Owens-Illinois Argentina S.A.	Argentina

State/Country

DIRECTORS AND OFFICERS

Directors

Carol A. Williams Chairman of the Board Special Advisor to the Chief Executive Officer(retired), Dow Chemical Company

Gary F. Colter President, CRS Inc.

Joseph J. DeAngelo Chairman of the Board, President and Chief Executive Officer, HD Supply Holdings Inc.

Gordon J. Hardie *Managing Director, Bunge Food & Ingredients*

Peter S. Hellman *President and Chief Financial and Administrative Officer (retired), Nordson Corporation*

Anastasia D. Kelly Co-Managing Partner (Americas), DLA Piper

Andres A. Lopez President and Chief Executive Officer, Owens Illinois

John J. McMackin, Jr. Principal, Williams & Jensen, PLLC

Alan J. Murray Managing Board Member for North America (retired), Heidelberg Cement AG

Hari N. Nair Chief Executive Officer, Anitar Investments LLC

Hugh H. Roberts President (retired), Kraft Foods International Commercial

Dennis K. Williams *Chairman of the Board (retired), IDEX Corporation*

Officers

Andres A. Lopez President and Chief Executive Officer

Miguel I. Alvarez President, O-I Latin America

James W. Baehren Senior Vice President of Corporate Development and Special Advisor to the Chief Executive Officer

Jan A. Bertsch Senior Vice President and Chief Financial Officer

Tim M. Connors President, O-I Asia Pacific

Sergio B. O. Galindo President, O-I North America

John A. Haudrich Senior Vice President and Chief Strategy and Integration Officer

Paul A. Jarrell Senior Vice President and Chief Administrative Officer

Vitaliano Torno President, O-I Europe

MaryBeth Wilkinson Senior Vice President, General Counsel and Corporate Secretary

COMPANY INFORMATION

Exchange Listing

Owens-Illinois common stock (symbol OI) is listed on the New York Stock Exchange.

Transfer Agent for Common Stock

Computershare Trust Company, N.A. P.O. Box 30170 College Station, TX 77842-3170

Private couriers and registered mail: 211 Quality Circle, Suite 210 College Station, TX 77845

Computershare website: http://www.computershare.com/investor Phone: (781) 575-2724 or 1-877-373-6374 Hearing-impaired: TDD 1-800-952-9245

Any inquiries regarding your account or certificates should be referred to Computershare Trust Company, N.A.

Trustees

U.S. Bank, N.A. Global Corporate Trust Services 60 Livingston Avenue EP-MN-WS3C St. Paul, MN 55107-1419

> 5.00 % Senior Notes, due 2022 5.375 % Senior Notes, due 2025 5.875% Senior Notes, due 2023 6.375% Senior Notes, due 2025

The Bank of New York 101 Barclay Street New York, NY 10286

7.80% Senior Debentures, due 2018

Deutsche Trustee Company Limited Winchester House 1 Great Winchester Street London, England EC2N 2DB

> 6.75% Senior Notes, due 2020 4.875% Senior Notes, due 2021 3.125% Senior Notes, due 2024

Annual Meeting

The annual meeting of share owners will be held at 9:00 a.m. on Thursday, May 11, 2017, in Plaza 2 of the O-I World Headquarters Campus, Perrysburg, OH.

Forms 10-K and 10-Q

The Company's Annual Report on Form 10-K and Quarterly Reports on Form 10-Q, filed with the Securities and Exchange Commission, may be obtained without charge by contacting:

Owens-Illinois, Inc. Investor Relations One Michael Owens Way Perrysburg, OH 43551 Phone: (567) 336-2400

These reports are also available without charge on the Company's website at www.o-i.com

Website

For further information about O-I, visit the Company's website at www.o-i.com

Annual Certifications

The most recent certifications by the Chief Executive Officer and the Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 are filed as exhibits to the Company's Form 10-K. The Company has also filed with the New York Stock Exchange the most recent Annual CEO Certification as required by Section 303.12(a) of the New York Stock Exchange Listed Company Manual.

Corporate Headquarters

Owens-Illinois, Inc. One Michael Owens Way Perrysburg, OH 43551