GREIF INC
Form 10-K
December 20, 2017
Table of Contents

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

FORM 10-K

---

x ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the fiscal year ended October 31, 2017
or
o TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the transition period from to
Commission file number: 001-00566

GREIF, INC.
(Exact name of Registrant as specified in its charter)

State of Delaware	31-4388903
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
425 Winter Road, Delaware, Ohio	43015
(Address of principal executive offices)	(Zip Code)

Registrant's telephone number, including area code 740-549-6000
Securities registered pursuant to Section 12(b) of the Act:

Title of Each Class	Name of Each Exchange on Which Registered
Class A Common Stock	New York Stock Exchange
Class B Common Stock	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 x No o
Indicate by check mark if the Registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Exchange Act. Yes o No x
Indicate by check mark whether the Registrant (1) has filed all reports 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 x No o
Indicate by check mark whether the Registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the Registrant was required to submit and post such files). Yes x No o
Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of the Registrant's knowledge, in the definitive proxy or information

statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. o

Indicate by check mark whether the Registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

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

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

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

The aggregate market value of voting and non-voting common equity held by non-affiliates computed by reference to the price at which the common equity was last sold as of the last business day of the Registrant's most recently completed second fiscal quarter was as follows:

Non-voting common equity (Class A Common Stock) – $1,465,214,314

Voting common equity (Class B Common Stock) – $361,903,339

The number of shares outstanding of each of the Registrant's classes of common stock, as of December 14, 2017, was as follows:

Class A Common Stock – 25,835,281

Class B Common Stock – 22,007,725

Listed hereunder are the documents, portions of which are incorporated by reference, and the parts of this Form 10-K into which such portions are incorporated:

1. The Registrant's Definitive Proxy Statement for use in connection with the Annual Meeting of Stockholders to be held on February 27, 2018 (the "2018 Proxy Statement"), portions of which are incorporated by reference into Parts II and III of this Form 10-K. The 2018 Proxy Statement will be filed within 120 days of October 31, 2017.

Table of Contents

IMPORTANT INFORMATION REGARDING FORWARD-LOOKING STATEMENTS

All statements, other than statements of historical facts, included in this Annual Report on Form 10-K of Greif, Inc. and subsidiaries (this “Form 10-K”) or incorporated herein, including, without limitation, statements regarding our future financial position, business strategy, budgets, projected costs, goals and plans and objectives of management for future operations and initiatives, are forward-looking statements within the meaning of Section 21E of the Securities Exchange Act of 1934, as amended (the “Exchange Act”). Forward-looking statements generally can be identified by the use of forward-looking terminology such as “may,” “will,” “expect,” “intend,” “estimate,” “anticipate,” "aspiration," "objective “project,” “believe,” “continue,” “on track” or “target” or the negative thereof or variations thereon or similar terminology. All forward-looking statements made in this Form 10-K are based on information currently available to our management. Forward-looking statements speak only as of the date the statements were made. Although we believe that the expectations reflected in forward-looking statements have a reasonable basis, we can give no assurance that these expectations will prove to be correct. Forward-looking statements are subject to risks and uncertainties that could cause actual events or results to differ materially from those expressed in or implied by the statements. For a discussion of the most significant risks and uncertainties that could cause our actual results to differ materially from those projected, see “Risk Factors” in Item 1A of this Form 10-K. The risks described in this Form 10-K are not all inclusive, and given these and other possible risks and uncertainties, investors should not place undue reliance on forward-looking statements as a prediction of actual results. All forward-looking statements made in this Form 10-K are expressly qualified in their entirety by reference to such risk factors. Except to the limited extent required by applicable law, we undertake no obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise.

Table of Contents

Index to Form 10-K Annual Report for the Year ended October 31, 2017

Table of Contents

Table of Contents

PART I

ITEM 1. BUSINESS

(a) General Development of Business

We are a leading global producer of industrial packaging products and services with operations in over 40 countries. We offer a comprehensive line of rigid industrial packaging products, such as steel, fibre and plastic drums, rigid intermediate bulk containers, closure systems for industrial packaging products, transit protection products, water bottles and remanufactured and reconditioned industrial containers, and services, such as container life cycle management, filling, logistics, warehousing and other packaging services. We produce containerboard and corrugated products for niche markets in North America. We are also a leading global producer of flexible intermediate bulk containers. We sell timber to third parties from our timberland in the southeastern United States that we manage to maximize long-term value. In addition, we sell, from time to time, timberland and special use land, which consists of surplus land, higher and better use ("HBU") land, and development land. Our customers range from Fortune 500 companies to medium and small-sized companies in a cross section of industries.

We were founded in 1877 in Cleveland, Ohio, as "Vanderwyst and Greif," a cooperage shop co-founded by one of four Greif brothers. One year after our founding, the other three Greif brothers were invited to join the business, renamed Greif Bros. Company, making wooden barrels, casks and kegs to transport post-Civil War goods nationally and internationally. We later purchased nearly 300,000 acres of timberland to provide raw materials for our cooperage plants. We still own significant timber properties located in the southeastern United States. In 1926, we incorporated as a Delaware corporation and made a public offering as The Greif Bros. Cooperage Corporation. In 1951, we moved our headquarters from Cleveland, Ohio to Delaware, Ohio, which is in the Columbus metro-area, where our corporate headquarters are currently located. Since the latter half of the 1900s, we have transitioned from our keg and barrel heading mills, stave mills and cooperage facilities to a global producer of industrial packaging products. Following our acquisition of Van Leer Packaging in 2001, a global steel and plastic drum manufacturer, we changed our name to Greif, Inc.

Our fiscal year begins on November 1 and ends on October 31 of the following year. Any references in this Form 10-K to the years 2017, 2016 or 2015, or to any quarter of those years, relate to the fiscal year ended in that year.

As used in this Form 10-K, the terms "Greif," "the Company," "we," "us," and "our" refer to Greif, Inc. and its subsidiaries.

(b) Financial Information about Segments

We operate in eight business segments, which are aggregated into four reportable business segments: Rigid Industrial Packaging & Services; Paper Packaging & Services; Flexible Products & Services; and Land Management. Information related to each of these segments is included in Note 17 to the Notes to Consolidated Financial Statements included in Item 8 of this Form 10-K.

(c) Narrative Description of Business

Products and Services

In the Rigid Industrial Packaging & Services segment, we are a leading global producer of rigid industrial packaging products, including steel, fibre and plastic drums, rigid intermediate bulk containers, closure systems for industrial packaging products, transit protection products, water bottles and remanufactured and reconditioned industrial containers, and services, such as container life cycle management, filling, logistics, warehousing and other packaging services. We sell our rigid industrial packaging products to customers in industries such as chemicals, paints and pigments, food and beverage, petroleum, industrial coatings, agricultural, pharmaceutical and mineral products, among others.

In the Paper Packaging & Services segment, we sell containerboard, corrugated sheets, corrugated containers and other corrugated products to customers in North America in industries such as packaging, automotive, food and building products. Our corrugated container products are used to ship such diverse products as home appliances, small machinery, grocery products, automotive components, books and furniture, as well as numerous other applications.

In the Flexible Products & Services segment, we are a leading global producer of flexible intermediate bulk containers and related services. Our flexible intermediate bulk containers consist of a polypropylene-based woven fabric that is produced at our production sites, as well as sourced from strategic regional suppliers. Our flexible products are sold globally and service customers and market segments similar to those of our Rigid Industrial Packaging & Services segment. Additionally, our flexible products significantly expand our presence in the agricultural and food industries, among others.

Table of Contents

In the Land Management segment, we are focused on the active harvesting and regeneration of our United States timber properties to achieve sustainable long-term yields. While timber sales are subject to fluctuations, we seek to maintain a consistent cutting schedule, within the limits of market and weather conditions. We also sell, from time to time, timberland and special use land, which consists of surplus land, HBU land and development land. As of October 31, 2017, we owned approximately 245,000 acres of timber property in the southeastern United States.

Customers

Due to the variety of our products, we have many customers buying different types of our products and due to the scope of our sales, no one customer is considered principal in our total operations.

Backlog

We supply a cross-section of industries, such as chemicals, paints and pigments, food and beverage, petroleum, industrial coatings, agricultural, pharmaceutical, mineral, packaging, automotive and building products, and must make spot deliveries on a day-to-day basis as our products are required by our customers. We do not operate on a backlog to any significant extent and maintain only limited levels of finished goods. Many customers place their orders weekly for delivery during the week.

Competition

The markets in which we sell our products are highly competitive with many participants. Although no single company dominates, we face significant competitors in each of our businesses. Our competitors include large vertically integrated companies as well as numerous smaller companies. The industries in which we compete are particularly sensitive to price fluctuations caused by shifts in industry capacity and other cyclical industry conditions. Other competitive factors include design, quality and service, with varying emphasis depending on product line.

In both the rigid industrial packaging industry and the flexible products industry, we compete by offering a comprehensive line of products on a global basis. In the paper packaging industry, we compete by concentrating on providing value-added, higher-margin corrugated products to niche markets. In addition, over the past several years we have closed higher cost facilities and otherwise restructured our operations, which we believe have significantly improved our cost competitiveness.

Compliance with Governmental Regulations Concerning Environmental Matters

Our operations are subject to extensive federal, state, local and international laws, regulations, rules and ordinances relating to pollution, the protection of the environment, the generation, storage, handling, transportation, treatment, disposal and remediation of hazardous substances and waste materials and numerous other environmental laws and regulations. In the ordinary course of business, we are subject to periodic environmental inspections and monitoring by various governmental agencies. In addition, certain of our production facilities require environmental permits that are subject to revocation, modification and renewal. As of the date of filing this Form 10-K, and based on current information, we believe that the probable costs of the remediation of company-owned property will not have a material adverse effect on our financial condition or results of operations. We believe that we have adequately reserved for our liability for these matters as of October 31, 2017.

We do not believe that compliance with federal, state, local and international provisions, which have been enacted or adopted regulating the discharge of materials into the environment, or otherwise relating to the protection of the environment, has had or will have a material adverse effect upon our capital expenditures, earnings or competitive position. We do not anticipate any material capital expenditures related to environmental control in 2018. However, during 2017, three reconditioning facilities in the Milwaukee, Wisconsin area that are owned by Container Life Cycle Management LLC (“CLCM”), our U.S. reconditioning joint venture company, have been subject to investigations and proceedings conducted by federal, state and local governmental agencies concerning, among other matters, potential violations of environmental laws and regulations. We have cooperated with the governmental agencies in these investigations and proceedings. As of the filing date of this Form 10-K, no citations have been issued or fines assessed with respect to any of these proceedings. As a result of these investigations and proceedings, we will review all options for future actions at these facilities, including changes to existing reconditioning operations, installation of control technology, other capital expenditures, and facility relocation or closure. While not expected to be material, the cost of any of these actions could be sizeable. See Item 3 of this Form 10-K for information concerning these investigations and proceedings.

Refer also to Note 13 to the Notes to Consolidated Financial Statements included in Item 8 of this Form 10-K for additional information concerning environmental expenses and cash expenditures for the periods ended October 31, 2017, 2016 and 2015, and our reserves for environmental liabilities as of October 31, 2017.

Table of Contents

Raw Materials

Steel, resin and containerboard, as well as used industrial packaging for reconditioning, are the principal raw materials for the Rigid Industrial Packaging & Services segment, resin is the primary raw material for the Flexible Products & Services segment, and pulpwood, old corrugated containers for recycling and containerboard are the principal raw materials for the Paper Packaging & Services segment. We satisfy most of our needs for these raw materials through purchases on the open market or under short-term and long-term supply agreements. All of these raw materials are purchased in highly competitive, price-sensitive markets, which have historically exhibited price, demand and supply cyclicality. From time to time, some of these raw materials have been in short supply at certain of our manufacturing facilities. In those situations, we ship the raw materials in short supply from one or more of our other facilities with sufficient supply to the facility or facilities experiencing the shortage. To date, raw material shortages have not had a material adverse effect on our financial condition or results of operations.

Research and Development

While research and development projects are important to our continued growth, the amount expended in any year is not material in relation to our results of operations.

Other

Our businesses are not materially dependent upon patents, trademarks, licenses or franchises.

No material portion of our businesses is subject to renegotiation of profits or termination of contracts or subcontracts at the election of a governmental agency or authority.

The businesses of our segments are not seasonal to any material extent, although the businesses of some of our customers who are in the agricultural industries and purchase our rigid industrial packaging products and flexible products may be seasonal in nature.

Employees

As of October 31, 2017, we had approximately 13,000 full time employees. A significant number of our full time employees are covered under collective bargaining agreements. We believe that our employee relations are generally good.

(d) Financial Information about Geographic Areas

Our operations are located in North and South America, Europe, the Middle East, Africa and the Asia Pacific regions. Information related to our geographic areas of operation is included in Note 17 to the Notes to Consolidated Financial Statements included in Item 8 of this Form 10-K. Refer to Quantitative and Qualitative Disclosures about Market Risk, included in Item 7A of this Form 10-K.

(e) Available Information

We maintain a website at www.greif.com. We file reports with the United States Securities and Exchange Commission (“SEC”) and make available, free of charge, on or through our website, our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, proxy and information statements and amendments to these reports filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act as soon as reasonably practicable after we have electronically filed such material with, or furnished it to, the SEC.

Any of the materials we file with the SEC may also be read and/or copied at the SEC’s Public Reference Room at 100 F Street, NE, Washington, DC 20549. Information on the operation of the SEC’s Public Reference Room may be obtained by calling the SEC at 1-800-SEC-0330. The SEC maintains a website that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC at www.sec.gov.

(f) Other Matters

Our common equity securities are listed on the New York Stock Exchange (“NYSE”) under the symbols GEF and GEF.B. Our Chief Executive Officer has timely certified to the NYSE that, at the date of the certification, he was unaware of any violation by our Company of the NYSE’s corporate governance listing standards. In addition, our Chief Executive Officer and Chief Financial Officer have provided certain certifications in this Form 10-K regarding the quality of our public disclosures. Refer to Exhibits 31.1 and 31.2 to this Form 10-K.

Table of Contents

ITEM 1A. RISK FACTORS

Statements contained in this Form 10-K may be “forward-looking” within the meaning of Section 21E of the Exchange Act. Such forward-looking statements are subject to certain risks and uncertainties that could cause our operating results to differ materially from those projected. The following factors, among others, in some cases have affected, and in the future could affect, our actual financial or operational performance, or both.

Historically, our Business has been Sensitive to Changes in General Economic or Business Conditions.

Our customers generally consist of other manufacturers and suppliers who purchase industrial packaging products and containerboard and related corrugated products for their own containment and shipping purposes. Because we supply a cross section of industries, such as chemicals, paints and pigments, food and beverage, petroleum, industrial coatings, agricultural, pharmaceutical, mineral products, packaging, automotive, and building products industries, and have operations in many countries, demand for our products and services has historically corresponded to changes in general economic and business conditions of the industries and countries in which we operate. The overall demand and prices for our products and services could decline as a result of a large number of factors outside our control, including economic recessions, changes in industrial production processes or consumer preference, changes in laws and regulations, inflation, changes in published pricing indices, fluctuations in interest and currency exchange rates and changes in the fiscal or monetary policies of governments in the regions in which we operate. Accordingly, our financial performance is substantially dependent upon the general economic and business conditions existing in these industries and countries, and any prolonged or substantial economic downturn in the markets in which we operate could have a material adverse effect on our business, results of operations and financial condition.

We may not Successfully Implement our Business Strategies, Including Achieving our Growth Objectives.

We may not be able to fully implement our business strategies or realize, in whole or in part within the expected time frames, the anticipated benefits of our growth and other initiatives. Our various business strategies and initiatives are subject to significant business, economic and competitive uncertainties and contingencies, many of which are beyond our control.

In addition, we may incur certain costs to achieve efficiency improvements and growth in our business and we may not meet anticipated implementation timetables or stay within budgeted costs. As these growth initiatives are undertaken, we may not fully achieve our expected cost savings and efficiency improvements or growth rates, or these initiatives could adversely impact our customer retention or our operations. Also, our business strategies may change from time to time in light of our ability to implement our new business initiatives, competitive pressures, economic uncertainties or developments, or other factors. A variety of risks could cause us not to realize some or all of the expected benefits of these initiatives. These risks include, among others, delays in the anticipated timing of activities related to such initiatives, strategies and operating plans; increased difficulty and costs in implementing these efforts; and the incurrence of other unexpected costs associated with operating the business. As a result, there can be no assurance that we will realize these benefits. If, for any reason, the benefits we realize are less than our estimates or the implementation of these growth initiatives and business strategies adversely affect our operations or cost more or take longer to effectuate than we expect, or if our assumptions prove inaccurate, our results of operations may be materially adversely affected.

Our Operations Subject us to Currency Exchange and Political Risks that Could Adversely Affect our Results of Operations.

We have operations in over 40 countries. Management of global operations is extremely complex, and operations outside the United States are subject to additional risks that may not exist, or be as significant, in the United States. As a result of our global operations, we are subject to certain risks that could disrupt our operations or force us to incur unanticipated costs.

We also have indebtedness, agreements to purchase raw materials and agreements to sell finished products that are denominated in Euros, Turkish Lira, Russian Rubles and other currencies. Our operating performance is affected by fluctuations in currency exchange rates by:

- translations into United States dollars for financial reporting purposes of the assets and liabilities of our non-U.S. operations conducted in local currencies; and
- gains or losses from transactions conducted in currencies other than the operation’s functional currency.

We are subject to various other risks associated with operating in countries outside the U.S., such as the following:

- political, social, economic and labor instability which has commonly been associated with developing countries but presently is also impacting several industrialized countries;
- war, invasion, civil disturbance or acts of terrorism;
- taking of property by nationalization or expropriation without fair compensation;

Table of Contents

- changes in government policies and regulations;
- loss or non-renewal of treaties or similar agreements with foreign tax authorities;
- difficulties in enforcement of contractual obligations;
- imposition of limitations on conversions of currencies into United States dollars or remittance of dividends and other payments by international subsidiaries;
- imposition or increase of withholding and other taxes on income remittances and other payments by international subsidiaries;
- hyperinflation, currency devaluation or defaults in certain countries;
- impositions or increase of investment and other restrictions or requirements by non-United States governments;
- national and regional labor strikes, whether legal or illegal and other labor or social actions; and
- restrictive governmental trade policies, customs, import/export and other trade compliance regulations.

The Current and Future Challenging Global Economy and Disruption and Volatility of the Financial and Credit Markets may Adversely Affect our Business.

The current global economic conditions are challenging to our global business operations. Such conditions have had, and may continue to have, a negative impact on our financial results. Future economic downturns, either in the United States, Europe or in other regions in which we do business could negatively affect our business and results of operations. The volatility of the current economic climate, especially in relation to ongoing uncertainties related to geopolitical events around the world, makes it difficult for us to predict the complete impact of the forgoing matters on our business and results of operations. Due to these current and future economic conditions, our customers may face financial difficulties, the unavailability of or reduction in commercial credit, or both, that may result in decreased sales by and revenues to our company. Certain of our customers may cease operations or seek bankruptcy protection, which would reduce our cash flows and adversely impact our results of operations. Our customers that are financially viable and not experiencing economic distress may nevertheless elect to reduce the volume of orders for our products or close facilities in an effort to remain financially stable or as a result of the unavailability of commercial credit which would negatively affect our results of operations. We may experience difficulties in servicing, renewing or repaying our outstanding debt due to continued volatility in the global economy. We may also have difficulty accessing the global credit markets due to the downgrade of the U.S. credit rating and the resulting tightening of commercial credit availability and the financial difficulties of our customers, which would result in decreased ability to fund capital-intensive strategic projects.

Further, we may experience challenges in forecasting revenues and operating results due to these global economic conditions. The difficulty in forecasting revenues and operating results may result in volatility in the market price of our common stock.

In addition, the lenders under our senior secured credit agreement and other borrowing facilities described in Item 7 of this Form 10-K under “Liquidity and Capital Resources – Borrowing Arrangements” and the counterparties with whom we maintain interest rate swap agreements, currency forward contracts and derivatives and other hedge agreements may be unable to perform their lending or payment obligations in whole or in part, or may cease operations or seek bankruptcy protection, which would negatively affect our cash flows and our results of operations.

A downgrade in our credit rating could also impact our ability to effectively finance our operations and could lead to increased borrowing costs and limits on our access to capital.

The equipment that we use in our manufacturing operations is expensive and requires continued maintenance. We require significant capital investment to maintain our equipment. If our existing sources of capital prove insufficient, there can be no assurance that we will be able to obtain capital to finance these expenditures on favorable terms, or at all. Any inability by us to maintain our equipment as needed or any inability to obtain capital for expenditures on equipment maintenance on favorable terms could have an adverse effect on our business, financial position and results of operations.

The Continuing Consolidation of our Customer Base and Suppliers May Intensify Pricing Pressure.

Over the last few years, many of our large industrial packaging, containerboard and corrugated products customers have acquired, or been acquired by, companies with similar or complementary product lines. In addition, many of our suppliers of raw materials such as steel, resin and paper, have undergone a similar process of consolidation. This consolidation has increased the concentration of our largest customers, resulting in increased pricing pressures from our customers. The consolidation of our largest suppliers has resulted in limited sources of supply and increased cost pressures from our suppliers. Any future consolidation of our customer base or our suppliers could negatively impact our business, results of operations and financial condition. Furthermore, if one or

Table of Contents

more of our major customers reduces, delays or cancels substantial orders, if one or more of our major suppliers is unable to timely produce and deliver our orders our business, results of operations, financial condition and cash flows may be materially and adversely affected, particularly for the period in which the reduction, delay or cancellation occurs and also possibly for subsequent periods.

We Operate in Highly Competitive Industries.

Each of our business segments operates in highly competitive industries. The most important competitive factors we face are price, quality and service. To the extent that one or more of our competitors become more successful with respect to any of these key competitive factors, we could lose customers and our sales could decline. In addition, due to the tendency of certain customers to diversify their suppliers, we could be unable to increase or maintain sales volumes with particular customers. Certain of our competitors are substantially larger and have significantly greater financial resources.

In addition, some rigid industrial packaging products are made from raw materials that are subject to pronounced price fluctuations, such as steel, which is used in the manufacture of steel drums and containers, and oil, which in turn affects the price of resin for plastic drums. Particularly in well-developed markets in Europe and in the United States, any substantial increases in the supply of rigid industrial packaging resulting from capacity increases, the stockpiling of raw materials or other types of opportunistic behavior by our competitors in a period of high raw materials prices, or price wars, could adversely affect our margins and the profitability of our business. Although price is a significant basis of competition in our industry, we also compete on the basis of product reliability, the ability to deliver products on a global scale and our reputation for quality and customer service. If we fail to maintain our current standards for product quality, the scope of our distribution capabilities or our customer relationships, our business, results of operations and financial condition could be adversely affected.

Negative media reports about us or our businesses, whether accurate or inaccurate, could damage our reputation and relationships with our customers and suppliers, cause customers and suppliers to terminate their relationship with us, or impair our ability to effectively compete, which could adversely affect our business, results of operation or financial condition.

Our Business is Sensitive to Changes in Industry Demands.

Industry demand for containerboard in the United States and certain of our industrial packaging products in our United States, European and other international markets has varied in recent years causing competitive pricing pressures for those products. We compete in industries that are capital intensive, which generally leads to continued production as long as prices are sufficient to cover marginal costs. As a result, changes in industry demands, including any resulting industry over-capacity, may cause substantial price competition and, in turn, negatively impact our business, results of operations and financial condition.

Raw Material and Energy Price Fluctuations and Shortages may Adversely Impact our Manufacturing Operations and Costs.

The principal raw materials used in the manufacture of our products are steel, resin, pulpwood, old corrugated containers for recycling, used industrial packaging for reconditioning, and containerboard, which we purchase or otherwise acquire in highly competitive, price sensitive markets. These raw materials have historically exhibited price and demand cyclicality. Some of these materials have been, and in the future may be, in short supply. For example, the availability of these raw materials and/or our ability to purchase and transport these raw materials may be unexpectedly disrupted by adverse weather conditions, natural disasters, man-made disasters, a substantial economic downturn in the industries that provide any of those products, or competition for use of raw materials in other regions or countries. However, we have not recently experienced any significant difficulty in obtaining our principal raw materials. We have long-term supply contracts in place for obtaining a portion of our principal raw materials. The cost of producing our products is also sensitive to the price of energy (including its impact on transport costs). We have, from time to time, entered into short-term contracts to hedge certain of our energy costs. Energy prices, in particular oil and natural gas, have fluctuated in recent years, with a corresponding effect on our production costs. Potential legislation, regulatory action and international treaties related to climate change, especially those related to the regulation of greenhouse gases, may result in significant increases in raw material and energy costs. There can be no assurance that we will be able to recoup any past or future increases in the cost of energy and raw materials.

Geopolitical Conditions, Including Direct or Indirect Acts of War or Terrorism, Could Have A Material Adverse Effect on our Operations and Financial Results.

Our operations could be disrupted by geopolitical conditions such as international boycotts and sanctions, acts of war, terrorist activity or other similar events. Such events could make it difficult or impossible to manufacture or deliver products to our customers, receive production materials from our suppliers, or perform critical functions, which could adversely affect our business globally or in certain regions. While we maintain similar manufacturing capacities at different locations and coordinate multisource supplier programs on many of our materials which would better enable us to respond to these types of events, we cannot be sure that our plans will fully protect us from all such disruptions.

We May Encounter Difficulties Arising from Acquisitions.

We have invested a substantial amount of capital in acquisitions, joint ventures and strategic investments and we expect that we will continue to do so in the foreseeable future. We are continually evaluating acquisitions and strategic investments that are significant to our business both in the United States and internationally. Acquisitions, joint ventures and strategic investments involve numerous risks, including the failure to identify suitable acquisition candidates, complete acquisitions on acceptable terms and conditions, retain key customers, employees and contracts, the inability to integrate businesses without material disruption, unanticipated costs incurred in connection with integrating businesses, the incurrence of liabilities greater than anticipated or operating results that are less than anticipated, the inability to realize the projected value, and the inability to realize projected synergies. In addition, acquisitions, joint ventures and strategic investments and associated integration activities require time and attention of management and other key personnel, and other companies in our industries have similar acquisition and investment strategies. There can be no assurance that any acquisitions, joint ventures and strategic investments will be successfully integrated into our operations, that competition for acquisitions will not intensify or that we will be able to complete such acquisitions, joint ventures and strategic investments on acceptable terms and conditions. The costs of unsuccessful acquisition, joint venture and strategic investment efforts may adversely affect our results of operations, financial condition or prospects.

In Connection With Acquisitions or Divestitures, We may become Subject to Liabilities.

In connection with any acquisitions or divestitures, we may become subject to liabilities or legal claims, including but not limited to third party liability and other tort claims; claims for breach of contract; employment-related claims; environmental, health and safety liabilities, conditions or damage; permitting, regulatory or other compliance with law issues; or tax liabilities. If we become subject to any of these liabilities or claims, and they are not adequately covered by insurance or an enforceable indemnity or similar agreement from a creditworthy counterparty, we may be responsible for significant out-of-pocket expenditures. These liabilities, if they materialize, could have a material adverse effect on our business, financial condition and results of operations.

We may Incur Additional Restructuring Costs and there is no Guarantee that our Efforts to Reduce Costs Will Be Successful.

We have restructured portions of our operations from time to time in recent years, particularly following acquisitions of businesses and periods of economic downturn due to recent and current global economic conditions. We are implementing a strategy to improve our business portfolio, address underperforming assets and generate additional cash. This strategy includes selling, general and administrative ("SG&A") reductions throughout the company and has and will likely continue to result in the rationalization of manufacturing facilities.

The rationalization of our manufacturing facilities may result in temporary constraints upon our ability to produce the quantity of products necessary to fill orders and thereby complete sales in a timely manner. In addition, system upgrades at our manufacturing facilities that impact ordering, production scheduling and other related manufacturing processes are complex, and could impact or delay production targets. A prolonged delay in our ability to fill orders on a timely basis could affect customer demand for our products and increase the size of our product inventories, causing future reductions in our manufacturing schedules and adversely affecting our results of operations. Moreover, our continuous development and production of new products will often involve the retooling of existing manufacturing facilities. This retooling may limit our production capacity at certain times in the future, which could adversely affect our results of operations and financial condition. In addition, the expansion and reconfiguration of existing manufacturing facilities could increase the risk of production delays, as well as require significant investments of capital.

While we expect these initiatives to result in significant profit opportunities and savings throughout our organization, our estimated profits and savings are based on several assumptions that may prove to be inaccurate, and as a result, there can be no assurance that we will realize these profits and cost savings or that, if realized, these profits and cost savings will be sustained. Failure to achieve or delays in achieving projected levels of efficiencies and cost savings from such measures, or unanticipated inefficiencies resulting from manufacturing and administrative reorganization actions in progress or contemplated, could adversely affect the Company's results of operation and, financial condition and harm our reputation.

We Could be Subject to Changes in our Tax Rates, the Adoption of New U.S. or Foreign Tax Legislation or Exposure to Additional Tax Liabilities.

The multinational nature of our business subjects us to taxation in the United States and numerous foreign jurisdictions. Due to economic and political conditions, tax rates in various jurisdictions may be subject to significant change. Our future effective tax rates could be affected by changes in the mix of earnings in countries with differing statutory tax rates, changes in the valuation of deferred tax assets and liabilities, or changes in tax laws or their interpretation. For example, the United States Congress is

Table of Contents

considering comprehensive tax reform which, among other matters, may significantly reduce the corporate tax rate and change certain U.S. tax rules impacting the way U.S. based multinationals are taxed on foreign income. Changes to the tax system in the United States, particularly a proposed mandatory deemed repatriation tax, could have a material impact to our financial statements. The cumulative undistributed earnings that are considered to be indefinitely reinvested in foreign subsidiaries and corporate joint ventures on the consolidated balance sheets did not have a material adverse effect or impact as of October 31, 2017. The potential impact of the mandatory deemed repatriation proposal and other proposals is uncertain at this time, especially as the outcome of U.S. tax reform discussions is unknown, but at this time, we believe we are properly reflecting the provision for taxes on income using all current enacted global tax laws in every jurisdiction in which we operate. However, there can be no assurance that our tax positions will not be challenged by relevant tax authorities or that we would be successful in any such challenge.

Full Realization of our Deferred Tax Assets may be Affected By a Number Of Factors.

We have deferred tax assets, including foreign operating net loss carryforwards along with U.S. and foreign capital loss carryforwards, employee and retiree benefit items, and other accruals not yet deductible for tax purposes. We have established valuation allowances to reduce those deferred tax assets to an amount that is more likely than not to be realized. Our ability to use these deferred tax assets depends in part upon our having future taxable income during the periods in which these temporary differences reverse or our ability to carry back any losses created by the deduction of these temporary differences. We expect to realize these assets over an extended period. However, if we were unable to generate sufficient future taxable income in the U.S. and certain foreign jurisdictions, or if there were a significant change in the time period within which the underlying temporary differences became taxable or deductible, we could be required to increase our valuation allowances against our deferred tax assets, which could have a material adverse effect on our reported results of operations.

Several Operations are Conducted by Joint Ventures That We Cannot Operate Solely for our Benefit.

Several operations, particularly in developing countries, are conducted through joint ventures, such as a significant joint venture in our Flexible Products & Services segment. In countries that require us to conduct business through a joint venture with a local joint venture partner, the loss of a joint venture partner or a joint venture partner’s loss of its ability to conduct business in such country may impact our ability to conduct business in that country.

In joint ventures, we share ownership and, in some instances, management of a company with one or more parties who may or may not have the same goals, strategies, priorities or resources as we do. In general, joint ventures are intended to be operated for the benefit of all co-owners, rather than for our exclusive benefit. Operating a business as a joint venture often requires additional organizational formalities as well as time-consuming procedures for sharing information, accounting and making decisions. In certain cases, our joint venture partners must agree in order for the applicable joint venture to take certain actions, including acquisitions, the sale of assets, budget approvals, borrowing money and granting liens on joint venture property. Our inability to take unilateral action that we believe is in our best interests may have an adverse effect on the financial performance of the joint venture and the return on our investment. In joint ventures, we believe our relationship with our co-owners is an important factor to the success of the joint venture, and if a co-owner changes, our relationship may be adversely affected. In addition, the benefits from a successful joint venture are shared among the co-owners, so that we do not receive all the benefits from our successful joint ventures. Finally, we may be required on a legal or practical basis or both, to accept liability for obligations of a joint venture beyond our economic interest, including in cases where our co-owner becomes bankrupt or is otherwise unable to meet its commitments. For additional information with respect to the joint venture relating to our Flexible Products & Services segment, refer to Item 7, Management’s Discussion and Analysis of Financial Condition and Results of Operation – Variable Interest Entities.

Certain of the Agreements that Govern our Joint Ventures Provide our Partners With Put or Call Options.

The agreements that govern certain of our current joint ventures under certain circumstances provide the joint venture partner with the right to sell their participation in the joint venture to us or the right to acquire our participation in the joint venture. Some of the joint venture agreements provide that the joint venture partner can sell its participation for a certain purchase price calculated on the basis of a fixed multiple. Such put and call rights may result in financial risks for us. In addition, such rights could negatively impact our operations if as a result of their exercise we lose access to

members of our management teams that are familiar with local markets or distribution and manufacturing channels.
Our Ability to Attract, Develop and Retain Talented and Qualified Employees, Managers and Executives Is Critical to our Success.
Our ability to attract, develop and retain talented and qualified employees, including executives and other key managers, is important to our business. This is becoming more difficult in the current highly competitive hiring and retention environment. The retirement of or unforeseen loss of key officers and employees without appropriate succession planning or the ability to develop or hire

Table of Contents
replacements could hinder our strategic planning and execution and make it difficult to manage our business and meet our objectives resulting in a material adverse effect on our business, results of operations and financial condition.
Our Business may be Adversely Impacted by Work Stoppages and Other Labor Relations Matters.
We are subject to risk of work stoppages and other labor relations matters because a significant number of our employees are represented by unions. We have experienced work stoppages and strikes in the past, and there may be work stoppages and strikes in the future. Any prolonged work stoppage or strike at any one of our principal manufacturing facilities could have a negative impact on our business, results of operations and financial condition. In addition, upon the expiration of existing collective bargaining agreements, we may not reach new agreements without union action and any such new agreements may not be on terms satisfactory to us.
We may not Successfully Identify Illegal Immigrants in our Workforce.
Our business is subject to laws regarding employment of illegal immigrants. Although we have taken steps that we believe are sufficient and appropriate to ensure compliance with immigration laws, we cannot provide assurance that we have identified, or will identify in the future, all illegal immigrants who work for us. Our failure to identify illegal immigrants who work for us may result in fines or other penalties being imposed upon us, which could have an adverse effect on our business, financial condition and results of operations.
Our Pension and Postretirement Plans are Underfunded and will Require Future Cash Contributions, and our Required Future Cash Contributions could be Higher than we Expect, each of which could have a Material Adverse Effect on our Financial Condition and Liquidity.
We sponsor various pension and similar benefit plans worldwide.
Our U.S. and non-U.S. pension and postretirement plans were underfunded by an aggregate of $149.2 million and $12.6 million, respectively, as of October 31, 2017. We are legally required to make cash contributions to our pension plans in the future, and those cash contributions could be material.
In fiscal 2018, we expect, but are not obligated, to make cash contributions and direct benefit payments of approximately $16.9 million and $5.2 million to our U.S. and non-U.S. pension and postretirement plans, respectively, which we believe will be sufficient to meet the minimum funding requirements under applicable laws. We expect, however, our future funding obligations for our pension and postretirement plans depend upon the levels of benefits provided for by these plans, the future performance of assets set aside for these plans, the rates of interest used to determine funding levels, the impact of potential business dispositions, actuarial data and experience, and any changes in government laws and regulations. Accordingly, our future funding requirements for our pension and postretirement plans could be higher than expected, which could have a material adverse effect on our financial condition and liquidity.
In addition, our pension plans hold a significant amount of equity securities. If the market values of these securities decline, our pension expense and funding requirements will increase, which could have a material adverse effect on our financial condition and liquidity.
Any decrease in interest rates and asset returns, if and to the extent not offset by contributions, could increase our obligations under our pension plans. If the performance of assets held in these pension plans does not meet our expectations, our cash contributions for these plans could be higher than we expect, which could have a material adverse effect on our financial condition and liquidity.
We may be Subject to Losses that Might not be Covered in Whole or in Part by Existing Insurance Reserves or Insurance Coverage.
We are self-insured for certain of the claims made under our employee medical and dental insurance programs and for certain of our workers' compensation claims. We establish reserves for estimated costs related to pending claims, administrative fees and claims incurred but not reported. Because establishing reserves is an inherently uncertain process involving estimates, currently established reserves may not be adequate to cover the actual liability for claims made under our employee medical and dental insurance programs and for certain of our workers' compensation claims. If we conclude that our estimates are incorrect and our reserves are inadequate for these claims, we will need to increase our reserves, which could adversely affect our financial condition and results of operations.
We have comprehensive liability, fire and extended coverage insurance on our facilities, with policy specifications and insured limits customarily carried for similar properties. However, there are certain types of losses, such as losses

resulting from wars,

12

Table of Contents

acts of terrorism, wind storm, flood, earthquake or other natural disasters, or pollution, that may be uninsurable or subject to restrictive policy conditions. In these instances, should a loss occur in excess of insured limits, we could lose capital invested in that property, as well as the anticipated future revenues derived from the manufacturing activities conducted at that property, while remaining obligated for any mortgage indebtedness or other financial obligations related to the property. Any such loss would adversely impact our business, financial condition and results of operations.

We purchase insurance policies covering general liability and product liability with substantial policy limits. However, there can be no assurance that any liability claim would be adequately covered by our applicable insurance policies or it would not be excluded from coverage based on the terms and conditions of the policy. This could also apply to any applicable contractual indemnity.

We also purchase environmental liability policies where legally required and may elect to purchase coverage in other circumstances in order to transfer all or a portion of environmental liability risk through insurance. However, there can be no assurance that any environmental liability claim would be adequately covered by our applicable insurance policies or that it would not be excluded from coverage based on the terms and conditions of the policy.

Our Business Depends on the Uninterrupted Operations of Our Facilities, Systems and Business Functions, including our Information Technology (IT) and Other Business Systems.

Our business is dependent upon our ability to execute, in an efficient and uninterrupted fashion, necessary business functions, such as accessing key business data, financial information, order processing, invoicing and the operation of IT dependent manufacturing equipment. In addition, a significant portion of the communication between our employees, customers and suppliers around the world depends on our IT systems. A shut-down of or inability to access one or more of our facilities, a power outage, a pandemic, or a failure of one or more of our IT, telecommunications or other systems could significantly impair our ability to perform such functions on a timely basis.

We are in the process of implementing a standard IT platform across our business and have successfully completed implementation in approximately three-fourths of our locations. The transition from many former systems, many of which were acquired in connection with business acquisitions, to a single system will reduce complexity and inefficiencies in monitoring business results and consolidating financial data that could result in a material adverse effect on our business, results of operations and financial condition. This project has been ongoing for several years requiring significant human and financial resources and is expected to be substantially complete by early fiscal 2019, with work at our Flexible Products & Services operations being completed later in 2019. There can be no assurance that this project will be successful, and even if successful, there can be no assurance that other difficulties and inefficiencies will not exist in our systems.

We have established a business continuity plan in an effort to ensure the continuation of core business operations in the event that normal operations could not be performed due to a catastrophic event. While we continue to test and assess our business continuity plan to ensure it meets the needs of our core business operations and addresses multiple business interruption events, there is no assurance that core business operations could be performed upon the occurrence of such an event.

A Security Breach of Customer, Employee, Supplier or Company Information may have a Material Adverse Effect on our Business, Financial Condition and Results of Operations.

In the conduct of our business, we collect, use, transmit, store and report data on information systems and interact with customers, vendors and employees. Increased global IT security threats and more sophisticated and targeted computer crime pose a risk to the security of our systems and networks and the confidentiality, availability and integrity of our data. Despite our security measures, our IT systems and infrastructure may be vulnerable to computer viruses, cyber-attacks, security breaches caused by employee error or malfeasance or other disruptions. Any such threat could compromise our networks and the information stored there could be accessed, publicly disclosed, lost or stolen. A security breach of our computer systems could interrupt or damage our operations or harm our reputation. In addition, we could be subject to legal claims or proceedings, liability under laws that protect the privacy of personal information and regulatory penalties if confidential information relating to customers, suppliers, employees or other parties is misappropriated from our computer system.

In the past, we have relied on the U.S.-European Union Frameworks, as agreed to by the U.S. Department of Commerce and the European Union ("EU") as one of the means to legally transfer European personal information from Europe to the United States. However, on October 6, 2015, the European Court of Justice invalidated the U.S.-EU Safe Harbor framework. On February 2, 2016, the U.S. and E.U. announced agreement on a new framework for transatlantic data flows entitled the EU-US Privacy Shield and the Company self-certified under the EU-US Privacy Shield framework on October 5, 2016. However, it is possible that Privacy Shield may be challenged in EU courts, so there is some uncertainty regarding its future validity and our ability to rely on it for EU to US data transfers.

Table of Contents

Additionally, the EU has enacted the new General Data Protection Regulation, which will take effect on May 25, 2018 and carries with it significantly increased responsibilities for companies that process EU personal data as well as significant penalties. As this date draws nearer, we expect to see increased regulatory and customer attention surrounding data privacy. Furthermore, outside of the EU, we continue to see increased regulation of data privacy and security, including the adoption of more stringent subject matter specific state laws and national laws regulating the collection and use of data, as well as security and data breach obligations. The uncertainty and changes in the requirements of multiple jurisdictions may increase the cost of compliance, reduce demand for our services, restrict our ability to offer services in certain locations, impact our customers' ability to deploy our solutions in certain jurisdictions, or subject us to sanctions by national data protection regulators, all of which could harm our business, financial condition, and results of operations. Failure to provide adequate privacy protections and maintain compliance with the new data privacy laws, like the EU-U.S. Privacy Shield framework and the new General Data Protection Regulation, could jeopardize business transactions across borders and result in significant penalties. These laws could create liability for us or increase our cost of doing business.

Similar security threats exist with respect to the IT systems of our lenders, suppliers, consultants, advisors and other third parties with whom we conduct business. A security breach of those computer systems could result in the loss, theft or disclosure of confidential information and could also interrupt or damage our operations, harm our reputation and subject us to legal claims.

The regulatory framework for privacy issues is evolving worldwide, and various government and consumer agencies and public advocacy groups have called for new regulation and changes in industry practices. It is possible that new laws and regulations will be adopted in the United States and internationally, or existing laws and regulations may be interpreted in new ways, that would affect our business. Complying with any new regulatory requirements could force us to incur substantial costs or require us to change our business practices in a manner that could reduce our revenue or compromise our ability to effectively pursue our growth strategy.

To date, we have seen no material impact on our business or operations from these threats. However, we cannot assure that our security efforts will prevent unauthorized access or loss of functionality to our or our third-party providers' systems.

Legislation/Regulation Related to Environmental and Health and Safety Matters and Corporate Social Responsibility could Negatively Impact our Operations and Financial Performance.

We must comply with extensive laws, rules and regulations in the United States and in each of the countries where we conduct business regarding environmental matters, such as air, soil and water quality and waste disposal. We must also comply with extensive laws, rules and regulations regarding safety, health and corporate responsibility matters. There can be no assurance that compliance with existing and new laws, rules and regulations will not require significant expenditures.

In addition, laws, rules and regulations, as well as the interpretation and administration of such laws and regulations by governmental agencies, can change and restrict or prohibit the manner in which we conduct our current operations, require additional permits to engage in some or all of our current operations, or increase the cost of some or all our operations. For example, certain of the remedies being sought by the U.S. EPA in the proceedings relating to the CLCM facilities in the Milwaukee, Wisconsin area seek to implement changes in the way certain laws and regulations are interpreted and administered with respect to our reconditioning business. Such changes could adversely affect our business, results of operation or financial condition.

We are also subject to transportation safety regulations promulgated by the U.S. Department of Transportation ("DOT") and agencies in other jurisdictions. Both the DOT regulations and standards issued by the United Nations and adopted by various jurisdictions outside the United States set forth requirements related to the transportation of both hazardous and nonhazardous materials in some of our packaging products and subject our company to random inspections and testing to ensure compliance. Failure to comply could result in fines to our company and could affect our business, results of operations and financial condition.

We are subject to laws, rules and regulations relating to some of the raw materials, such as resins and epoxy-based coatings, used in our rigid container business. These materials may contain Bisphenol-A (BPA), a chemical monomer that can be toxic in sufficient quantities, and is used in several food contact applications. Regulatory agencies in several jurisdictions worldwide have found these materials to be safe for food contact at current levels, but a significant change in regulatory rulings concerning BPA could have an adverse effect on our business.

At the European Union, or EU, level, many laws and regulations are designed to protect human health and the environment. For example, Directive 2004/35/EC concerns obligations to remedy damages to the environment, which could require us to remediate contamination identified at sites we own or use. Other EU directives limit pollution from industrial activities, reduce emissions to air, water and soil, protect water resources, reduce waste, protect employee health and safety and regulate the registration, evaluation, authorization and restriction of chemicals. See “Business-Regulation.” Failure to comply with these laws, or a change in the applicable legal framework, could affect our business, results of operations and financial condition.

Table of Contents

Our customers in the food industry are subject to increasing laws, rules and regulations relating to food safety. As a result, customers may demand that changes be made to our products or facilities, as well as other aspects of our production processes, that may require the investment of capital. The failure to comply with these requests could adversely affect our relationships with some customers and result in negative effects on our business, results of operations and financial condition.

We are subject to the annual disclosure and reporting requirements regarding the use of “conflict minerals” from the Democratic Republic of the Congo and adjoining countries pursuant to Section 1502 of The Dodd-Frank Wall Street Reform and Consumer Protection Act. These requirements could affect the sourcing, availability and cost of minerals used in the manufacture of certain of our products. We have incurred and will continue to incur costs associated with complying with these supply chain due diligence procedures. In addition, because our supply chain is complex, we may face reputation challenges with our customers and other stakeholders if we are unable to sufficiently verify the origins of all minerals used in our products through the due diligence procedures that we implement.

Although there may be adverse financial impact (including compliance costs, potential permitting delays and increased cost of energy, raw materials and transportation) associated with any legislation, regulation or other action, the extent and magnitude of that impact cannot be reliably or accurately estimated due to the fact that some requirements have only recently been adopted and the present uncertainty regarding other additional measures and how they will be implemented.

Product Liability Claims and Other Legal Proceedings could Adversely Affect our Operations and Financial Performance.

We produce products and provide services related to other parties’ products, including sensitive products such as food ingredients, pharmaceutical ingredients and hazardous substances. Incidents involving these product types can involve risk of recall, contamination, spillage, leakage, fires, and explosions, which can threaten individual health and cause the breakdown or failure of equipment or processes and the performance of facilities below expected levels of capacity. If any of our customers have such accidents involving our products, they may bring product liability claims against us. While we have built extensive operational processes to ensure that the design and manufacture of our products meet rigorous quality standards, there can be no assurance that we or our customers will not experience operational process failures that could result in potential product, safety, regulatory or environmental claims and associated litigation. We are also subject to a variety of legal proceedings and legal compliance risks in our areas of operation around the globe. Any such claims, whether with or without merit, could be time consuming and expensive to defend and could divert management’s attention and resources. In accordance with customary practice, we maintain insurance against some, but not all, of these potential claims. In the future, we may not be able to maintain insurance at commercially acceptable premium levels at all. In addition, the levels of insurance we maintain may not be adequate to fully cover any and all losses or liabilities. If any significant judgment or claim is not fully insured or indemnified against, it could have a material adverse impact on our business, financial condition and results of operations.

We and the industries in which we operate are at times being reviewed or investigated by regulators and other governmental agencies, which could lead to enforcement actions, fines and penalties or the assertion of private litigation claims and damages. Simply responding to actual or threatened litigation or government investigations of our compliance with regulatory standards may require significant expenditures of time and other resources. While we believe that we have adopted appropriate risk management and compliance programs, the global and diverse nature of our operations means that legal and compliance risks will continue to exist and legal proceedings and other contingencies, the outcome of which cannot be predicted with certainty, will arise from time to time that could adversely affect our business, results of operations and financial condition.

We may Incur Fines or Penalties, Damage to our Reputation or other Adverse Consequences if our Employees, Agents or Business Partners Violate, or are Alleged to have Violated, Anti-bribery, Competition or Other Laws.

We cannot provide assurance that our internal controls will always protect us from reckless or criminal acts committed by our employees, agents or business partners that would violate U.S. and/or non-U.S. laws, including anti-bribery, competition, trade sanctions and regulation, and other laws. Any such improper actions could subject us to civil or criminal investigations in the U.S. and in other jurisdictions, could lead to substantial civil or criminal monetary and non-monetary penalties against us or our subsidiaries, and could damage our reputation. Even the allegation or appearance of our employees, agents or business partners acting improperly or illegally could damage our reputation and result in significant expenditures in investigating and responding to such actions.

Changing Climate, Climate Change Regulations and Greenhouse Gas Effects may Adversely Affect our Operations and Financial Performance.

There is continuing concern from members of the scientific community and the general public that emissions of greenhouse gases (GHG) and other human activities have or will cause significant changes in weather patterns and increase the frequency or severity of weather events, wildfires and flooding. Climate change creates physical and financial risk. Physical risks from climate change include an increase in sea level and changes in weather conditions, such as an increase in precipitation, droughts and extreme weather events. These types of events may adversely impact the Company, our suppliers, our customers and their ability to purchase our products and our ability to manufacture and transport our products on a timely basis and could result in a material adverse effect on our business, results of operations and financial condition.

We believe it is likely that the scientific and political attention to issues concerning the extent and causes of climate change will continue, with the potential for further legislation and regulations that could affect our results of operations and financial condition. Foreign, federal, state and local regulatory and legislative bodies have proposed various legislative and regulatory measures relating to climate change, regulating GHG emissions and energy policies. If such legislation or regulations are enacted, we could incur increased energy, environmental and other costs and capital expenditures to comply with the limitations. Failure to comply with these regulations could result in fines to our company and could affect our business, results of operations and financial condition.

We, along with other companies in many business sectors, including our customers, are considering and implementing ways to reduce GHG emissions. As a result, our customers may request that changes be made to our products or facilities, as well as other aspects of our production processes, that increase costs and may require the investment of capital. The failure to comply with these requests could adversely affect our relationships with some customers, which in turn could adversely affect our business, results of operations and financial condition.

We could face increased costs related to defending and resolving legal claims and other litigation related to climate change and the alleged impact of our operations on climate change.

The Frequency and Volume of our Timber and Timberland Sales will Impact our Financial Performance.

We have a significant inventory of standing timber and timberland and approximately 20,000 acres of special use properties in the United States as of October 31, 2017. The frequency, demand for and volume of sales of timber, timberland and special use properties will have an effect on our financial condition and results of operations. In addition, volatility in the real estate market for special use properties could negatively affect our results of operations.

Changes in U.S. Generally Accepted Accounting Principles (U.S. GAAP) and SEC Rules and Regulations could Materially Impact our Reported Results.

U.S. GAAP and SEC accounting and reporting changes have become more frequent and significant in the past several years. These changes could have significant effects on our reported results when compared to prior periods and other companies and may even require us to retrospectively adjust prior periods from time to time. Additionally, material changes to the presentation of transactions in the consolidated financial statements could impact key ratios that analysts and credit rating agencies use to rate our company, increase our cost of borrowing and ultimately our ability to access the credit markets in an efficient manner.

The Financial Accounting Standard Board ("FASB") has issued an Accounting Standards Update that provides new requirements for revenue recognition effective for us on November 1, 2018. We anticipate that the impact of this standard will be limited to expanded disclosures, with no material impact on our financial position, results of operations, comprehensive income or cash flows. The FASB has also issued an Accounting Standards Update that provides new requirements for accounting for and disclosing lease assets and lease liabilities on the balance sheet and disclosing key information about lease arrangements effective for us on November 1, 2019. We are in the process of determining the potential impact of adopting these standards on our financial position, results of operations, comprehensive income, cash flows and disclosure.

If the Company Fails to Maintain an Effective System of Internal Control, the Company may not be able to Accurately Report Financial Results or Prevent Fraud.

Effective internal controls are necessary to provide reliable financial reports and to assist in the effective prevention of fraud. We must annually evaluate our internal control procedures to satisfy the requirements of Section 404 of the Sarbanes-Oxley Act of 2002, which requires management and auditors to assess the effectiveness of internal controls. As described in Item 9A of this Form 10-K, management has concluded that our internal controls over financial reporting were effective as of October 31, 2017. In the past, we have reported material weaknesses in the adequacy of our internal controls, and there is no assurance that, in the future, material weaknesses will not be identified that would cause management to change its current conclusion as to the effectiveness of our internal controls. If we fail to maintain effective internal controls, we could report material weaknesses in the future, indicating that there is a reasonable possibility that our financial statements that do not accurately reflect our financial condition.

The Company has a Significant Amount of Goodwill and Long-lived Assets which, if Impaired in the Future, would Adversely Impact our Results of Operations.

Table of Contents

Our goodwill could be impaired if the fair value of any particular reporting unit is less than the carrying value of that reporting unit. Impairment of the Company's goodwill would reduce the Company's net income in the period of any such write down. The Company is required to evaluate goodwill reflected on its balance sheet at least annually, or when circumstances indicate a potential impairment. If it determines that the goodwill is impaired, the Company would be required to write off a portion or all of the goodwill. At October 31, 2017, the carrying value of the Company's goodwill was $785.4 million including the impact of a $13.0 million goodwill impairment related to the Rigid Industrial Packaging Products & Services – Latin America reporting unit that resulted from the August 1, 2017, goodwill impairment testing.

We may be required to record future impairments of our long-lived assets as we continue to restructure our business. Decisions to sell or close plants could reduce the hold period of an asset group or indicate that the fair value of the asset group is less than the carrying value. We may also experience declines in particular businesses due to competition or other outside forces indicating our long-lived assets are not recoverable. Any resulting impairments will impact net income in the period in which the triggering event occurs and could be significant, which could have a material adverse effect on our results of operations.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

Table of Contents

ITEM 2. PROPERTIES

The following are our principal operating locations and the products manufactured at such facilities or the use of such facilities. We consider our operating properties to be in satisfactory condition and adequate to meet our present needs. However, we expect to make further additions, improvements and consolidations of our properties to support our business.

Location	Products or Use	Owned	Leased
RIGID INDUSTRIAL PACKAGING & SERVICES			
Algeria	Steel drums	1	—
Argentina	Steel and plastic drums, water bottles and distribution centers	2	1
Australia	Closures	—	2
Austria	Steel drums, intermediate bulk containers and reconditioned containers and services	1	—
Belgium	Steel and plastic drums, and shared services	2	1
Brazil	Steel and plastic drums, closures, warehouse and general office	5	4
Canada	Steel and plastic drums	2	—
Chile	Steel drums, water bottles and distribution centers	1	1
China	Steel drums, closures, packaging services, warehouse and general offices	9	2
Colombia	Steel and plastic drums and water bottles	1	1
Costa Rica	Steel drums	—	1
Czech Republic	Steel drums	1	—
Denmark	Fibre drums	—	1
Egypt	Steel drums	1	—
France	Steel and plastic drums, closures, reconditioned containers and services and distribution center	4	1
Germany	Steel and plastic drums, closures, reconditioned containers and services and intermediate bulk containers	7	1
Greece	Steel drums	1	—
Guatemala	Steel drums	1	—
Hungary	Steel drums and shared services	1	1
Israel	Steel, plastic and fibre drums and intermediate bulk containers	—	1
Italy	Steel and plastic drums, closures, intermediate bulk containers and distribution center	1	4
Kenya	Steel drums	—	1
Malaysia	Steel and plastic drums	1	1
Mexico	Fibre, steel and plastic drums, closures and distribution centers	1	3
Morocco	Steel and plastic drums	1	—
Netherlands	Steel drums, closures, paints and linings, research center, general offices, distribution center, reconditioned containers and services and intermediate bulk containers	4	1
Nigeria	Steel drums	1	2
Norway	Office	—	1
Philippines	Steel drums and water bottles	—	1
Poland	Steel drums and water bottles	1	—
Portugal	Steel drums	1	—
Russia	Steel drums, water bottles, intermediate bulk containers and general office	7	3

Saudi Arabia	Steel drums	—	2

Table of Contents

Singapore	Steel drums and plastic drums	1	—
South Africa	Steel and plastic drums and distribution center	2	1
Spain	Steel drums and distribution center	2	2
Sweden	Steel and plastic drums, intermediate bulk containers and distribution center	1	1
Turkey	Steel drums	1	—
Ukraine	Distribution center and water bottles	—	1
United Kingdom	Steel drums, reconditioned containers and services and distribution centers	2	—
United States	Fibre, steel and plastic drums, intermediate bulk containers, reconditioned containers and services, closures, steel parts, distribution centers and packaging services	18	25
Venezuela	Steel and plastic drums	2	—
Vietnam	Steel drums	1	—

Location	Products or Use	Owned	Leased
FLEXIBLE PRODUCTS & SERVICES:			
Belgium	Manufacturing plant	—	1
Brazil	Distribution center	—	1
Chile	Distribution center	—	1
China	Manufacturing plant	—	1
France	Manufacturing plant and distribution centers	1	—
Germany	Manufacturing plant and general office	—	2
India	General office	—	1
Ireland	Distribution center	—	1
Mexico	Manufacturing plant	—	1
Netherlands	Manufacturing plant, distribution centers and general office	—	2
Portugal	Manufacturing plant	—	1
Romania	Manufacturing plants	—	2
Saudi Arabia	Idle	1	—
Spain	Distribution center	—	1
Turkey	Manufacturing plants	—	3
Ukraine	Manufacturing plant	1	—
United Kingdom	Manufacturing plant	—	1
United States	Distribution centers	—	2
Vietnam	Manufacturing plant	—	1

Location	Products or Use	Owned	Leased
PAPER PACKAGING & SERVICES:			
United States	Corrugated sheets, containers and other products, containerboard, investment property, general offices and distribution centers	13	3

Location	Products or Use	Owned	Leased
LAND MANAGEMENT:			
United States	General offices	3	2

Table of Contents

Location	Products or Use	Owned	Leased
CORPORATE:			
Luxembourg	General office	—	1
Netherlands	General office	—	1
United States	Principal and general offices	4	—

We also own a substantial amount of timber properties. Our timber properties consisted of approximately 245,000 acres in the southeastern United States as of October 31, 2017.

ITEM 3. LEGAL PROCEEDINGS

We are not a party to any pending legal proceedings that are material to our business or financial condition.

From time to time, we have been a party to legal proceedings arising at the country, state or local level involving environmental sites to which we have shipped, directly or indirectly, small amounts of toxic waste, such as paint solvents. As of the filing date of this Form 10-K, we have been classified only as a “de minimis” participant, and such proceedings do not involve monetary sanctions in excess of $100,000.

On July 19, 2017, the Wisconsin Department of Natural Resources (“WDNR”) issued Notices of Violation to us and CLCM with respect to CLCM’s three reconditioning facilities in the Milwaukee, Wisconsin area regarding violations of Wisconsin laws related to hazardous waste, air management and industrial storm water. On November 27, 2017, the United States Environmental Protection Agency (“U.S. EPA”) issued a Notice of Violation to us and CLCM with respect to CLCM’s reconditioning facilities in the Milwaukee, Wisconsin area regarding violations of the federal Resource Conservation and Recovery Act (“RCRA”), primarily related to the unlawful storage and treatment of hazardous wastes without RCRA licenses and violations of RCRA’s requirements related to hazardous waste determinations and hazardous waste activity notifications, and Wisconsin laws related to hazardous waste. On November 27, 2017, the U.S. EPA issued Notices and Findings of Violations to CLCM with respect to two of CLCM's reconditioning facilities in the Milwaukee, Wisconsin area regarding violations of the federal Clean Air Act, primarily related to air management, and Wisconsin laws related to air management. The remedies being sought in these proceedings include compliance with the applicable environmental laws and regulations as being interpreted by the U.S. EPA and WDNR and monetary sanctions. We have cooperated with the governmental agencies in these investigations and proceedings. As of the filing date of this Form 10-K, no citations have been issued or fines assessed with respect to any of these proceedings. With respect to one or more of these proceedings, monetary sanctions may be imposed by the U.S. EPA or the WNDR and those monetary sanctions may exceed $100,000 individually or in the aggregate.

ITEM 4. MINE SAFETY DISCLOSURES

None.

PART II

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

Shares of our Class A and Class B Common Stock are listed on the New York Stock Exchange under the symbols GEF and GEF.B, respectively.

Financial information regarding our two classes of common stock, as well as the number of holders of each class and the high, low and closing sales prices for each class for each quarterly period for the two most recent years, is included in Note 19 to the Notes to Consolidated Financial Statements in Item 8 of this Form 10-K.

We pay quarterly dividends of varying amounts computed on the basis described in Note 14 to the Notes to Consolidated Financial Statements included in Item 8 of this Form 10-K. The annual dividends paid for the last two years are as follows:

2017 Dividends per Share – Class A $1.68; Class B $2.51

2016 Dividends per Share – Class A $1.68; Class B $2.51

The terms of our current credit agreement limit our ability to make “restricted payments,” which include dividends and purchases, redemptions and acquisitions of our equity interests. The payment of dividends and other restricted payments are subject to the condition that certain defaults not exist under the terms of our current credit agreement and, in the event that certain defaults exist,

20

Table of Contents

are limited in amount by a formula based, in part, on our consolidated net income. Refer to “Liquidity and Capital Resources – Borrowing Arrangements” in Item 7 of this Form 10-K.

In July 2017, the Board of Directors' Stock Repurchase Committee authorized and we executed the repurchase of 2,000 shares of Class B Common Stock as a part of the Board authorized common stock repurchase program.

Performance Graph

The following graph compares the performance of shares of our Class A and B Common Stock to that of the Standard and Poor’s 500 Index and our industry group (Peer Index) assuming $100 invested on October 31, 2012 and reinvestment of dividends for each subsequent year. The graph does not purport to represent our value.

The Peer Index comprises the containers and packaging index as shown by Dow Jones.

Equity compensation plan information required by Items 201(d) of Regulation S-K will be found under the caption “Equity Compensation Plan Information” in the 2018 Proxy Statement, which information is incorporated herein by reference.

Table of Contents

ITEM 6. SELECTED FINANCIAL DATA

The five-year selected financial data is as follows:

	Year Ended October 31,				
(in millions, except per share amounts)	2017	2016	2015	2014	2013
Net sales	$3,638.2	$3,323.6	$3,616.7	$4,239.1	$4,219.9
Net income attributable to Greif, Inc.	$118.6	$74.9	$71.9	$91.5	$144.7
Total assets	$3,232.3	$3,153.0	$3,315.7	$3,667.4	$3,886.7
Long-term debt, including current portion of long-term debt	$952.8	$974.6	$1,146.9	$1,105.0	$1,217.2
Basic earnings per share:					
Class A Common Stock	$2.02	$1.28	$1.23	$1.56	$2.47
Class B Common Stock	$3.02	$1.90	$1.83	$2.33	$3.70
Diluted earnings per share:					
Class A Common Stock	$2.02	$1.28	$1.23	$1.56	$2.47
Class B Common Stock	$3.02	$1.90	$1.83	$2.33	$3.70
Dividends per share:					
Class A Common Stock	$1.68	$1.68	$1.68	$1.68	$1.68
Class B Common Stock	$2.51	$2.51	$2.51	$2.51	$2.51

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

The terms “Greif,” “the Company,” “we,” “us” and “our” as used in this discussion refer to Greif, Inc. and its subsidiaries.

Greif Business System and Transformation Initiative

We developed and use the “Greif Business System,” a quantitative, systematic and disciplined process, to improve productivity, increase profitability, reduce costs and drive shareholder value. During the fourth quarter 2014, we announced a transformation initiative, which was a holistic plan to improve our financial performance and reward our shareholders. At its core, this plan restructured the company by enhancing the Greif Business System through refocused efforts on operational efficiency, customer service excellence, working capital, and sourcing and supply chain; reducing complexity; the consolidation and optimization of our manufacturing network; the sale of selected non-core assets; the reduction of selling, general, and administrative ("SG&A") costs; and implementing growth initiatives. As of the fourth quarter of 2017, we have completed our transformation initiative. We intend to continue to utilize the Greif Business System to operate with the financial discipline that underlined the transformation initiative and anticipate the full year benefit of the fiscal 2017 initiatives to be realized in fiscal 2018.

RESULTS OF OPERATIONS

The discussion and analysis of our financial condition and results of operations are based upon our consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States (“GAAP”). The preparation of these consolidated financial statements, in accordance with these principles, require us to make estimates and assumptions that affect the reported amount of assets and liabilities, revenues and expenses, and related disclosure of contingent assets and liabilities at the date of our consolidated financial statements.

Historical revenues and earnings may or may not be representative of future operating results due to various economic and other factors.

The non-GAAP financial measure of EBITDA is used throughout the following discussion of our results of operations. EBITDA is defined as net income, plus interest expense, net, plus income tax expense, plus depreciation, depletion and amortization. Since we do not calculate net income by segment, EBITDA by segment is reconciled to operating profit by segment. We use EBITDA as one of the financial measures to evaluate our historical and ongoing operations and believe that this non-GAAP financial measure is useful to enable investors to perform meaningful comparisons of our historical and current performance. Additionally, EBITDA is a metric considered by debt holders and certain investors as an indicator of our ability to generate cash flow. EBITDA, as a

Table of Contents

non-GAAP financial measure, should not be considered an alternative or substitute for, and should not be considered superior to, any of our GAAP financial measures. Accordingly, users of this financial information should not place undue reliance on EBITDA.

The following table sets forth the net sales, operating profit (loss) and EBITDA for each of our business segments for 2017, 2016 and 2015:

Year Ended October 31, (in millions)	2017	2016	2015
Net sales			
Rigid Industrial Packaging & Services	$2,522.7	$2,324.2	$2,586.4
Paper Packaging & Services	800.9	687.1	676.1
Flexible Products & Services	286.4	288.1	322.6
Land Management	28.2	24.2	31.6
Total net sales	$3,638.2	$3,323.6	$3,616.7
Operating profit (loss):			
Rigid Industrial Packaging & Services	$173.4	$143.9	$86.4
Paper Packaging & Services	83.3	89.1	109.3
Flexible Products & Services	5.7	(15.5)	(36.6)
Land Management	10.0	8.1	33.7
Total operating profit	$272.4	$225.6	$192.8
EBITDA:			
Rigid Industrial Packaging & Services	$241.9	$223.8	$179.5
Paper Packaging & Services	115.3	120.7	138.4
Flexible Products & Services	11.1	(11.3)	(29.9)
Land Management	14.6	11.9	37.0
Total EBITDA	$382.9	$345.1	$325.0

The following table sets forth EBITDA, reconciled to net income and operating profit, for our consolidated results for 2017, 2016 and 2015:

Year Ended October 31, (in millions)	2017	2016	2015
Net income	$135.1	$75.5	$67.2
Plus: interest expense, net	60.1	75.4	74.8
Plus: income tax expense	67.2	66.5	48.4
Plus: depreciation, depletion and amortization expense	120.5	127.7	134.6
EBITDA	$382.9	$345.1	$325.0
Net income	$135.1	$75.5	$67.2
Plus: interest expense, net	60.1	75.4	74.8
Plus: income tax expense	67.2	66.5	48.4
Plus: other expense, net	12.0	9.0	3.2
Less: equity earnings of unconsolidated affiliates, net of tax	(2.0)	(0.8)	(0.8)
Operating profit	272.4	225.6	192.8
Less: other expense, net	12.0	9.0	3.2
Less: equity earnings of unconsolidated affiliates, net of tax	(2.0)	(0.8)	(0.8)
Plus: depreciation, depletion and amortization expense	120.5	127.7	134.6
EBITDA	$382.9	$345.1	$325.0

Table of Contents

The following table sets forth EBITDA for each of our business segments, reconciled to the operating profit (loss) for each segment, for 2017, 2016 and 2015:

Year Ended October 31, (in millions)	2017	2016	2015
Rigid Industrial Packaging & Services			
Operating profit	$173.4	$143.9	$86.4
Less: other expense, net	10.5	5.5	1.3
Less: equity earnings of unconsolidated affiliates, net of tax	(2.0)	(0.8)	(0.4)
Plus: depreciation and amortization expense	77.0	84.6	94.0
EBITDA	$241.9	$223.8	$179.5
Paper Packaging & Services			
Operating profit	$83.3	$89.1	$109.3
Less: other income, net	(0.1)	—	(0.4)
Plus: depreciation and amortization expense	31.9	31.6	28.7
EBITDA	$115.3	$120.7	$138.4
Flexible Products & Services			
Operating profit (loss)	$5.7	$(15.5)	$(36.6)
Less: other expense, net	1.6	3.5	2.3
Less: equity earnings of unconsolidated affiliates, net of tax	—	—	(0.4)
Plus: depreciation and amortization expense	7.0	7.7	8.6
EBITDA	$11.1	$(11.3)	$(29.9)
Land Management			
Operating profit	$10.0	$8.1	$33.7
Plus: depreciation, depletion and amortization expense	4.6	3.8	3.3
EBITDA	14.6	11.9	37.0
Consolidated EBITDA	$382.9	$345.1	$325.0

Year 2017 Compared to Year 2016

Net Sales

Net sales were $3,638.2 million for 2017 compared with $3,323.6 million for 2016. The 9.5 percent increase in net sales was primarily due to strategic pricing decisions and increases in index prices in our Rigid Industrial Packaging & Services segment and an increase in volumes in our mills and corrugator facilities in our Paper Packaging & Services segment, partially offset by the impact of our 2016 divestitures in our Rigid Industrial Packaging & Services segment.

Gross Profit

Gross profit was $714.7 million for 2017 compared with $684.9 million for 2016. The respective reasons for the improvement or decline in gross profit for each segment are described below in the "Segment Review." Gross profit margin was 19.6 percent for 2017 compared to 20.6 percent for 2016.

Selling, General and Administrative Expenses

Selling, general and administrative ("SG&A") expenses increased 0.9 percent to $380.4 million for 2017 from $376.8 million for 2016. This increase was primarily due to increases in incentive compensation due to improved business performance and increases in professional fees partially offset by decreased non-income tax expense and the impact of foreign currency translation of $2.9 million. SG&A expenses were 10.5 percent of net sales for 2017 compared with 11.3 percent of net sales for 2016.

Table of Contents

Restructuring Charges

Restructuring charges were $12.7 million for 2017 compared with $26.9 million for 2016. Charges for both periods were primarily related to employee separation costs, relocation fees and professional fees incurred for services specifically associated with employee separation and relocation. Restructuring activities and associated costs during 2017 are anticipated to deliver annual run-rate savings of approximately $9.9 million with payback periods ranging from one to three years among the plans. We anticipate completion of the current restructuring programs by early 2018. Refer to Note 6 – Restructuring Charges, within the Notes to Consolidated Financial Statements in Item 8 of this Form 10-K for additional information.

Impairment Charges

Goodwill impairment charges were $13.0 million for 2017. These charges were related to the impairment of goodwill within the Rigid Industrial Packaging & Services segment. There were no goodwill impairment charges for 2016. Non-cash asset impairment charges were $7.8 million for 2017 compared with $51.4 million for 2016. In 2017, these charges were primarily related to plant closures and impairments of goodwill allocated to assets held for sale. Refer to Note 9 – Financial Instruments and Fair Value Measurements, within the Notes to Consolidated Financial Statements in Item 8 of this Form 10-K for additional information.

Timberland Gains

There were no gains on timberland sales for 2017 or 2016.

Gain on Disposal of Properties, Plants and Equipment, net

The gain on disposal of properties, plants, and equipment, net was $0.4 million and $10.3 million for 2017 and 2016, respectively. See Note 4 to the Consolidated Financial Statements included in Item 8 of this Form 10-K for additional information.

Loss on Disposal of Businesses, net

The loss on disposal of businesses was $1.7 million and $14.5 million for 2017 and 2016, respectively. See Note 2 to the Consolidated Financial Statements included in Item 8 of this Form 10-K for additional information.

Operating Profit

Operating profit was $272.4 million for 2017 compared with $225.6 million for 2016. The $46.8 million increase consisted of increases of $29.5 million in the Rigid Industrial Packaging & Services segment, $21.2 million in the Flexible Products & Services segment, and $1.9 million in the Land Management segment. The increase was partially offset by a decrease of $5.8 million in the Paper Packaging & Services segment. The primary factors that contributed to the $46.8 million increase, when compared to 2016, were increased sales, lower non-cash asset impairment charges of $30.6 million, lower restructuring charges of $14.2 million, and lower losses on the sale of businesses of $12.8 million, partially offset by increased pension settlement charges of $27.1 million and lower gains on sales of property, plant, and equipment of $9.9 million.

EBITDA

EBITDA was $382.9 million and $345.1 million for 2017 and 2016, respectively. The increase in EBITDA was primarily due to the same factors impacting operating profit described above. Depreciation, depletion and amortization expense was $120.5 million for 2017 compared with $127.7 million for 2016. The decrease in depreciation, depletion and amortization expense was primarily due to impact of 2016 divestitures.

Trends

In fiscal year 2018, we anticipate stronger demand from key end use segments (e.g., bulk and specialty chemicals) as a result of improving global macroeconomic conditions and favorable access to credit impacting primarily our Rigid Industrial Packaging & Services segment. In addition, we anticipate benefits from proposed infrastructure and planned chemical expansion projects, primarily planned in the United States. We also anticipate that our Paper Packaging & Services segment will benefit from a more favorable price - cost relationship as containerboard price increases announced in 2017 are fully realized, although old corrugated container (OCC) costs are anticipated to remain somewhat volatile due to unpredictable overseas demand.

Table of Contents

Segment Review

Rigid Industrial Packaging & Services

Key factors influencing profitability in the Rigid Industrial Packaging & Services segment are:

- Selling prices, product mix, customer demand and sales volumes;
- Raw material costs, primarily steel, resin, containerboard and used industrial packaging for reconditioning;
- Energy and transportation costs;
- Benefits from executing the Greif Business System;
- Restructuring charges;
- Divestiture of businesses and facilities; and
- Impact of foreign currency translation.

Net sales increased 8.5 percent to $2,522.7 million in 2017 from $2,324.2 million in 2016. The $198.5 million increase in net sales was primarily the result of an increase in selling prices due to strategic pricing and increases in index prices of raw materials partially offset by the impact of the 2016 divestitures in this segment.

Gross profit was $502.2 million for 2017 compared with $489.4 million for 2016. The $12.8 million increase in gross profit was primarily due to the positive impact of strategic volume and pricing actions, partially offset by increases in raw material prices. Gross profit margin decreased to 19.9 percent from 21.1 percent in 2016.

Operating profit was $173.4 million for 2017 compared with $143.9 million for 2016. The $29.5 million increase was primarily attributable to the same factors impacting gross profit, a decrease in non-cash asset impairment charges of $22.8 million, a decrease in restructuring charges of $7.8 million and a decrease in loss on sales of properties, plants and equipment and businesses, net of $3.2 million, partially offset by an increase in pension settlement charges of $16.7 million.

EBITDA was $241.9 million for 2017 compared with $223.8 million for 2016. The $18.1 million increase was due to the same factors that impacted the segment’s operating profit, as described above. Depreciation, depletion and amortization expense was $77.0 million for 2017 compared with $84.6 million for 2016. The reduction in depreciation, depletion and amortization expense was primarily due to impact of 2016 divestitures.

Paper Packaging & Services

Key factors influencing profitability in the Paper Packaging & Services segment are:

- Selling prices, product mix, customer demand and sales volumes;
- Raw material costs, primarily old corrugated containers;
- Energy and transportation costs; and
- Benefits from executing the Greif Business System.

Net sales increased 16.6 percent to $800.9 million for 2017 compared with $687.1 million for 2016, primarily related to increased net volumes of 5.9 percent in our mills and corrugator facilities and a $22.7 million increase in specialty product sales. Selling prices increased 12.0 percent, primarily due to an increase in published containerboard index prices during 2017.

Gross profit was $150.9 million for 2017 compared with $144.5 million for 2016. The increase in gross profit was primarily due to the same factors impacting net sales, as described above. Gross profit margin was 18.8 percent and 21.0 percent for 2017 and 2016, respectively. This decrease was due to an increase in input costs, primarily old corrugated container costs, during 2017 compared to 2016.

Operating profit was $83.3 million for 2017 compared with $89.1 million for 2016. The decrease was primarily due to increased pension settlement charges of $10.2 million, increased input costs, and increased SG&A expenses, partially offset by selling price and volume increases as described above.

EBITDA was $115.3 million for 2017 compared with $120.7 million for 2016. The decrease in EBITDA was primarily due to the same factors impacting net sales and gross profit, as described above. Depreciation, depletion and amortization expense was $31.9 million and $31.6 million for 2017 and 2016, respectively.

Table of Contents

Flexible Products & Services

Key factors influencing profitability in the Flexible Products & Services segment are:

- Selling prices, product mix, customer demand and sales volumes;
- Raw material costs, primarily resin;
- Energy and transportation costs;
- Benefits from executing the Greif Business System;
- Restructuring charges;
- Divestiture of businesses and facilities; and
- Impact of foreign currency translation.

Net sales decreased 0.6 percent to $286.4 million for 2017 compared with $288.1 million for 2016. This decrease was primarily due to the impact of non-material divestitures in 2016 of $6.5 million and the impact of foreign currency translation of $6.5 million, offset by strategic pricing decisions.

Gross profit was $51.1 million for 2017 compared with $42.0 million for 2016. This increase was primarily attributable to reduced labor and fixed production costs and the impact of strategic volume and pricing decisions. Gross profit margin increased to 17.8 percent for 2017 from 14.6 percent for 2016.

Operating profit was $5.7 million for 2017 compared with an operating loss of $15.5 million for 2016. This improvement in operating profit was primarily due to the same factors impacting the segment's gross profit, as well as a decrease in non-cash asset impairment charges of $6.3 million and a decrease in restructuring charges of $5.1 million.

EBITDA was $11.1 million for 2017 compared with negative $11.3 million for 2016. This improvement was due to the same factors that impacted the segment's operating profit, as described above. Depreciation, depletion and amortization expense was $7.0 million for 2017 compared with $7.7 million for 2016, respectively.

Land Management

As of October 31, 2017, our Land Management segment consisted of 245,000 acres of timber properties in the southeastern United States. Key factors influencing profitability in the Land Management segment are:

- Planned level of timber sales;
- Selling prices and customer demand;
- Gains on timberland sales; and
- Gains on the disposal of development, surplus and HBU properties ("special use property").

In order to maximize the value of our timber properties, we continue to review our current portfolio and explore the development of certain of these properties. This process has led us to characterize our property as follows:

- Surplus property, meaning land that cannot be efficiently or effectively managed by us, whether due to parcel size, lack of productivity, location, access limitations or for other reasons.
- HBU property, meaning land that in its current state has a higher market value for uses other than growing and selling timber.
- Development property, meaning HBU land that, with additional investment, may have a significantly higher market value than its HBU market value.
- Core timberland, meaning land that is best suited for growing and selling timber.

We report the sale of timberland property in "timberland gains," the sale of HBU and surplus property in "gain on disposal of properties, plants and equipment, net" and the sale of timber and development property under "net sales" and "cost of products sold" in our consolidated statements of income. All HBU and development property, together with surplus property, is used to productively grow and sell timber until the property is sold.

Whether timberland has a higher value for uses other than growing and selling timber is a determination based upon several variables, such as proximity to population centers, anticipated population growth in the area, the topography of the land, aesthetic

Table of Contents

considerations, including access to lakes or rivers, the condition of the surrounding land, availability of utilities, markets for timber and economic considerations both nationally and locally. Given these considerations, the characterization of land is not a static process, but requires an ongoing review and re-characterization as circumstances change.

As of October 31, 2017, we estimated that there were 20,000 acres in the United States of special use property, which we expect will be available for sale in the next five to seven years.

Net sales were $28.2 million and $24.2 million for 2017 and 2016, respectively. The increase in net sales was primarily due to an increase in timber sales.

Operating profit increased to $10.0 million for 2017 from $8.1 million for 2016. This increase was due to the same factor that impacted the segment's net sales, as described above.

EBITDA was $14.6 million and $11.9 million for 2017 and 2016, respectively. This increase was due to the same factors that impacted the segment’s operating profit. Depreciation, depletion and amortization expense was $4.6 million for 2017 compared with $3.8 million for 2016.

Other Income Statement Changes

Interest Expense, net

Interest expense, net was $60.1 million and $75.4 million for 2017 and 2016, respectively. This decrease was primarily due to the repayment of Senior Notes due February 2017 with funds borrowed at a lower interest rate under our 2017 Credit Agreement along with lower year-over-year debt balances.

Other Expense, net

Other expense, net was $12.0 million and $9.0 million for 2017 and 2016, respectively.

U.S. and Non-U.S. Income before Income Tax Expense

Refer to the following tables for details of the U.S. and non-U.S. income before income taxes and U.S. and non-U.S. income before income taxes after eliminating the impact of non-cash asset impairment charges, non-cash pension settlement charges, restructuring charges, and (gains) losses on sales of businesses.

Table of Contents

Summary

	Year ended October 31, 2017	2016
Non-U.S. % of Consolidated Net Sales	51.1 %	51.5 %
U.S. % of Consolidated Net Sales	48.9 %	48.5 %
	100.0 %	100.0 %
Non-U.S. % of Consolidated I.B.I.T.	42.6 %	35.3 %
U.S. % of Consolidated I.B.I.T.	57.4 %	64.7 %
	100.0 %	100.0 %
Non-U.S. % of Consolidated I.B.I.T. before Special Items	43.5 %	50.0 %
U.S. % of Consolidated I.B.I.T. before Special Items	56.5 %	50.0 %
	100.0 %	100.0 %

Non-U.S. I.B.I.T. Reconciliation

	Year ended October 31, 2017	2016
Non-U.S. I.B.I.T.	$85.2	$49.9
Non-cash asset impairment charges	2.2	29.9
Goodwill impairment charges	13.0	—
Non-cash pension settlement charge	1.2	—
Restructuring charges	10.8	20.5
Loss on sale of businesses	1.7	16.6
Total Non-U.S. Special Items	28.9	67.0
Non-U.S. I.B.I.T. before Special Items	$114.1	$116.9

U.S. I.B.I.T. Reconciliation

	Year ended October 31, 2017	2016
U.S. I.B.I.T.	$115.1	$91.3
Non-cash asset impairment charges	5.6	21.5
Non-cash pension settlement charge	25.9	—
Restructuring charges	1.9	6.4
(Gain) on sale of businesses	—	(2.1)
Total U.S. Special Items	33.4	25.8
U.S. I.B.I.T. before Special Items	$148.5	$117.1

*Income Before Income Tax expense = I.B.I.T.

Income Tax Expense

We had operations in over 40 countries during 2017. Operations outside of the United States are subject to additional risks that may not exist, or be as significant, within the United States. Our global operations in these countries results in the need to address complex and varying tax systems on a constantly changing basis.

Preparation of our financial statements requires the use of estimates and assumptions that affect the reported amounts of our assets and liabilities and revenues and expenses as of the balance sheet date. The multitude of tax jurisdictions, with varying laws, creates a level of uncertainty, and significant judgment is required when addressing the complex tax systems. Our effective tax rate and the amount of taxes we pay are dependent upon various factors, including the following: the laws and regulations of the tax jurisdictions in which income is earned; the recognition of permanent book/tax basis differences realized through the non-deductible write-off of goodwill allocated to divestitures and impairment of other intangibles; the ability to realize deferred tax assets at

Table of Contents

certain international subsidiaries; negotiation and dispute resolution with taxing authorities in the U.S. and international jurisdictions; and changes in tax laws, regulations, administrative rulings and common law.

The provision for income taxes is computed using the asset and liability method, under which deferred tax assets and liabilities are recognized currently for the expected future tax consequences of temporary differences between the financial reporting and the tax bases of assets and liabilities. This method includes an estimate of the future realization of tax losses. Deferred tax assets and liabilities are measured using the currently enacted tax rates that apply to taxable income in effect for the years in which those tax assets are expected to be realized or settled.

In fiscal year 2017, tax expense was $67.2 million on $200.3 million of pretax income, as compared to the fiscal year 2016, where tax expense was $66.5 million on $141.2 million of pretax income. Tax expense in 2017 increased by $13.8 million due to the mix of income and losses among various jurisdictions, including changes in losses and income from jurisdictions for which a valuation allowance has been provided, as well as the timing of recognition of the related tax expense under Accounting Standards Codification ("ASC") 740-270. There was also an increase in tax expense of $7.0 million for unremitted foreign earnings under ASC 740-30 (formally APB23). However, these tax increases were largely offset by decreases in tax expense of $10.4 million related to changes in the measurement of uncertain tax positions netted against releases resulting from audit settlements and expiration of the statute of limitations in several jurisdictions; withholding tax expense decreased by $2.9 million; and other taxes decreased by $6.8 million. The net difference in tax expense was an increase of $0.7 million.

During 2017, the valuation allowance account increased by $40.3 million, which consisted of the following: $1.3 million of decreases due to currency translation; $1.2 million of net increases in new valuation allowances; and $40.4 million of net incremental increases against net operating losses and other net deferred tax assets. The impact of the increase in valuation allowances was not material to our 2017 effective tax rate.

During 2016, the valuation allowance account increased by $2.6 million, which consisted of the following: $0.8 million of increases due to currency translation; $2.2 million of net increases in new valuation allowances; and $0.4 million of net incremental decreases against net operating losses and other net deferred tax assets. The impact of the decrease in valuation allowances was not material to our 2016 effective tax rate.

We analyze potential income tax liabilities related to uncertain tax positions in the United States and international jurisdictions. The analysis of potential income tax liabilities results in estimates of income tax liabilities recognized for uncertain tax positions following the guidance of ASC 740, “Income Taxes.” The estimation of potential tax liabilities related to uncertain tax positions involves significant judgment in evaluating the impact of uncertainties in the application of ASC 740 and other complex tax laws. We periodically analyze both potential income tax liabilities and existing liabilities for uncertain tax positions resulting in both new reserves and adjustments to existing reserves in light of changing facts and circumstances. This includes the release of existing liabilities for uncertain tax positions based on the expiration of statutes of limitation. During 2017, recognition of uncertain tax positions decreased primarily due to audit and statute of limitations releases attributable to non-US jurisdictions; whereas in 2016, the uncertain tax positions increased primarily due to new positions largely attributable to non-U.S. jurisdictions.

The ultimate resolution of potential income tax liabilities may result in a payment that is materially different from our current estimates. If our estimates recognized under ASC 740 prove to be different than what is ultimately resolved, such resolution could have a material impact on our financial condition and results of operations. While predicting the final outcome or the timing of the resolution of any particular tax matter is subject to various risks and uncertainties, we believe that our tax accounts related to uncertain tax positions are appropriately stated.

Prior to the first quarter of 2017, we asserted under ASC 740-30, formerly Accounting Principles Board opinion 23 ("APB 23"), that unremitted earnings of our subsidiaries directly or indirectly owned by Greif International Holding BV (“GIH”) were permanently reinvested. As a result of our debt re-financing concluded in November 2016, we reassessed our unremitted earnings position in the first quarter of 2017. We concluded that the unremitted earnings of subsidiaries owned directly or indirectly by GIH may be used to fully fund the repayment of up to €187.0 million ($203.9 million as of April 30, 2017) of third-party debt of GIH’s non-U.S. parent company, Greif Luxembourg Holding Sarl. During 2017, €187.0 million ($203.9 million as of April 30, 2017) of the debt was repaid, utilizing, in part, $104.0 million of pre-2017 earnings distributed during 2017. As a result, deferred tax liabilities of $2.0 million related to withholding taxes was recorded through the fourth quarter of 2017 (initially measured at $3.6 million) with respect to the $104.0 million of pre-2017 unremitted earnings, which represents the total tax liability less current year dividends and releases for all of the pre-2017 unremitted earnings expected to be remitted.

Beginning in 2017, deferred tax liabilities have been recorded on current year earnings not required to be immediately reinvested by the respective subsidiaries of our foreign holding companies (including holding companies such as GIH, Greif Luxembourg Holding Sarl, and Greif UK International Holding Ltd).

Table of Contents

Other than the foregoing change in assertion with respect to current year earnings, we have not recognized U.S. deferred income taxes on a cumulative total of $646.4 million of undistributed earnings from certain of our non-U.S. subsidiaries. Our intention is to reinvest these earnings indefinitely outside the U.S. or to repatriate the earnings only when it is tax-efficient to do so. Therefore, no U.S. tax provision has been accrued related to the repatriation of these earnings. Furthermore, given the uncertainty as to whether we will decide in the future to repatriate earnings and the wide variation in results depending on the various alternatives we could deploy should we decide to do so, it is difficult to make a reliable estimate as to the amount of any additional taxes which may be payable on such undistributed earnings.

Refer to Note 11 to the Notes to Consolidated Financial Statements in Item 8 of this Form 10-K for further discussion.

Equity Earnings of Unconsolidated Affiliates, net of Tax

We recorded $2.0 million and $0.8 million of equity earnings of unconsolidated affiliates, net of tax, for 2017 and 2016, respectively.

Net Income Attributable to Noncontrolling Interests

Net income attributable to noncontrolling interests represents the portion of earnings from the operations of our non-wholly owned, consolidated subsidiaries that belongs to the noncontrolling interests in those subsidiaries. Net income attributable to noncontrolling interests was $16.5 million and $0.6 million for 2017 and 2016, respectively. The increase in net income attributable to noncontrolling interests was due primarily to increased earnings of the Flexible Packaging JV.

Net Income Attributable to Greif, Inc.

Based on the factors noted above, net income attributable to Greif, Inc. increased $43.7 million to $118.6 million in 2017 from $74.9 million in 2016.

Year 2016 Compared to Year 2015

Net Sales

Net sales were $3,323.6 million for 2016 compared with $3,616.7 million for 2015. The 8.1 percent decrease in net sales was primarily due to the negative impact of foreign currency translation of 5.8 percent, primarily attributable to the revaluation of our Venezuelan operations in 2015, a decrease in volumes, largely attributable to divestitures completed during 2015 and 2016, partially offset by a slight increase in prices and product mix due to the impact of strategic volume and pricing decisions.

Gross Profit

Gross profit was $684.9 million for 2016 compared with $669.8 million for 2015. The improvement in gross profit was primarily due to divestitures of low margin businesses and the impact of strategic volume and pricing decisions noted in Net Sales above. Specific discussion of the changes in gross profit for each business segment are described in the "Segment Review." Gross profit margin was 20.6 percent for 2016 compared to 18.5 percent for 2015.

Selling, General and Administrative Expenses

Selling, general and administrative ("SG&A") expenses decreased 8.8 percent to $376.8 million for 2016 from $413.2 million for 2015. This decrease was primarily due to divestitures of $6.9 million and the impact of foreign currency translation of $33.8 million, partially offset by an increase in incentive compensation due to improved business performance. SG&A expenses were 11.3 percent of net sales for 2016 compared with 11.4 percent of net sales for 2015.

Restructuring Charges

Restructuring charges were $26.9 million for 2016 compared with $40.0 million for 2015. Charges for both periods were primarily related to employee separation costs, relocation fees and professional fees incurred for services specifically associated with employee separation and relocation. Restructuring activities and associated costs during 2016 are anticipated to deliver annual run-rate savings of approximately $18.2 million with payback periods ranging from one to three years among the plans. We anticipate completion of the current restructuring programs by early 2018. Refer to Note 6 – Restructuring Charges, within the Notes to Consolidated Financial Statements in Item 8 of this Form 10-K for additional information.

Impairment Charges

Table of Contents

Non-cash asset impairment charges were $51.4 million for 2016 compared with $45.9 million for 2015. In 2016, these charges were primarily related to plant closures and sales of businesses within the Rigid Industrial Packaging & Services and Flexible Products & Services segments and information technology software identified as obsolete. Charges in 2015 related to Venezuelan property, plants, and equipment, information technology software identified as obsolete and plant closures within the Rigid Industrial Packaging & Services segment. Refer to Note 9 – Financial Instruments and Fair Value Measurements, within the Notes to Consolidated Financial Statements in Item 8 of this Form 10-K for additional information.

Timberland Gains

There were no gains on timberland sales for 2016 compared with $24.3 million for 2015.

Gain on Disposal of Properties, Plants and Equipment, net

The gain on disposal of properties, plants, and equipment, net was $10.3 million and $7.0 million for 2016 and 2015, respectively. Refer to Note 4 to the Consolidated Financial Statements included in Item 8 of this Form 10-K for additional information.

Loss on Disposal of Businesses, net

The loss on disposal of businesses was $14.5 million and $9.2 million for 2016 and 2015, respectively. See Note 2 to the Consolidated Financial Statements included in Item 8 of this Form 10-K for additional information.

Operating Profit

Operating profit was $225.6 million for 2016 compared with $192.8 million for 2015. The $32.8 million increase consisted of increases of $57.5 million and $21.1 million in the Rigid Industrial Packaging & Services and the Flexible Products & Services segments, respectively, partially offset by decreases of $20.2 million and $25.6 million in the Paper Packaging & Services and Land Management segments, respectively. The primary factors that contributed to the $32.8 million increase, when compared to 2015, were improvements in gross profit margin, lower SG&A expenses, lower restructuring charges of $13.1 million, partially offset by lower timberland gains of $24.3 million, all described above.

EBITDA

EBITDA was $345.1 million and $325.0 million for 2016 and 2015, respectively. The increase in EBITDA was primarily due to the same factors impacting operating profit described above. Depreciation, depletion and amortization expense was $127.7 million for 2016 compared with $134.6 million for 2015. The decrease in depreciation, depletion and amortization expense was primarily due to foreign currency translation and the impact of divestitures, partially offset by an increase in the Paper Packaging & Services segment, that was primarily due to the completion of the Riverville mill modernization project completed in the second quarter of 2015.

Segment Review

Rigid Industrial Packaging & Services

Net sales decreased 10.1 percent to $2,324.2 million in 2016 from $2,586.4 million in 2015. The decrease in net sales was primarily due to the negative impact of foreign currency translation of 7.6 percent, primarily attributable to the remeasurement of our Venezuelan operations in August of 2015, and a net volume decrease, primarily due to the impact of divestitures, partially offset by the impact of increases in prices and product mix due to the impact of strategic value and pricing decisions.

Gross profit was $489.4 million for 2016 compared with $463.4 million for 2015. The $26.0 million increase in gross profit was primarily due to the positive impact of strategic volume and pricing actions, cost containment efforts, decreases in raw material costs, and a $6.0 million net charge in 2015 related to the devaluation of inventory through costs of products sold in the Venezuelan operation of $9.3 million, net of operational gross margin contribution of the Venezuelan operation of $3.3 million. Gross profit margin increased to 21.1 percent from 17.9 percent in 2015.

Operating profit was $143.9 million for 2016 compared with $86.4 million for 2015. The $57.5 million increase was primarily attributable to the same factors impacting gross profit, a $25.4 million reduction in SG&A expenses and a reduction in restructuring costs of $10.6 million, partially offset by an increase of $4.6 million in loss on sales of properties, plants and equipment and businesses, net.

EBITDA was $223.8 million for 2016 compared with $179.5 million for 2015. The $44.3 million increase was due to the same factors that impacted the segment's operating profit, as described above. Depreciation, depletion and amortization expense was

32

Table of Contents

$84.6 million for 2016 compared with $94.0 million for 2015. The reduction in depreciation, depletion and amortization expense was primarily due to impact of divestitures.

Paper Packaging & Services

Net sales increased 1.6 percent to $687.1 million for 2016 compared with $676.1 million for 2015. Net volumes increased 6.1 percent from 2015 to 2016, primarily related to increased containerboard output largely due to the Riverville mill modernization project completed in the second quarter of 2015, and the addition of two product lines in the corrugator business. These increases were partially offset by selling price decreases of 4.6 percent, primarily due to a reduction in published containerboard index prices impacting 2016.

Gross profit was $144.5 million for 2016 compared with $163.5 million for 2015.Gross profit margin was 21.0 percent and 24.2 percent for 2016 and 2015, respectively. This decrease was due to an increase in input costs, primarily old corrugated container costs, during 2016 compared to 2015 and the decrease in selling prices described above.

Operating profit was $89.1 million for 2016 compared with $109.3 million for 2015. The decrease was primarily due to the same factors impacting net sales and gross profit, as described above.

EBITDA was $120.7 million for 2016 compared with $138.4 million for 2015.The decrease in EBITDA was primarily due to the same factors impacting net sales and gross profit, as described above. Depreciation, depletion and amortization expense was $31.6 million and $28.7 million for 2016 and 2015, respectively. The increase in depreciation, depletion and amortization was primarily due to the completion of the Riverville mill modernization project in the second quarter of 2015.

Flexible Products & Services

Net sales decreased 10.7 percent to $288.1 million for 2016 compared with $322.6 million for 2015. This decrease was attributable to volume decreases of 6.7 percent and the negative impact of foreign currency translation of 3.5 percent for 2016 compared with 2015.

Gross profit was $42.0 million for 2016 compared with $33.8 million for 2015. This increase was mainly due to improved margins as a result of strategic volume and pricing decisions and reductions in fixed and variable productions costs, partially offset by $1.2 million in costs associated with the move to an in-house labor model in Turkey. Gross profit margin increased to 14.6 percent for 2016 from 10.5 percent for 2015.

Operating loss was $15.5 million for 2016 compared with an operating loss of $36.6 million for 2015. This improvement in operating loss was primarily due to the same factors impacting the segment's gross profit, as well as SG&A cost savings of $12.3 million realized as part of our transformation efforts.

EBITDA was negative $11.3 million for 2016 compared with negative $29.9 million for 2015. This improvement was due to the same factors that impacted the segment’s operating loss, as described above. Depreciation, depletion and amortization expense was $7.7 million for 2016 compared with $8.6 million for 2015, respectively.

Land Management

Net sales were $24.2 million and $31.6 million for 2016 and 2015, respectively. The decrease in net sales was primarily due to the sale of our remaining 5,200 acres of development properties in Canada during the fourth quarter of 2015.

Operating profit decreased to $8.1 million for 2016 from $33.7 million for 2015. This decrease was due to no timberland gains in 2016, compared with $24.3 million of timberland gains in 2015 and lower net sales in 2016.

EBITDA was $11.9 million and $37.0 million for 2016 and 2015, respectively. This decrease was due to the same factors that impacted the segment’s operating profit. Depreciation, depletion and amortization expense was $3.8 million for 2016 compared with $3.3 million for 2015.

As of October 31, 2016, we estimated that there were 20,803 acres in the United States of special use property, which we expect will be available for sale in the next five to seven years.

Other Income Statement Changes

Interest Expense, net

Table of Contents

Interest expense, net was $75.4 million and $74.8 million for 2016 and 2015, respectively. This increase was a result of mandatorily redeemable noncontrolling interest adjustments to redemption value recorded in 2016.

Other Expense, net

Other expense, net was $9.0 million and $3.2 million for 2016 and 2015, respectively. The increase in other expense was due to a net gain of $4.9 million related to the remeasurement of our Venezuelan monetary assets and liabilities during 2015.

U.S. and Non-U.S. Income before Income Tax Expense

Income before income tax expense derived from non-U.S. operations as a percentage of consolidated income before income tax expense decreased from 39.0 percent to 35.3 percent for the years ended October 31, 2015 and 2016, respectively. After eliminating the impact of timberland gains, restructuring charges, noncash asset impairment charges, acquisition-related costs, gains and losses on the sales of businesses, remeasurement of our Venezuelan monetary assets and liabilities and the Venezuelan non-monetary inventory adjustment to net realizable value, income before income tax expense derived from non-U.S. operations as a percentage of consolidated income before income tax expense decreased from 53.9 percent to 50.0 percent for the years ended October 31, 2015 and 2016, respectively. Refer to the following tables for details of the U.S and non-U.S income before income taxes results for the periods presented.

Table of Contents

Summary

	Year ended October 31, 2016	2015
Non-U.S. % of Consolidated Net Sales	51.5 %	53.3 %
U.S. % of Consolidated Net Sales	48.5 %	46.7 %
	100.0%	100.0%
Non-U.S. % of Consolidated I.B.I.T.	35.3 %	39.0 %
U.S. % of Consolidated I.B.I.T.	64.7 %	61.0 %
	100.0%	100.0%
Non-U.S. % of Consolidated I.B.I.T. before Special Items	50.0 %	53.9 %
U.S. % of Consolidated I.B.I.T. before Special Items	50.0 %	46.1 %
	100.0%	100.0%

Non-U.S. I.B.I.T. Reconciliation

	Year ended October 31, 2016	2015
Non-U.S. I.B.I.T.	49.9	44.8
Non-cash asset impairment charges	29.9	35.3
Restructuring charges	20.5	27.3
(Gain) Loss on sale of businesses	16.6	(9.4)
Impact of Venezuela devaluation on cost of goods sold	—	9.3
Impact of Venezuela devaluation on other income/expense	—	(4.9)
Total Non-U.S. Special Items	67.0	57.6
Non-U.S. I.B.I.T. before Special Items	116.9	102.4

U.S. I.B.I.T. Reconciliation

	Year ended October 31, 2016	2015
U.S. I.B.I.T.	91.3	70.0
Non-cash asset impairment charges	21.5	10.6
Timberland gains	—	(24.3)
Restructuring charges	6.4	12.7
(Gain) Loss on sale of businesses	(2.1)	18.6
Total U.S. Special Items	25.8	17.6
U.S. I.B.I.T. before Special Items	117.1	87.6

*Income Before Income Tax expense = I.B.I.T.

Income Tax Expense

We had operations in over 45 countries during 2016. Operations outside of the United States are subject to additional risks that may not exist, or be as significant, within the United States. Our global operations in these countries results in the need to address complex and varying tax systems on a constantly changing basis.

Preparation of our financial statements requires the use of estimates and assumptions that affect the reported amounts of our assets and liabilities and revenues and expenses as of the balance sheet date. The multitude of tax jurisdictions, with varying laws, creates a level of uncertainty, and significant judgment is required when addressing the complex tax systems. Our effective tax rate and the amount of taxes we pay are dependent upon various factors, including the following: the laws and regulations of the tax jurisdictions in which income is earned; the recognition of permanent book/tax basis differences realized through the non-deductible write-off of goodwill allocated to divestitures and impairment of other intangibles; the ability to realize deferred tax assets at

35

Table of Contents

certain international subsidiaries; negotiation and dispute resolution with taxing authorities in the U.S. and international jurisdictions; and changes in tax laws, regulations, administrative rulings and common law.

The provision for income taxes is computed using the asset and liability method, under which deferred tax assets and liabilities are recognized currently for the expected future tax consequences of temporary differences between the financial reporting and the tax bases of assets and liabilities. This method includes an estimate of the future realization of tax losses. Deferred tax assets and liabilities are measured using the currently enacted tax rates that apply to taxable income in effect for the years in which those tax assets are expected to be realized or settled.

The effective tax rate for 2016 was 47.1 percent compared to 42.2 percent for 2015. The primary items that increased the 2015 effective tax rate from the federal statutory rate were the exchange rate change impacting the balance sheet for our Venezuela business, unrecognized tax benefits, net increase in valuation allowances, withholding taxes and the non-deductible write-off of goodwill allocated to divestitures and impairment of other intangibles. Cumulatively, these items impacted the 2015 effective tax rate by approximately 14.0 percent.

The primary items which increased our effective income tax rate from the federal statutory rate in 2016 were non-deductible expenses, such as the write-off of goodwill allocated to divestitures and impairments, withholding taxes, unrecognized tax benefits, state and local taxes, net of federal tax benefit, the net impact of changes in valuation allowances due to changes in circumstances in several legal entities and other tax items. Cumulatively, these items impacted our 2016 effective income tax rate by approximately 28.0 percent. This increase was offset by the impact of foreign tax rates and permanent book-tax differences, which decreased our effective income tax rate by approximately 15.9 percent in 2016. In both 2016 and 2015, the items that materially increased our effective income tax rate from the federal statutory rate were related to non-U.S. operations.

During 2016, the valuation allowance account increased by $2.6 million, which consisted of the following: $0.8 million of increases due to currency translation; $2.2 million of net increases in new valuation allowances; and $0.4 million of net incremental decreases against net operating losses and other net deferred tax assets. The impact of the increase in valuation allowances was not material to our 2016 effective tax rate.

During 2015, the valuation allowance account decreased by $19.0 million, which consisted of the following: $17.9 million of decreases due to currency translation; $3.4 million of net increases in new valuation allowances; and $4.5 million of net incremental decreases against net operating losses and other net deferred tax assets. The impact of the decrease in valuation allowances was not material to our 2015 effective tax rate.

We analyze potential income tax liabilities related to uncertain tax positions in the United States and international jurisdictions. The analysis of potential income tax liabilities results in estimates of income tax liabilities recognized for uncertain tax positions following the guidance of Accounting Standards Codification (“ASC”) 740, “Income Taxes.” The estimation of potential tax liabilities related to uncertain tax positions involves significant judgment in evaluating the impact of uncertainties in the application of ASC 740 and other complex tax laws. We periodically analyze both potential income tax liabilities and existing liabilities for uncertain tax positions resulting in both new reserves and adjustments to existing reserves in light of changing facts and circumstances. This includes the release of existing liabilities for uncertain tax positions based on the expiration of statutes of limitation. During 2016 and 2015, recognition of uncertain tax positions increased due to new positions primarily attributable to non-U.S. jurisdictions. The ultimate resolution of potential income tax liabilities may result in a payment that is materially different from our current estimates of income tax liabilities recognized as liabilities for uncertain tax positions. If our estimates recognized under the standards of ASC 740 prove to be different than what is ultimately determined, there is inherent risk that such resolution could have a material impact on our financial condition and results of operations.

While it is often difficult to predict the final outcome or the timing of the resolution of any particular tax matter, we believe that our tax accounts related to uncertain tax positions are appropriately stated.

As of October 31, 2016, we had not recognized U.S. deferred income taxes on a cumulative total of $557.0 million of undistributed earnings from certain non-U.S. subsidiaries. Our intention is to reinvest these earnings indefinitely outside the U.S., or to repatriate the earnings only when it is tax-efficient to do so. Therefore, no U.S. tax provision has been accrued related to the repatriation of these earnings. It is not practicable to estimate the amount of any additional taxes which may be payable on the undistributed earnings given the various alternatives we could employ should we decide to repatriate these earnings in the future.

Refer to Note 11 to the Notes to Consolidated Financial Statements in Item 8 of this Form 10-K for further discussion.

Table of Contents

Equity Earnings of Unconsolidated Affiliates, net of Tax

We recorded $0.8 million of equity earnings of unconsolidated affiliates, net of tax, for each of 2016 and 2015.

Net (Income) Loss Attributable to Noncontrolling Interests

Net (income) loss attributable to noncontrolling interests represents the portion of earnings or losses from the operations of our non-wholly owned, consolidated subsidiaries that belongs to the noncontrolling interests in those subsidiaries. Net (income) loss attributable to noncontrolling interests was $(0.6) million and $4.7 million for 2016 and 2015, respectively. The decrease in net loss attributable to noncontrolling interests was due to the overall decrease in the net operating loss of the Flexible Packaging JV in 2016 compared to 2015.

Net Income Attributable to Greif, Inc.

Based on the factors noted above, net income attributable to Greif, Inc. increased $3.0 million to $74.9 million in 2016 from $71.9 million in 2015.

OTHER COMPREHENSIVE INCOME CHANGES

Foreign currency translation

In accordance with ASC 830, “Foreign Currency Matters,” the assets and liabilities denominated in a foreign currency are translated into United States Dollars at the rate of exchange existing at the end of the current period, and revenues and expenses are translated at average exchange rates over the month in which they are incurred. The cumulative translation adjustments, which represent the effects of translating assets, liabilities and operations of our international subsidiaries, are presented in the consolidated statements of changes in equity in accumulated other comprehensive loss. Other comprehensive income resulting from foreign currency translation for 2017 was $37.6 million. Other comprehensive loss resulting from foreign currency translation for 2016 was $17.6 million.

Minimum pension liability, net

Change in minimum pension liability, net of tax for 2017 and 2016 was $14.2 million and $(7.4) million, respectively. The comprehensive income in 2017, resulting from the change in minimum pension liability, net was primarily due to settlements of $27.8 million that occurred during 2017 as compared to none in 2016.

BALANCE SHEET CHANGES

Working capital changes

The $47.8 million increase in accounts receivable to $447.0 million as of October 31, 2017 from $399.2 million as of October 31, 2016 was primarily due to increased net sales and timing of collections.

The $2.1 million increase in inventories to $279.5 million as of October 31, 2017 from $277.4 million as of October 31, 2016 was primarily due to increased raw material prices.

The $27.2 million increase in accounts payable to $399.2 million as of October 31, 2017 from $372.0 million as of October 31, 2016 was primarily due to increased raw material prices and the timing of payments.

Other balance sheet changes

The $12.6 million decrease in other intangible assets to $98.0 million as of October 31, 2017 from $110.6 million as of October 31, 2016 was primarily due to amortization expense of $13.5 million recognized during 2017 partially offset by foreign currency translation.

The $16.5 million increase in properties, plants and equipment, net to $1,188.4 million as of October 31, 2017 from $1,171.9 million as of October 31, 2016 was primarily due to capital expenditures partially offset by depreciation, non-cash asset impairments, and divestitures completed during the twelve months ended October 31, 2017.

The $36.8 million decrease in long-term debt to $937.8 million as of October 31, 2017 from $974.6 million as of October 31, 2016 was attributable to repayments resulting from improved operating cash flows year over year.

Table of Contents

The $20.9 million decrease in foreign currency translation loss to $249.3 million as of October 31, 2017 from a loss of $270.2 million as of October 31, 2016 was primarily due to changes in several key foreign currencies compared with the U.S. dollar in addition to the recognition of accumulated foreign currency translation upon the disposal of foreign entities.

The $26.1 million increase in noncontrolling interest to $36.6 million as of October 31, 2017 from $10.5 million as of October 31, 2016 was primarily due to increased earnings of consolidated joint ventures and foreign currency translation partially offset by deconsolidation of nonstrategic businesses.

LIQUIDITY AND CAPITAL RESOURCES

Our primary sources of liquidity are operating cash flows and borrowings under our senior secured credit facility and the senior notes we have issued and, to a lesser extent, proceeds from our trade accounts receivable credit facility and proceeds from the sale of our non-United States accounts receivable. We use these sources to fund our working capital needs, capital expenditures, cash dividends, common stock repurchases and acquisitions. We anticipate continuing to fund these items in a like manner. We currently expect that operating cash flows, borrowings under our senior secured credit facility, proceeds from our U.S. trade accounts receivable credit facility and proceeds from the sale of our non-United States accounts receivable will be sufficient to fund our anticipated working capital, capital expenditures, cash dividends, debt repayment, potential acquisitions of businesses and other liquidity needs for at least 12 months. However, if funds held outside the U.S. are needed for operations in the U.S., we would be required to accrue and pay U.S. taxes to repatriate them. For those international earnings considered to be permanently reinvested, we currently have no plans or intentions to repatriate such funds for U.S. operations.

Capital Expenditures

During 2017, 2016 and 2015, we invested $100.1 million (excluding $9.5 million for purchases of and investments in timber properties), $101.1 million (excluding $7.1 million for purchases of and investments in timber properties), and $141.3 million (excluding $38.4 million for purchases of and investments in timber properties) in capital expenditures, respectively.

We anticipate future capital expenditures, excluding the potential purchases of and investments in timber properties, ranging from $100.0 million to $120.0 million during the year ending October 31, 2018. These expenditures will replace and improve existing equipment and fund new facilities.

Sale of Non-United States Accounts Receivable

On April 27, 2012, Cooperage Receivables Finance B.V. (the “Main SPV”) and Greif Coordination Center BVBA, our indirect wholly owned subsidiary (“Seller”), entered into the Nieuw Amsterdam Receivables Purchase Agreement (the “European RPA”) with affiliates of a major international bank (the “Purchasing Bank Affiliates”). On April 18, 2017, the Main SPV and Seller amended and extended the term of the existing European RPA. Under the European RPA, as amended, the maximum amount of receivables that may be sold and outstanding under the European RPA at any time is €100 million ($116.1 million as of October 31, 2017). Under the terms of the European RPA, we have the ability to loan excess cash back to the Purchasing Bank Affiliates in the form of a subordinated loan receivable. As of October 31, 2015, we had loaned $44.2 million of excess cash back to the Purchasing Bank Affiliates, which was included in prepaid expenses and other current assets. During the first quarter of 2016, we collected $44.2 million that had been so loaned to the Purchasing Bank Affiliates.

Under the terms of the European RPA, we have agreed to sell trade receivables meeting certain eligibility requirements that the Seller had purchased from other of our indirect wholly-owned subsidiaries under a factoring agreement. The structure of the transactions provide for a legal true sale, on a revolving basis, of the receivables transferred from our various subsidiaries to the respective banks and their affiliates. The purchaser funds an initial purchase price of a certain percentage of eligible receivables based on a formula, with the initial purchase price approximating 75 percent to 90 percent of eligible receivables. The remaining deferred purchase price is settled upon collection of the receivables. At the balance sheet reporting dates, we remove from accounts receivable the amount of proceeds received from the initial purchase price since they meet the applicable criteria of ASC 860, “Transfers and Servicing,” and we continue to recognize the deferred purchase price in prepaid expenses and other current assets or other current liabilities. The receivables are sold on a non-recourse basis with the total funds in the servicing collection accounts pledged to the banks between settlement dates.

In October 2007, Greif Singapore Pte. Ltd., our indirect wholly-owned subsidiary, entered into the Singapore Receivable Purchase Agreement (the “Singapore RPA”) with a major international bank. The maximum amount of aggregate receivables that may be financed under the Singapore RPA is 15.0 million Singapore Dollars ($11.0 million as of October 31, 2017). Under the terms of the Singapore RPA, we have agreed to sell trade receivables in exchange for an initial purchase price of approximately 90 percent of the eligible receivables. The remaining deferred purchase price is settled upon collection of the receivables.

Table of Contents

Refer to Note 3 to the Consolidated Financial Statements included in Item 8 of this Form 10-K for additional information regarding these various RPAs.

Acquisitions and Divestitures

During 2017, we completed two divestitures of businesses in the Rigid Industrial Packaging & Services segment, completed no acquisitions, deconsolidated two nonstrategic businesses (one in the Flexible Products & Services segment and one in the Rigid Industrial Packaging & Services segment) and liquidated two non-U.S. nonstrategic businesses in the Rigid Industrial Packaging & Services segment. The loss on disposal of businesses was $1.7 million for the year ended October 31, 2017. Proceeds from divestitures were $5.1 million for the year ended October 31, 2017. Proceeds from divestitures that were completed in fiscal year 2015 and collected during the year ended October 31, 2017 were $0.8 million. We have $4.3 million of notes receivable recorded from the sale of businesses, ranging in remaining terms of up to fourteen months.

Refer to Note 2 to the Consolidated Financial Statements included in Item 8 of this Form 10-K for disclosures regarding our acquisitions and divestitures.

Borrowing Arrangements

Long-term debt is summarized as follows:

(in millions)	October 31, 2017	October 31, 2016
2017 Credit Agreement	$ 323.8	$ —
Prior Credit Agreement	—	201.2
Senior Notes due 2017	—	300.1
Senior Notes due 2019	248.0	247.0
Senior Notes due 2021	230.9	216.6
Receivables Facility	150.0	—
Other debt	6.5	9.7
	959.2	974.6
Less current portion	15.0	—
Less deferred financing costs	6.4	—
Long-term debt	$ 937.8	$ 974.6

2017 Credit Agreement

On November 3, 2016, we and certain of our international subsidiaries entered into a new senior secured credit agreement (the “2017 Credit Agreement”) with a syndicate of financial institutions. The 2017 Credit Agreement replaced in its entirety the $1.0 billion senior secured credit agreement we entered into on December 19, 2012, with two of our international subsidiaries ("Prior Credit Agreement") and with a syndicate of financial institutions. The total available borrowing under the 2017 Credit Agreement was $753.1 million as of October 31, 2017, which has been reduced by $11.9 million for outstanding letters of credit, all of which was then available without violating covenants.

The 2017 Credit Agreement provides for an $800.0 million revolving multicurrency credit facility expiring November 3, 2021, and a $300.0 million term loan, with quarterly principal installments that commenced on April 30, 2017, through maturity on November 3, 2021, both with an option to add an aggregate of $550.0 million to the facilities with the agreement of the lenders. We used the proceeds of the term loan on February 1, 2017, to repay the principal of our $300.0 million 6.75% Senior Notes that matured on that date. The revolving credit facility is available to fund ongoing working capital and capital expenditure needs, for general corporate purposes, and to finance acquisitions. Interest is based on either a Eurodollar rate or a base rate that resets periodically plus a calculated margin amount. On November 3, 2016, a total of approximately $208.0 million was used to pay the obligations outstanding under the Prior Credit Agreement in full and certain costs and expenses incurred in connection with the 2017 Credit Agreement. The financing costs associated with the 2017 Credit Agreement totaled $5.6 million as of October 31, 2017, and are recorded as a direct deduction from the long-term debt liability.

The 2017 Credit Agreement contains certain covenants, which include financial covenants that require us to maintain a certain leverage ratio and an interest coverage ratio. The leverage ratio generally requires that at the end of any fiscal quarter we will not permit the ratio of (a) our total consolidated indebtedness, to (b) our net income plus depreciation, depletion, and amortization, interest expense (including capitalized interest), and income taxes, minus certain extraordinary gains and non-recurring gains (or plus certain extraordinary losses and non-recurring losses) and plus or minus certain other items for the preceding twelve months ("adjusted EBITDA") to be greater than 4.00 to 1.00 (or 3.75 to 1.00, during any collateral release period). The interest coverage ratio generally requires that at the end of any fiscal quarter we will not permit the ratio of (a) adjusted EBITDA, to (b) the consolidated interest expense to the extent paid or payable, to be less than 3.00 to 1.00, during the applicable preceding twelve month period. As of October 31, 2017, we were in compliance with these covenants.

The terms of the 2017 Credit Agreement limit our ability to make "restricted payments", which include dividends and purchases, redemptions and acquisitions of our equity interests. The repayment of this facility is secured by a security interest in our personal property and certain of our United States subsidiaries, including equipment and inventory and certain intangible assets, as well as a pledge of the capital stock of substantially all of our United States subsidiaries and will be secured, in part, by the capital stock of the non-U.S. borrowers. However, in the event that we receive and maintain an investment grade rating from either Moody's Investors Service, Inc. or Standard & Poor's Corporation, we may request the release of such collateral. The Payment of outstanding principal under the 2017 Credit Agreement and accrued interest thereon may be accelerated and become immediately due and payable upon our default in payment or other performance obligations or failure to comply with the financial and other covenants in the 2017 Credit Agreement, subject to applicable notice requirements and cure periods as provided in the 2017 Credit Agreement.

As of October 31, 2017, $323.8 million was outstanding under the 2017 Credit Agreement. The current portion of the 2017 Credit Agreement was $15.0 million and the long-term portion was $308.8 million. The weighted average interest rate on the 2017 Credit Agreement was 2.19% for the year ended October 31, 2017. The actual interest rate on the 2017 Credit Agreement was 2.70% as of October 31, 2017.

Refer to Note 8 to the Consolidated Financial Statements included in Item 8 of this Form 10-K for additional disclosures regarding the replaced Prior Credit Agreement and the new 2017 Credit Agreement.

Senior Notes

On February 9, 2007, we issued $300.0 million of 6.75% Senior Notes due February 1, 2017. These Senior Notes were paid in full on February 1, 2017 with $300.0 million of term loan proceeds borrowed under the 2017 Credit Agreement.

We have issued $250.0 million of our 7.75% Senior Notes due August 1, 2019. Proceeds from the issuance of these Senior Notes were principally used for general corporate purposes, including the repayment of amounts outstanding under our revolving multicurrency credit facility under our then-existing credit agreement, without any permanent reduction of the commitments thereunder. These Senior Notes are general unsecured obligations of Greif, Inc. only, provide for semi-annual payments of interest at a fixed rate of 7.75% and do not require any principal payments prior to maturity on August 1, 2019. These Senior Notes are not guaranteed by any of our subsidiaries and thereby are effectively subordinated to all of our subsidiaries' existing and future indebtedness. The Indenture pursuant to which these Senior Notes were issued contains covenants, which, among other things, limit our ability to create liens on our assets to secure debt and to enter into sale and leaseback transactions. These covenants are subject to a number of limitations and exceptions as set forth in the Indenture. As of October 31, 2017, we were in compliance with these covenants.

Our Luxembourg subsidiary has issued €200.0 million of 7.375% Senior Notes due July 15, 2021. These Senior Notes are fully and unconditionally guaranteed on a senior basis by Greif, Inc. A portion of the proceeds from the issuance of these Senior Notes was used to repay non-U.S. borrowings under the 2010 Credit Agreement, without any permanent reduction of the commitments thereunder, with the remaining proceeds available for general corporate purposes, including the financing of acquisitions. These Senior Notes are general unsecured obligations of the Luxembourg subsidiary and Greif, Inc. and provide for semi-annual payments of interest at a fixed rate of 7.375%, and do not require any principal payments prior to maturity on July 15, 2021. The Indenture pursuant to which these Senior Notes were issued contains covenants, which, among other matters, limit our ability to create liens on our assets to secure debt and to enter into sale and leaseback transactions. These covenants are subject to a number of limitations and exceptions as set forth in the Indenture. As of October 31, 2017, we were in compliance with these covenants.

Refer to Note 8 and Note 9 to the Consolidated Financial Statements included in Item 8 of this Form 10-K for additional disclosures regarding the Senior Notes discussed above.

United States Trade Accounts Receivable Credit Facility

On September 28, 2016, certain of our domestic subsidiaries entered into a receivables financing facility (the “Receivables Facility”) with Cooperatieve Rabobank U.A., New York Branch (“Rabobank”), as the agent, managing agent, administrator and committed investor. The financing facility was renewed and amended on September 27, 2017 to extend the facility through September 26, 2018 and to add The Bank of Tokyo-Mitsubishi UFJ Ltd. as a managing agent, an administrator and a committed investor. The

Table of Contents

maximum amount available to be borrowed under the Receivables Facility is $150.0 million, subject to the amounts of eligible receivables.

The Receivables Facility matures in September 2018. In addition, we can terminate the Receivables Facility at any time upon five days prior written notice. The Receivables Facility is secured by certain of our United States trade accounts receivables and bears interest at a variable rate based on the London Interbank Offered Rate (“LIBOR”) or an applicable base rate, plus a margin, or a commercial paper rate plus a margin. Interest is payable on a monthly basis and the principal balance is payable upon termination of the Receivables Facility. The Receivables Facility also contains certain covenants and events of default, which are materially similar to the Credit Agreement covenants. As of October 31, 2017, we were in compliance with these covenants. Proceeds of the Receivables Facility are available for working capital and general corporate purposes. As of October 31, 2017, the outstanding balance under the Receivables Facility was $150 million.

Refer to Note 8 of the Consolidated Financial Statements included in Item 8 of this Form 10-K for disclosures regarding the Receivables Facility.

Other

In addition to the amounts borrowed under the 2017 Credit Agreement and proceeds from the Senior Notes and the Receivables Facility, as of October 31, 2017, we had outstanding other debt of $6.5 million in long-term debt and $14.5 million in short-term borrowings. There are no financial covenants associated with other debt.

As of October 31, 2017, annual maturities, including the current portion of long-term debt under the Company’s various financing arrangements, are $165.0 million in 2018, $268.7 million in 2019, $30.0 million in 2020, $254.0 million in 2021, $241.3 million in 2022 and $0.2 million thereafter.

As of October 31, 2017 and 2016, the Company had deferred financing fees and debt issuance costs of $6.4 million and $4.2 million, respectively. Refer to Note 8 of the Consolidated Financial Statements included in Item 8 of this Form 10-K for disclosures regarding the deferred financing fees.

Financial Instruments

Interest Rate Derivatives

During the first quarter of 2017 we entered into a forward interest rate swap with a notional amount of $300.0 million. As of February 1, 2017, we began to receive variable rate interest payments based upon one month U.S. dollar LIBOR and in return pay a fixed spread, depending on our leverage ratio, over the borrowing cost as defined in the 2017 Credit Agreement. This effectively converted the borrowing rate on $300.0 million of debt under the 2017 Credit Agreement from a variable rate to a fixed rate of 1.194%. This derivative is designated as a cash flow hedge for accounting purposes. Accordingly, the effective portion of any gain or loss on this derivative instrument is reported as a component of other comprehensive income and reclassified into earnings in the same line item associated with the forecasted transaction and in the same period during which the hedged transaction affects earnings. The ineffective portion of any gain or loss on the derivative instrument is recognized into earnings.

Losses reclassified to earnings under this contract were $0.3 million for the year ended October 31, 2017. These losses were recorded within the consolidated statements of income as interest expense, net. As of October 31, 2016 we had no interest rate derivatives, and during the year ended October 31, 2015, interest rate derivatives in place did not have a material impact on our consolidated financial statements.

Refer to Note 18 of the Consolidated Financial Statements included in Item 8 of this Form 10-K for additional disclosures of the gain or loss included in other comprehensive income. The assumptions used in measuring fair value of the interest rate derivative are considered level 2 inputs, which are based upon LIBOR and interest paid based upon a designated fixed rate over the life of the swap agreements.

Foreign Exchange Hedges

We conduct business in international currencies and are subject to risks associated with changing foreign exchange rates. Our objective is to reduce volatility associated with foreign exchange rate changes to allow management to focus its attention on business operations. Accordingly, we enter into various contracts that change in value as foreign exchange rates change to protect the value of certain existing foreign currency assets and liabilities, commitments and anticipated foreign currency revenues and expenses.

41

Table of Contents

As of October 31, 2017, we had outstanding foreign currency forward contracts in the notional amount of $80.1 million ($78.9 million as of October 31, 2016). At October 31, 2017, these derivative instruments were designated and qualified as fair value hedges. Adjustments to fair value for fair value hedges are recognized in earnings, offsetting the impact of the hedged item. The assumptions used in measuring fair value of foreign exchange hedges are considered level 2 inputs, which were based on observable market pricing for similar instruments, principally foreign exchange futures contracts. Realized losses recorded in other expense, net under fair value contracts were $1.8 million, $2.7 million and $6.0 million for the twelve months ended October 31, 2017, 2016 and 2015, respectively.

Contractual Obligations

As of October 31, 2017, we had the following contractual obligations:

		Payments Due by Period			
(in millions)	Total	Less than 1 year	1-3 years	3-5 years	After 5 years
Long-term debt, net of deferred financing costs	$937.8	$148.1	$ 295.6	$ 493.9	$ 0.2
Short-term borrowings	14.5	14.5	—	—	—
Operating and capital lease obligations	223.1	42.8	67.0	45.3	68.0
Liabilities held by special purpose entities	43.3	2.2	41.1	—	—
Contingent liabilities and environmental reserves	7.1	1.7	2.5	2.0	0.9
Current portion of long-term debt	15.0	15.0	—	—	—
Mandatorily redeemable noncontrolling interests	9.2	—	—	9.2	—
Total	$1,250.0	$224.3	$ 406.2	$ 550.4	$ 69.1

Environmental reserves are estimates based on current remediation plans; actual liabilities could significantly differ from the reserve estimates.

There are no near-term pension funding obligations and the amount of obligations in future years is not reasonably estimable, therefore, they have been excluded from the contractual obligations table. We intend to make pension contributions of $22.1 million during 2018, which consists of $16.9 million of employer contributions and $5.2 million of benefits paid directly by the employer. These contributions are not contractually obligated, and therefore, not included in the table above.

Our unrecognized tax benefits under ASC 740, "Income Taxes" have been excluded from the contractual obligations table because of the inherent uncertainty and the inability to reasonably estimate the timing of cash outflows.

Stock Repurchase Program and Other Share Acquisitions

Our Board of Directors has authorized the purchase of Class A Common Stock or Class B Common Stock or any combination of the foregoing up to 4,703,487 shares as of October 31, 2017. Refer to Note 14 to the Notes to Consolidated Financial Statements included in Item 8 of this Form 10-K for additional information regarding this program and the repurchase of shares of Class A and B Common Stock.

Effects of Inflation

Inflation did not have a material impact on our operations during 2017, 2016 or 2015.

Critical Accounting Policies

A summary of our significant accounting policies is included in Note 1 to the Notes to Consolidated Financial Statements included in Item 8 of this Form 10-K. We believe that the consistent application of these policies enables us to provide readers of the consolidated financial statements with useful and reliable information about our results of operations and financial condition. The following are the accounting policies that we believe are most important to the portrayal of our results of operations and financial condition and require our most difficult, subjective or complex judgments.

Other items that could have a significant impact on the financial statements include the risks and uncertainties listed in Part I, Item 1A – Risk Factors. Actual results could differ materially using different estimates and assumptions, or if conditions are significantly different in the future.

Assets and Liabilities Held for Sale. Assets and liabilities held for sale represent land, buildings and land improvements less accumulated depreciation as well as any other assets or liabilities that are held for sale in conjunction with the sale of a business. We record assets and liabilities held for sale in accordance with ASC 360 “Property, Plant, and Equipment,” at the lower of carrying value or fair value less cost to sell. Fair value is based on the estimated proceeds from the sale of the facility utilizing recent purchase offers, market comparables and/or data obtained from our commercial real estate broker. Our estimate as to fair value is regularly reviewed and subject to changes in the commercial real estate markets and our continuing evaluation as to the facility’s acceptable sale price. See Note 4 and Note 9 to the Notes to Consolidated Financial Statements included in Item 8 of this Form 10-K for additional information regarding assets and liabilities held for sale.

Goodwill and Indefinite-Lived Intangibles Impairment Testing. We account for goodwill in accordance with ASC 350, “Intangibles – Goodwill and Other.” Under ASC 350, purchased goodwill is not amortized, but instead is tested for impairment either annually or when events and circumstances indicate an impairment may have occurred. Our goodwill impairment assessment is performed by reporting unit. A reporting unit is the operating segment, or a business one level below that operating segment (the component level) if discrete financial information is prepared and regularly reviewed by segment management. However, components are aggregated as a single reporting unit if they have similar economic characteristics. In conducting the annual impairment tests, the estimated fair value of each of our reporting units is compared to its carrying amount including goodwill. If the estimated fair value exceeds the carrying amount, then no impairment exists. If the carrying amount exceeds the estimated fair value, further analysis is performed to assess impairment.

During the fourth quarter of 2017, we performed an assessment of our operating segments and determined that as a result of changes in the way the chief operating decision maker receives and reviews financial information, a realignment of our operating segment and reporting unit structure was necessary. As of our annual goodwill impairment testing date of August 1, 2017, our reporting units of the Rigid Industrial Packaging & Services segment were realigned to consist of Rigid Industrial Packaging & Services – North America; Rigid Industrial Packaging & Services – Latin America; Rigid Industrial Packaging & Services – Europe, Middle East and Africa; Rigid Industrial Packaging & Services – Asia Pacific; and Rigid Industrial Packaging & Services – Tri-Sure. As a result of the realignment, goodwill was reassigned to each of the Rigid Industrial Packaging & Services reporting units using a relative fair value approach. There have been no changes to the reporting units of the Paper Packaging & Services; Flexible Products & Services; and Land Management segments. No reporting units were aggregated for purposes of conducting the annual impairment test.

The Rigid Industrial Packaging & Services segment consists of five operating segments: Rigid Industrial Packaging & Services – North America; Rigid Industrial Packaging & Services – Latin America; Rigid Industrial Packaging & Services – Europe, Middle East and Africa; Rigid Industrial Packaging & Services – Asia Pacific; and Rigid Industrial Packaging & Services – Tri-Sure. Each of these operating segments consists of multiple components that have discrete financial information available that is reviewed by segment management on a regular basis. We have evaluated these components and concluded that they are economically similar and should be aggregated into five separate reporting units. For the purpose of aggregating our components, we review the long-term performance of gross profit margin and operating profit margin. Additionally, we review qualitative factors such as common customers, similar products, similar manufacturing processes, sharing of resources, level of integration, and interdependency of processes across components. We place greater weight on the qualitative factors outlined in ASC 280 “Segment Reporting” and consider the guidance in ASC 350 in determining whether two or more components of an operating segment are economically similar and can be aggregated into a single reporting unit. However, our assessment of the aggregation includes both qualitative and quantitative factors and is based on the facts and circumstances specific to the components.

The estimated fair value of the reporting units utilized in the impairment test is based on a discounted cash flow analysis or income approach and market multiple approach. Under this method, the principal valuation focus is on the reporting unit’s cash-generating capabilities. The discount rates used for impairment testing are based on our weighted average cost of capital. The use of alternative estimates, peer groups or changes in the industry, or adjusting the discount rate, earnings before interest, taxes, depreciation, depletion and amortization multiples or price earnings ratios used could affect the estimated fair value of the assets and potentially result in impairment. Any identified

impairment would result in an adjustment to our results of operations.
We performed our annual goodwill impairment test in the fourth quarter of 2017 as of August 1. This test resulted in no impairment charges for reporting units Rigid Industrial Packaging & Services – North America; Rigid Industrial Packaging & Services – Europe, Middle East and Africa; Rigid Industrial Packaging & Services – Asia Pacific; Rigid Industrial Packaging & Services – Tri-Sure; and Paper Packaging & Services. Our Flexible Products & Services and Land Management reporting units have no goodwill and therefore no impairment test was required. As of August 1, 2017, the estimated fair value of each of these reporting units was deemed to substantially exceed the carrying amount of assets and liabilities assigned to each reporting unit. Due to the realignment of our reporting units in the fourth quarter of 2017, we recorded an impairment charge of $13.0 million, which represented goodwill associated with the Rigid Industrial Packaging & Services segment as the carrying amount of the Rigid

Table of Contents

Industrial Packaging & Services – Latin America reporting unit exceeded its fair value. Our annual impairment tests in 2016 and 2015 resulted in no goodwill impairment charges. Refer to Note 5 in Item 8 of this Form 10-K for further information.
The following table summarizes the carrying amount of goodwill by reporting unit for the ended October 31, 2017 and 2016:

(in millions)	Goodwill Balance October 31, 2017	October 31, 2016
Rigid Industrial Packaging & Services		
Americas	$—	$ 271.7
Europe, Middle East, Africa and Asia Pacific	—	455.2
North America	252.9	—
Latin America	—	—
Europe, Middle East and Africa	304.6	—
Asia Pacific	89.4	—
Tri-Sure	79.0	—
Flexible Products & Services	—	—
Paper Packaging & Services	59.5	59.5
Land Management	—	—
Total	$ 785.4	$ 786.4

We test for impairment of indefinite-lived intangible assets during the fourth quarter of each fiscal year as of August 1, or more frequently if certain indicators are present or changes in circumstances suggest that impairment may exist.
Long-lived Asset Impairment Testing. Long-lived assets are grouped together at the lowest level, generally at the plant level, for which identifiable cash flows are largely independent of cash flows of other groups of long-lived assets. As events warrant, we evaluate the recoverability of long-lived assets, other than goodwill and other intangible assets, by assessing whether the carrying value can be recovered over their remaining useful lives through the expected future undiscounted operating cash flows of the underlying asset groups. Impairment indicators include, but are not limited to, a significant decrease in the market price of a long-lived asset; a significant adverse change in the manner in which the asset is being used or in its physical condition; a significant adverse change in legal factors or the business climate that could affect the value of a long-lived asset; an accumulation of costs significantly in excess of the amount originally expected for the acquisition or construction of a long-lived asset; current period operating or cash flow losses combined with a history of operating or cash flow losses associated with the use of the asset; or a current expectation that it is more likely than not that a long-lived asset will be sold or otherwise disposed of significantly before the end of its previously estimated useful life. Future decisions to change our manufacturing processes, exit certain businesses, reduce excess capacity, temporarily idle facilities and close facilities could result in material impairment charges. Any impairment loss that may be required is determined by comparing the carrying value of the assets to their estimated fair value.
See Note 9 to the Notes to Consolidated Financial Statements included in Item 8 of this Form 10-K for additional information regarding the fair value of our long-lived assets.
Income Taxes. Preparation of our financial statements requires the use of estimates and assumptions that affect the reported amounts of our assets and liabilities and revenues and expenses. The multitude of tax jurisdictions in which we operate requires significant judgment when applying the complex tax regulations to estimate our global tax position. Our effective tax rate and the amount of taxes we pay are dependent upon various factors including the following: the laws and regulations, and varying tax rates of the country tax jurisdictions in which income is earned; the recognition of permanent book/tax basis differences realized through acquisitions, divestitures and asset impairments; the ability to realize long term deferred tax assets at certain international subsidiaries; negotiation and

dispute resolution with taxing authorities in the U.S. and non-U.S. jurisdictions arising from federal, state and local country tax audits; and changes in tax laws, regulations, administrative rulings and common law.

Refer to Note 11 to the Notes to Consolidated Financial Statements in Item 8 of this Form 10-K for further discussion.

Pension and Postretirement Benefits. Pension and postretirement assumptions are significant inputs to the actuarial models that measure pension and postretirement benefit obligations and related effects on operations. Two assumptions – discount rate and expected return on assets – are important elements of plan expense and asset/liability measurement. We evaluate these critical assumptions at least annually on a plan and country-specific basis. At least annually, we evaluate other assumptions involving

Table of Contents
demographic factors, such as retirement age, mortality and turnover, and update them to reflect our experience and expectations for the future. Actual results in any given year will often differ from actuarial assumptions because of economic and other factors.
Accumulated and projected benefit obligations are measured as the present value of future cash payments. We discount those cash payments using the weighted average of market-observed yields for high quality fixed income securities with maturities that correspond to the payment of benefits. Lower discount rates increase present values and subsequent-year pension expense; higher discount rates decrease present values and subsequent-year pension expense. Our weighted discount rates for consolidated pension plans at October 31, 2017, 2016 and 2015 were 3.01%, 3.08% and 3.71%, respectively, reflecting market interest rates.
To develop the expected long-term rate of return on assets assumption, we use a generally consistent approach worldwide. The approach considers various sources, primarily inputs from a range of advisors, inflation, bond yields, historical returns and future expectations for returns for each asset class, as well as the target asset allocation of each pension portfolio. This rate is gross of any investment or administrative expenses. Assets in our principal pension plans earned approximately 6.1% in 2017. Based on our analysis of future expectations of asset performance, past return results, and our current and expected asset allocations, we have assumed a 4.53% long-term expected return on those assets for cost recognition in 2018. This is a reduction from the 5.39%, 5.51% and 5.47% long-term expected return we had assumed in 2017, 2016 and 2015, respectively.
Changes in key assumptions for our consolidated pension and postretirement plans would have the following effects.

- Discount rate – A 25 basis point increase in discount rate would decrease pension and postretirement cost in the following year by $1.3 million and would decrease the pension and postretirement benefit obligation at year-end by about $26.0 million.
- Expected return on assets – A 50 basis point decrease in the expected return on assets would increase pension and postretirement cost in the following year by $2.7 million.

Further discussion of our pension and postretirement benefit plans and related assumptions is contained in Note 12 to the Notes to Consolidated Financial Statements included in Item 8 of this Form 10-K.
Revenue Recognition. We recognize revenue when title passes to customers or services have been rendered, with appropriate provision for returns and allowances. Revenue is recognized in accordance with ASC 605, “Revenue Recognition.”
Timberland disposals, timber and special use property revenues are recognized when closings have occurred, required down payments have been received, title and possession have been transferred to the buyer, and all other criteria for sale and profit recognition have been satisfied.
We report the sale of timberland property in "timberland gains," the sale of HBU and surplus property in “gain on disposal of properties, plants and equipment, net” and the sale of timber and development property under “net sales” and “cost of products sold" in our consolidated statements of income. All HBU and development property, together with surplus property, is used to productively grow and sell timber until the property is sold.
Variable Interest Entities. We evaluate whether an entity is a variable interest entity (“VIE”) and determine if the primary beneficiary status is appropriate on a quarterly basis. We consolidate VIE’s for which we are the primary beneficiary. If we are not the primary beneficiary and an ownership interest is held, the VIE is accounted for under the equity method of accounting. When assessing the determination of the primary beneficiary, we consider all relevant facts and circumstances, including: the power to direct the activities of the VIE that most significantly impact the VIE’s economic performance and the obligation to absorb the expected losses and/or the right to receive the expected returns of the VIE.
Flexible Packaging Joint Venture
In 2010, we formed a joint venture (referred to herein as the “Flexible Packaging JV”) with Dabbagh Group Holding Company Limited and one of its subsidiaries, originally National Scientific Company Limited and now Gulf Refined Packaging for Industrial Packaging Company LTD ("GRP"). The Flexible Packaging JV owns the operations in the Flexible Products & Services segment. The Flexible Packaging JV has been consolidated into our operations as of its formation date of September 29, 2010.

All entities contributed to the Flexible Packaging JV were existing businesses acquired by us and were reorganized under Greif Flexibles Asset Holding B.V. and Greif Flexibles Trading Holding B.V. (“Asset Co.” and “Trading Co.”), respectively. The Flexible Packaging JV also included Global Textile Company LLC (“Global Textile”), which owned and operated a fabric hub in the Kingdom of Saudi Arabia that commenced operations in the fourth quarter of 2012, but ceased operations in the fourth quarter of 2014. We have 51 percent ownership in Trading Co. and 49 percent ownership in Asset Co. and Global Textile. However, we and

Table of Contents

GRP have equal economic interests in the Flexible Packaging JV, notwithstanding the actual ownership interests in the various legal entities. All investments, loans and capital contributions are to be shared equally by us and GRP and each partner has committed to contribute capital of up to $150.0 million and obtain third party financing for up to $150.0 million as required.

The Flexible Packaging JV is deemed to be a VIE since the total equity investment at risk is not sufficient to permit the legal entity to finance its activities without additional subordinated financial support from us. We are the primary beneficiary because we have (1) the power to direct the activities of the VIE that most significantly impact the VIE's economic performance, and (2) the obligation to absorb losses of the VIE that could potentially be significant to the VIE or the right to receive benefits from the VIE that could potentially be significant to the VIE.

Recent Accounting Standards

See Note 1 to the Notes to Consolidated Financial Statements included in Item 8 of this Form 10-K for a detailed description of recently issued and newly adopted accounting standards.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Interest Rate Risk

We are subject to interest rate risk related to our financial instruments that include borrowings under the 2017 Credit Agreement, proceeds from our Senior Notes and Receivables Facility, and interest rate swap agreements. We do not enter into financial instruments for trading or speculative purposes. The interest rate swap agreements have been entered into to manage our exposure to variability in interest rates.

We have an interest rate swap agreement with an aggregate notional amount of $300 million as of October 31, 2017. The interest rate swap agreement is used to manage our fixed and floating rate debt mix. Under certain of these agreements, we receive interest monthly from the counterparties equal to LIBOR and pay interest at a fixed rate over the life of the contracts. A loss on interest rate swap contracts was recorded in the amount of $0.3 million and $0.2 million as of October 31, 2017 and 2015, respectively. As of October 31, 2016, we had no interest rate derivatives.

The tables below provide information about our derivative financial instruments and other financial instruments that are sensitive to changes in interest rates. For the Prior Credit Agreement, 2017 Credit Agreement, Senior Notes and the Receivables Facility, the tables present scheduled amortizations of principal and the weighted average interest rate by contractual maturity dates as of October 31, 2017 and 2016.

The fair values of our Prior Credit Agreement, 2017 Credit Agreement, Senior Notes and Receivables Facility are based on rates available to us for debt of the same remaining maturity as of October 31, 2017 and 2016.

Financial Instruments

As of October 31, 2017 (Dollars in millions)

Table of Contents

	Expected Maturity Date							
	2018	2019	2020	2021	2022	After 2022	Total	Fair Value
2017 Credit Agreement								
Scheduled amortizations	$15	15	30	23	—	—	$83	$83
Scheduled maturity	—	—	—	—	$241	—	$241	$241
Average interest rate [1]	2.70 %	2.70 %	2.70%	2.70 %	2.70 %	—	2.70 %	
Senior Notes due 2019:								
Scheduled maturity	—	$250	—	—	—	—	$250	$272
Average interest rate	7.75 %	7.75 %	—	—	—	—	7.75 %	
Senior Notes due 2021:								
Scheduled maturity	—	—	—	$232	—	—	$232	$281
Average interest rate	7.38 %	7.38 %	7.38%	7.38 %	—	—	7.38 %	
Receivables Facility:								
Scheduled maturity	$150	—	—	—	—	—	$150	$150

[1] Variable rate specified is based on LIBOR or an alternative base rate plus a calculated margin as of October 31, 2017. The rates presented are not intended to project our expectations for the future.

Financial Instruments

As of October 31, 2016 (Dollars in millions)

	Expected Maturity Date							
	2017	2018	2019	2020	2021	After 2021	Total	Fair Value
Prior Credit Agreement:								
Scheduled maturity	—	$201	—	—	—	—	$201	$201
Average interest rate [1]	1.78 %	1.78 %	—	—	—	—	1.78 %	
Senior Notes due 2017:								
Scheduled maturity	$300	—	—	—	—	—	$300	$302
Average interest rate	6.75 %	—	—	—	—	—	6.75 %	
Senior Notes due 2019:								
Scheduled maturity	—	—	$250	—	—	—	$250	$280
Average interest rate	7.75 %	7.75 %	7.75 %	—	—	—	7.75 %	
Senior Notes due 2021:								
Scheduled maturity	—	—	—	—	$217	—	$217	$265
Average interest rate	7.38 %	7.38 %	7.38 %	7.38%	7.38 %	—	7.38 %	
Receivables Facility:								
Scheduled maturity	—	—	—	—	—	—	—	—

[1] Variable rate specified is based on LIBOR or an alternative base rate plus a calculated margin as of October 31, 2016. The rates presented are not intended to project our expectations for the future.

Currency Risk

As a result of our international operations, our operating results are subject to fluctuations in currency exchange rates. The geographic presence of our operations mitigates this exposure to some degree. Additionally, our transaction exposure is somewhat limited because we produce and sell a majority of our products in local currency within most countries in which we operate.

As of October 31, 2017, we had outstanding foreign currency forward contracts in the notional amount of $80.1 million ($78.9 million as of October 31, 2016). The purpose of these contracts is to hedge our exposure to foreign currency transactions and short-term intercompany loan balances in our international businesses. The fair value of these contracts resulted in realized losses

Table of Contents

recorded in other expense, net of $1.8 million, $2.7 million and $6.0 million for the years ended October 31, 2017, 2016 and 2015, respectively.

A sensitivity analysis (with respect only to these instruments) to changes in the foreign currencies hedged indicates that if the U.S. dollar strengthened by 10 percent, the fair value of these instruments would decrease by $1.7 million to a net liability of $2.2 million. Conversely, if the U.S. dollar weakened by 10 percent, the fair value of these instruments would increase by $1.8 million to a net asset of $1.3 million.

Commodity Price Risk

We purchase commodities such as steel, resin, containerboard, pulpwood and energy. We do not currently engage in material hedging of commodities, although in the past we have sometimes engaged in hedges in natural gas, because there has historically been a high correlation between the commodity cost and the ultimate selling price of our products. There were no commodity hedging contracts outstanding as of October 31, 2017 and 2016.

Table of Contents

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA
GREIF, INC. AND SUBSIDIARY COMPANIES
CONSOLIDATED STATEMENTS OF INCOME

Year Ended October 31, (in millions, except per share amounts)	2017	2016	2015
Net sales	$3,638.2	$3,323.6	$3,616.7
Costs of products sold	2,923.5	2,638.7	2,946.9
Gross profit	714.7	684.9	669.8
Selling, general and administrative expenses	380.4	376.8	413.2
Restructuring charges	12.7	26.9	40.0
Timberland gains	—	—	(24.3)
Non-cash asset impairment charges	7.8	51.4	45.9
Goodwill impairment charges	13.0	—	—
Pension settlement charge	27.1	—	—
Gain on disposal of properties, plants and equipment, net	(0.4)	(10.3)	(7.0)
Loss on disposal of businesses, net	1.7	14.5	9.2
Operating profit	272.4	225.6	192.8
Interest expense, net	60.1	75.4	74.8
Other expense, net	12.0	9.0	3.2
Income before income tax expense and equity earnings of unconsolidated affiliates, net	200.3	141.2	114.8
Income tax expense	67.2	66.5	48.4
Equity earnings of unconsolidated affiliates, net of tax	(2.0)	(0.8)	(0.8)
Net income	135.1	75.5	67.2
Net (income) loss attributable to noncontrolling interests	(16.5)	(0.6)	4.7
Net income attributable to Greif, Inc.	$118.6	$74.9	$71.9
Basic earnings per share attributable to Greif, Inc.:			
Class A Common Stock	$2.02	$1.28	$1.23
Class B Common Stock	$3.02	$1.90	$1.83
Diluted earnings per share attributed to Greif, Inc.:			
Class A Common Stock	$2.02	$1.28	$1.23
Class B Common Stock	$3.02	$1.90	$1.83

Refer to the accompanying Notes to Consolidated Financial Statements.

Table of Contents

GREIF, INC. AND SUBSIDIARY COMPANIES
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)

Year Ended October 31, (in millions)	2017	2016	2015
Net income	$135.1	$75.5	$67.2
Other comprehensive income (loss), net of tax:			
Foreign currency translation	37.6	(17.6)	(130.9)
Interest rate derivative, net of tax expense of $3.1 million, tax benefit of $0.0 million and tax benefit of $0.1 million, respectively	5.1	—	0.1
Minimum pension liabilities net of tax expense of $16.5 million, tax benefit of $4.7 million and tax expense of $0.5 million, respectively	14.2	(7.4)	9.0
Other comprehensive income (loss), net of tax	56.9	(25.0)	(121.8)
Comprehensive income (loss)	192.0	50.5	(54.6)
Comprehensive income (loss) attributable to noncontrolling interests	33.2	(3.4)	(23.5)
Comprehensive income (loss) attributable to Greif, Inc.	$158.8	$53.9	$(31.1)

Refer to the accompanying Notes to Consolidated Financial Statements.

Table of Contents

GREIF, INC. AND SUBSIDIARY COMPANIES
CONSOLIDATED BALANCE SHEETS

(in millions)	October 31, 2017	October 31, 2016
ASSETS		
Current assets		
Cash and cash equivalents	$ 142.3	$ 103.7
Trade accounts receivable, less allowance of $8.9 in 2017 and $8.8 in 2016	447.0	399.2
Inventories:		
Raw materials	192.1	185.4
Work-in-process	11.5	12.2
Finished goods	75.9	79.8
Assets held for sale	2.2	3.8
Prepaid expenses	35.3	30.0
Other current assets	88.2	98.2
	994.5	912.3
Long-term assets		
Goodwill	785.4	786.4
Other intangible assets, net of amortization	98.0	110.6
Deferred tax assets	10.5	9.0
Assets held by special purpose entities	50.9	50.9
Pension assets	10.3	22.2
Other long-term assets	94.3	89.7
	1,049.4	1,068.8
Properties, plants and equipment		
Timber properties, net of depletion	276.2	277.8
Land	99.5	99.5
Buildings	428.3	398.1
Machinery and equipment	1,540.2	1,484.8
Capital projects in progress	80.2	91.3
	2,424.4	2,351.5
Accumulated depreciation	(1,236.0)	(1,179.6)
	1,188.4	1,171.9
Total assets	$ 3,232.3	$ 3,153.0

Refer to the accompanying Notes to Consolidated Financial Statements.

Table of Contents

GREIF, INC. AND SUBSIDIARY COMPANIES
CONSOLIDATED BALANCE SHEETS

(in millions)	October 31, 2017	October 31, 2016
LIABILITIES AND SHAREHOLDERS' EQUITY		
Current liabilities		
Accounts payable	$399.2	$372.0
Accrued payroll and employee benefits	111.8	93.7
Restructuring reserves	5.2	10.4
Current portion of long-term debt	15.0	—
Short-term borrowings	14.5	51.6
Other current liabilities	142.2	131.5
	687.9	659.2
Long-term liabilities		
Long-term debt	937.8	974.6
Deferred tax liabilities	217.8	193.0
Pension liabilities	159.5	179.8
Postretirement benefit obligations	12.6	13.7
Liabilities held by special purpose entities	43.3	43.3
Contingent liabilities and environmental reserves	7.1	6.8
Mandatorily redeemable noncontrolling interests	9.2	9.0
Other long-term liabilities	78.1	83.9
	1,465.4	1,504.1
Commitments and Contingencies (Note 13)		
Redeemable Noncontrolling Interests (Note 20)	31.5	31.8
Equity		
Common stock, without par value	144.2	141.4
Treasury stock, at cost	(135.6)	(135.6)
Retained earnings	1,360.5	1,340.0
Accumulated other comprehensive loss, net of tax:		
Foreign currency translation	(249.3)	(270.2)
Interest rate derivative	5.1	—
Minimum pension liabilities	(114.0)	(128.2)
Total Greif, Inc. shareholders' equity	1,010.9	947.4
Noncontrolling interests	36.6	10.5
Total shareholders' equity	1,047.5	957.9
Total liabilities and shareholders' equity	$3,232.3	$3,153.0

Refer to the accompanying Notes to Consolidated Financial Statements.

Table of Contents

GREIF, INC. AND SUBSIDIARY COMPANIES
CONSOLIDATED STATEMENTS OF CASH FLOWS

Year Ended October 31, (in millions)	2017	2016	2015
Cash flows from operating activities:			
Net income	$135.1	$75.5	$67.2
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation, depletion and amortization	120.5	127.7	134.6
Timberland gains	—	—	(24.3)
Non-cash asset impairment charges	20.8	51.4	45.9
Pension settlement charge	27.1	—	—
Gain on disposals of properties, plants and equipment, net	(0.4)	(10.3)	(7.0)
Loss on disposals of businesses, net	1.7	14.5	9.2
Unrealized foreign exchange loss	4.6	4.1	—
Deferred income tax expense (benefit)	2.3	1.5	(5.9)
Gain from Venezuela monetary assets and liabilities remeasurement	—	—	(4.9)
Loss for Venezuela non-monetary assets to net realizable value	—	—	9.3
Other, net	1.2	—	(2.2)
Increase (decrease) in cash from changes in certain assets and liabilities:			
Trade accounts receivable	(47.3)	(18.6)	39.5
Inventories	(7.0)	3.4	38.9
Deferred purchase price on sold receivables	5.1	5.2	(5.7)
Accounts payable	20.5	39.4	(56.6)
Restructuring reserves	(5.3)	(10.7)	18.8
Pension and postretirement benefit liabilities	(1.7)	(8.9)	(4.0)
Other, net	27.8	26.8	(46.5)
Net cash provided by operating activities	305.0	301.0	206.3
Cash flows from investing activities:			
Acquisitions of companies, net of cash acquired	—	(0.4)	(1.6)
Collection (issuance) of subordinated note receivable	—	44.2	(44.2)
Purchases of properties, plants and equipment	(96.8)	(100.1)	(135.8)
Purchases of and investments in timber properties	(9.5)	(7.1)	(38.4)
Purchases of properties, plants and equipment with insurance proceeds	—	(4.4)	—
Proceeds from the sale of properties, plants, equipment and other assets	9.6	12.3	49.3
Proceeds from the sale of businesses	5.9	23.8	19.6
Proceeds on insurance recoveries	0.4	6.6	4.6
Net cash used in investing activities	(90.4)	(25.1)	(146.5)
Cash flows from financing activities:			
Proceeds from issuance of long-term debt	1,446.0	1,102.3	912.3
Payments on long-term debt	(1,627.9)	(1,119.2)	(870.1)
Proceeds from (payments on) short-term borrowings, net	(36.4)	4.7	2.6
Proceeds from trade accounts receivable credit facility	203.6	283.5	123.0
Payments on trade accounts receivable credit facility	(53.6)	(431.1)	(85.4)
Long-term debt and credit facility financing fees paid	(4.5)	—	—
Dividends paid to Greif, Inc. shareholders	(98.6)	(98.7)	(98.7)
Dividends paid to noncontrolling interests	(4.2)	(4.9)	(4.0)
Proceeds from the sale of membership units of a consolidated subsidiary	—	0.3	—
Exercise of stock options	—	—	0.2
Acquisitions of treasury stock	—	(5.2)	—
Purchases of redeemable noncontrolling interest	—	(6.0)	—

Cash contribution from noncontrolling interest holder	—	1.5	—
Net cash used in financing activities	(175.6)	(272.8)	(20.1)
Effects of exchange rates on cash	(0.4)	(5.6)	(18.6)
Net increase (decrease) in cash and cash equivalents	38.6	(2.5)	21.1
Cash and cash equivalents at beginning of year	103.7	106.2	85.1
Cash and cash equivalents at end of year	$142.3	$103.7	$106.2

53

Table of Contents

Year Ended October 31, (in millions)	2017	2016	2015
Supplemental information:			
Non-cash transactions:			
Capital expenditures included in accounts payable	$12.5	$9.2	$12.6
Schedule of interest and income taxes paid:			
Cash payments for interest expense	$76.2	$74.8	$77.5
Cash payments for taxes	$53.4	$51.8	$73.5

Refer to the accompanying Notes to Consolidated Financial Statements.

Table of Contents

GREIF, INC. AND SUBSIDIARY COMPANIES
CONSOLIDATED STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY
(Amounts in millions, except shares amounts in thousands and per share amounts)

	Capital Stock		Treasury Stock		Retained Earnings	Accumulated Other Comprehensive Income (Loss)	Greif, Inc. Equity	Noncontrolling interests	Total Equity
	Shares	Amount	Shares	Amount					
As of October 31, 2014	47,724	$135.5	29,118	$(130.7)	$1,411.7	$(274.4)	$1,142.1	$81.1	$1,223.2
Net income					71.9		71.9	(4.7)	67.2
Other comprehensive income (loss):									
– Foreign currency translation						(112.1)	(112.1)	(18.8)	(130.9)
– Reclassification of cash flow hedges to earnings, net of immaterial income tax expense						0.1	0.1		0.1
– Minimum pension liability adjustment, net of income tax expense of $0.5 million						9.0	9.0		9.0
Comprehensive loss							(31.1)		(54.6)
Acquisitions of noncontrolling interests and other					(0.4)		(0.4)	(9.3)	(9.7)
Dividends paid to Greif, Inc., Shareholders ($1.68 per Class A share and $2.51 per Class B share)					(98.7)		(98.7)		(98.7)
Dividends paid to noncontrolling interest								(4.0)	(4.0)
Stock options exercised	10	0.2	(10)	—			0.2		0.2
Restricted stock directors	30	1.3	(30)	—			1.3		1.3
Tax benefit of stock options and other	—	0.2	—	—			0.2		0.2
Long-term incentive shares issued	50	1.9	(50)	0.1			2.0		2.0
As of October 31, 2015	47,814	$139.1	29,028	$(130.6)	$1,384.5	$(377.4)	$1,015.6	$44.3	$1,059.9
Net income					74.9		74.9	0.6	75.5
Other comprehensive income (loss):									
– Foreign currency translation						(13.6)	(13.6)	(4.0)	(17.6)
– Minimum pension liability adjustment, net of income tax benefit of $4.7 million						(7.4)	(7.4)		(7.4)
Comprehensive income							53.9		50.5
Out of period mark to redemption value of redeemable noncontrolling interest					(19.8)		(19.8)		(19.8)

Current period mark to redemption value of redeemable noncontrolling interest					(2.1)		(2.1)		(2.1)
Reclassification of redeemable noncontrolling interests					1.2		1.2	(22.8)	(21.6)
Net loss allocated to redeemable noncontrolling interests								(4.8)	(4.8)
Other								(0.4)	(0.4)
Dividends paid to Greif, Inc., Shareholders ($1.68 per Class A share and $2.51 per Class B share)					(98.7)		(98.7)		(98.7)
Contributions from noncontrolling interest								1.5	1.5
Dividends paid to noncontrolling interest								(3.9)	(3.9)
Treasury shares acquired	(110)		110	(5.2)			(5.2)		(5.2)
Restricted stock executives and directors	47	1.3	(47)	0.1			1.4		1.4
Long-term incentive shares issued	41	1.0	(41)	0.1			1.1		1.1
As of October 31, 2016	47,792	$141.4	29,050	$(135.6)	$1,340.0	$ (398.4)	$947.4	$ 10.5	$957.9
Net income					118.6		118.6	16.5	135.1
Other comprehensive income (loss):									
– Foreign currency translation						20.9	20.9	16.7	37.6
– Interest rate derivative, net of income tax expense of $3.1 million						5.1	5.1		5.1
– Minimum pension liability adjustment, net of income tax expense of $16.5 million						14.2	14.2		14.2
Comprehensive income							158.8		192.0
Current period mark to redemption value of redeemable noncontrolling interest					0.5		0.5		0.5
Net income allocated to redeemable noncontrolling interests								(1.4)	(1.4)
Deconsolidation of noncontrolling interest								(2.6)	(2.6)
Dividends paid to Greif, Inc., Shareholders ($1.68 per Class A share and $2.51 per Class B share)					(98.6)		(98.6)		(98.6)
Dividends paid to noncontrolling interest								(3.1)	(3.1)

Treasury shares acquired	(2)		2	0.1			0.1		0.1
Restricted stock executives and directors	24	1.3	(24)	—			1.3		1.3
Long-term incentive shares issued	29	1.5	(29)	(0.1)			1.4		1.4
As of October 31, 2017	47,843	$144.2	28,999	$(135.6)	$1,360.5	$(358.2)	$1,010.9	$36.6	$1,047.5

Refer to the accompanying Notes to Consolidated Financial Statements.

Table of Contents

GREIF, INC. AND SUBSIDIARY COMPANIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

NOTE 1 – BASIS OF PRESENTATION AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The Business

Greif, Inc. and its subsidiaries (collectively, “Greif,” “our,” or the “Company”), principally manufacture rigid industrial packaging products, such as steel, fibre and plastic drums, rigid intermediate bulk containers, closure systems for industrial packaging products, transit protection products, water bottles and remanufactured and reconditioned industrial containers, and provides services, such as container life cycle management, filling, logistics, warehousing and other packaging services. The Company produces containerboard and corrugated products for niche markets in North America and is also a leading global producer of flexible intermediate bulk containers. The Company has operations in over 40 countries. In addition, the Company owns timber properties in the southeastern United States, which are actively harvested and regenerated.

Due to the variety of its products, the Company has many customers buying different products and due to the scope of the Company’s sales, no one customer is considered principal in the total operations of the Company.

Because the Company supplies a cross section of industries, such as chemicals, paints and pigments, food and beverage, petroleum, industrial coatings, agricultural, pharmaceutical, mineral, packaging, automotive and building products, and must make spot deliveries on a day-to-day basis as its products are required by its customers, the Company does not operate on a backlog to any significant extent and maintains only limited levels of finished goods. Many customers place their orders weekly for delivery during the same week.

The Company’s raw materials are principally steel, resin, containerboard, old corrugated containers, pulpwood and used industrial packaging for reconditioning.

There were approximately 13,000 employees of the Company as of October 31, 2017.

Principles of Consolidation and Basis of Presentation

The consolidated financial statements include the accounts of Greif, Inc., all wholly-owned and majority-owned subsidiaries, joint ventures controlled by the Company or for which the Company is the primary beneficiary, including the joint venture relating to the Flexible Products & Services segment, and equity earnings of unconsolidated affiliates. All intercompany transactions and balances have been eliminated in consolidation. Investments in unconsolidated affiliates are accounted for using the equity method based on the Company’s ownership interest in the unconsolidated affiliate.

The Company’s consolidated financial statements are presented in accordance with accounting principles generally accepted in the United States (“GAAP”). Certain prior year amounts have been reclassified to conform to the current year presentation.

The Company’s fiscal year begins on November 1 and ends on October 31 of the following year. Any references to the year 2017, 2016 or 2015, or to any quarter of those years, relates to the fiscal year ended in that year.

Venezuela Currency

The Company’s results of its Venezuelan businesses have been reported under highly inflationary accounting since 2010 and the functional currency was converted to U.S. dollars at that time. Prior to the third quarter of 2015, Greif utilized the official rate of 6.4 Bolivars/U.S. dollar to measure Bolivar-denominated monetary assets and liabilities and the respective historical rate to measure Bolivar-denominated nonmonetary assets for each reporting period. During the third quarter of 2015, due to the continued devaluation of the Bolivar and reconsideration of the exchange rate mechanism that best reflected the economics of the Company's business activities in Venezuela, the Company remeasured the local currency denominated balance sheet using the SIMADI exchange rate.

As a result of the change to the SIMADI rate, the Company recorded other income of $4.9 million related to the remeasurement of its Venezuelan monetary assets and liabilities during 2015. In addition, the Company determined that an adjustment of $9.3 million to increase cost of goods sold was needed to reflect the non-monetary inventory assets at net realizable value and, upon review of long-lived assets for impairment, the Company determined that the carrying amount of the long-lived asset was not recoverable in U.S. dollar functional currency and recorded an impairment charge of $15.0 million.

Table of Contents

Use of Estimates
The preparation of consolidated financial statements in conformity with GAAP requires management to make certain estimates, judgments and assumptions that affect the amounts reported in the consolidated financial statements and accompanying notes. The most significant estimates are related to the expected useful lives assigned to properties, plants and equipment, goodwill and other intangible assets, estimates of fair value, environmental liabilities, pension and postretirement benefits, including plan assets, income taxes, net assets held for sale and contingencies. Actual amounts could differ from those estimates.
Cash and Cash Equivalents
The Company considers highly liquid investments with an original maturity of three months or less to be cash equivalents. The carrying value of cash equivalents approximates fair value.
The Company had total cash and cash equivalents held outside of the United States in various foreign jurisdictions of $140.7 million and $96.6 million as of October 31, 2017 and 2016, respectively. Under current tax laws and regulations, if cash and cash equivalents held outside the United States are repatriated to the United States in the form of dividends or otherwise, the Company may be subject to additional U.S. income taxes (subject to an adjustment for foreign tax credits) and foreign withholding taxes.
Allowance for Doubtful Accounts
Trade receivables represent amounts owed to the Company through its operating activities and are presented net of allowance for doubtful accounts. The allowance for doubtful accounts totaled $8.9 million and $8.8 million as of October 31, 2017 and 2016, respectively. The Company evaluates the collectability of its accounts receivable based on a combination of factors. In circumstances where the Company is aware of a specific customer's inability to meet its financial obligations to the Company, the Company records a specific allowance for bad debts against amounts due to reduce the net recognized receivable to the amount the Company reasonably believes will be collected. In addition, the Company recognizes allowances for bad debts based on the length of time receivables are past due with allowance percentages, based on its historical experiences, applied on a graduated scale relative to the age of the receivable amounts. If circumstances such as higher than expected bad debt experience or an unexpected material adverse change in a major customer's ability to meet its financial obligations to the Company were to occur, the recoverability of amounts due to the Company could change by a material amount. Amounts deemed uncollectible are written-off against an established allowance for doubtful accounts.
Concentration of Credit Risk and Major Customers
The Company maintains cash depository accounts with banks throughout the world and invests in high quality short-term liquid instruments. Such investments are made only in instruments issued by high quality institutions. These investments mature within three months and the Company has not incurred any related losses for the years ended October 31, 2017, 2016, and 2015.
Trade receivables can be potentially exposed to a concentration of credit risk with customers or in particular industries. Such credit risk is considered by management to be limited due to the Company's many customers, none of which are considered principal in the total operations of the Company, and its geographic scope of operations in a variety of industries throughout the world. The Company does not have an individual customer that exceeds 10 percent of total revenue. In addition, the Company performs ongoing credit evaluations of its customers' financial conditions and maintains reserves for credit losses. Such losses historically have been within management's expectations.
Inventory
The Company primarily uses the FIFO method of inventory valuation. Reserves for slow moving and obsolete inventories are provided based on historical experience, inventory aging and product demand. The Company continuously evaluates the adequacy of these reserves and makes adjustments to these reserves as required.
The Paper Packaging & Services segment trades certain inventories with third parties. These inventory trades are accounted for as non-monetary exchanges and the Company records an asset or liability for any imbalance resulting from these trades.
Net Assets Held for Sale

Net assets held for sale represent land, buildings and other assets and liabilities for locations that have met the criteria of “held for sale” accounting, as specified by Accounting Standards Codification (“ASC”) 360, “Property, Plant, and Equipment.” As of October 31, 2017, there were two asset groups within the Rigid Industrial Packaging Products & Services segment classified as assets and liabilities held for sale. The effect of suspending depreciation on the facilities held for sale is immaterial to the results

Table of Contents

of operations. The net assets held for sale are being marketed for sale and it is the Company's intention to complete the sales of these assets within the upcoming year.

Goodwill and Indefinite-Lived Intangibles

Goodwill is the excess of the purchase price of an acquired entity over the amounts assigned to tangible and intangible assets and liabilities assumed in the business combination. The Company accounts for purchased goodwill and indefinite-lived intangible assets in accordance with ASC 350, "Intangibles – Goodwill and Other." Under ASC 350, purchased goodwill and intangible assets with indefinite lives are not amortized, but instead are tested for impairment at least annually. The Company tests for impairment of goodwill and indefinite-lived intangible assets during the fourth quarter of each fiscal year as of August 1, or more frequently if certain indicators are present or changes in circumstances suggest that impairment may exist.

In accordance with ASC 350, the Company has the option to first assess qualitative factors to determine whether it is necessary to perform the quantitative test for goodwill impairment. If the Company believes, as a result of its qualitative assessment, that it is more-likely-than-not that the fair value of a reporting unit is less than its carrying amount, the quantitative impairment test is required. The quantitative test for goodwill impairment is conducted at the reporting unit level by comparing the carrying value of each reporting unit to the estimated fair value of the unit. If the carrying value of a reporting unit exceeds its estimated fair value, then the goodwill of the reporting unit is impaired. Goodwill impairment is recognized in the amount that the carrying value exceeds the fair value; not to exceed the balance of goodwill attributable to the reporting unit. When a portion of a reporting unit is disposed of, goodwill is allocated to the gain or loss on that disposition based on the relative fair values of the portion of the reporting unit subject to disposition and the portion of the reporting unit that will be retained.

The Company's determinations of estimated fair value of the reporting units are based on both the market approach and a discounted cash flow analysis utilizing the income approach. Under the market approach, the principal inputs are market prices and valuation multiples for public companies engaged in businesses that are considered comparable to the reporting unit. Under the income approach, the principal inputs are the reporting unit's cash-generating capabilities and the discount rate. The discount rates used in the income approach are based on a market participant's weighted average cost of capital. The use of alternative estimates, including different peer groups or changes in the industry, or adjusting the discount rate, earnings before interest, taxes, depreciation, depletion and amortization forecasts or cash flow assumptions used could affect the estimated fair value of the reporting units and potentially result in goodwill impairment. Any identified impairment would result in an expense to the Company's results of operations. Refer to Note 5 for additional information regarding goodwill and other intangible assets.

Other Intangibles

The Company accounts for intangible assets in accordance with ASC 350. Indefinite lived intangible assets are not amortized. Definite lived intangible assets are amortized over their useful lives on a straight-line basis. The useful lives for definite lived intangible assets vary depending on the type of asset and the terms of contracts or the valuation performed. The Company tests for impairment of intangible assets at least annually, or more frequently if certain indicators are present to suggest that impairment may exist. Amortization expense on intangible assets is recorded on the straight-line method over their useful lives as follows:

	Years
Trade names	10-15
Non-competes	1-10
Customer relationships	5-25
Other intangibles	3-20

Acquisitions

From time to time, the Company acquires businesses and/or assets that augment and complement its operations. In accordance with ASC 805, "Business Combinations," these acquisitions are accounted for under the purchase method of accounting. The consolidated financial statements include the results of operations from these business combinations from the date of acquisition.

In order to assess performance, the Company classifies costs incurred in connection with acquisitions as acquisition-related costs. These costs consist primarily of transaction costs, integration costs and changes in the fair value of contingent payments (earn-outs) and are recorded within selling, general and administrative costs. Acquisition transaction costs are incurred during the initial evaluation of a potential targeted acquisition and primarily relate to costs to analyze, negotiate and consummate the transaction as well as financial and legal due diligence activities. Post-acquisition integration activities are costs incurred to combine the operations of an acquired enterprise into the Company's operations.

Table of Contents

Internal Use Software
Internal use software is accounted for under ASC 985, “Software.” Internal use software is software that is acquired, internally developed or modified solely to meet the Company’s needs and for which, during the software’s development or modification, a plan does not exist to market the software externally. Costs incurred to develop the software during the application development stage and for upgrades and enhancements that provide additional functionality are capitalized and then amortized over a three to ten year period. Internal use software is capitalized as a component of machinery and equipment on the Consolidated Balance Sheets.
Long-Lived Assets
Properties, plants and equipment are stated at cost. Depreciation on properties, plants and equipment is provided on the straight-line method over the estimated useful lives of the assets as follows:

	Years
Buildings	30-45
Machinery and equipment	3-19

Depreciation expense was $106.8 million, $107.4 million and $113.4 million in 2017, 2016 and 2015, respectively. Expenditures for repairs and maintenance are charged to expense as incurred. When properties are retired or otherwise disposed of, the cost and accumulated depreciation are eliminated from the asset and related allowance accounts. Gains or losses are credited or charged to income as incurred.
The Company capitalizes interest on long-term fixed asset projects using a rate that approximates the weighted average cost of borrowing. For the years ended October 31, 2017, 2016, and 2015, the Company capitalized interest costs of $3.5 million, $2.6 million, and $1.5 million, respectively.
The Company tests for impairment of properties, plants and equipment if certain indicators are present to suggest that impairment may exist. Long-lived assets are grouped together at the lowest level, generally at the plant level, for which identifiable cash flows are largely independent of cash flows of other groups of long-lived assets. As events warrant, we evaluate the recoverability of long-lived assets, other than goodwill and indefinite-lived intangible assets, by assessing whether the carrying value can be recovered over their remaining useful lives through the expected future undiscounted operating cash flows of the underlying business. Impairment indicators include, but are not limited to, a significant decrease in the market price of a long-lived asset; a significant adverse change in the manner in which the asset is being used or in its physical condition; a significant adverse change in legal factors or the business climate that could affect the value of a long-lived asset; an accumulation of costs significantly in excess of the amount originally expected for the acquisition or construction of a long-lived asset; current period operating or cash flow losses combined with a history of operating or cash flow losses associated with the use of the asset; or a current expectation that it is more likely than not that a long-lived asset will be sold or otherwise disposed of significantly before the end of its previously estimated useful life. Future decisions to change our manufacturing processes, exit certain businesses, reduce excess capacity, temporarily idle facilities and close facilities could also result in material impairment charges. Any impairment loss that may be required is determined by comparing the carrying value of the assets to their estimated fair value.
As of October 31, 2017, the Company's timber properties consisted of approximately 245,000 acres, all of which were located in the southeastern United States. The Company’s land costs are maintained by tract. Upon acquisition of a new timberland tract, the Company records separate amounts for land, merchantable timber and pre-merchantable timber allocated as a percentage of the values being purchased. The Company begins recording pre-merchantable timber costs at the time the site is prepared for planting. Costs capitalized during the establishment period include site preparation by aerial spray, costs of seedlings, including refrigeration rental and trucking, planting costs, herbaceous weed control, woody release, and labor and machinery use. The Company does not capitalize interest costs in the process. Property taxes are expensed as incurred. New road construction costs are capitalized as land improvements and depreciated over 20 years. Road repairs and maintenance costs are expensed as incurred. Costs after establishment of the seedlings, including management costs, pre-commercial thinning costs and fertilization costs, are expensed as incurred. Once the timber becomes merchantable, the cost is transferred from the pre-merchantable timber category to the merchantable timber category in the depletion block.

Merchantable timber costs are maintained by five product classes, pine sawtimber, pine chip-n-saw, pine pulpwood, hardwood sawtimber and hardwood pulpwood, within a depletion block, with each depletion block based upon a geographic district or subdistrict. Currently, the Company has eight depletion blocks. These same depletion blocks are used for pre-merchantable timber costs. Each year, the Company estimates the volume of the Company's merchantable timber for the five product classes by each depletion block and depletion costs recognized upon sales are calculated as volumes sold times the unit costs in the respective depletion block. Depletion expense was $4.0 million, $3.2 million and $2.8 million in 2017, 2016 and 2015, respectively.

Contingencies

Various lawsuits, claims and proceedings have been or may be instituted or asserted against the Company, including those pertaining to environmental, product liability and safety and health matters. While the amounts claimed may be substantial, the ultimate liability cannot currently be determined because of the considerable uncertainties that exist. All lawsuits, claims and proceedings are considered by the Company in establishing reserves for contingencies in accordance with ASC 450, “Contingencies.” In accordance with the provisions of ASC 450, the Company accrues for a litigation-related liability when it is probable that a liability has been incurred and the amount of the loss can be reasonably estimated. Based on currently available information known to the Company, the Company believes that its reserves for these litigation-related liabilities are reasonable and that the ultimate outcome of any pending matters is not likely to have a material effect on the Company’s financial position or results of operations.

Environmental Cleanup Costs

The Company accounts for environmental cleanup costs in accordance with ASC 410, “Asset Retirement and Environmental Obligations.” The Company expenses environmental expenditures related to existing conditions resulting from past or current operations and from which no current or future benefit is discernible. Expenditures that extend the life of the related property or mitigate or prevent future environmental contamination are capitalized. The Company determines its liability on a site-by-site basis and records a liability at the time when it is probable and can be reasonably estimated. The Company’s estimated liability is reduced to reflect the anticipated participation of other potentially responsible parties in those instances where it is probable that such parties are legally responsible and financially capable of paying their respective shares of the relevant costs.

Self-insurance

The Company is self-insured for certain of the claims made under its employee medical and dental insurance programs. The Company had recorded liabilities totaling $3.3 million and $4.4 million for estimated costs related to outstanding claims as of October 31, 2017 and 2016, respectively. These costs include an estimate for expected settlements on pending claims, administrative fees and an estimate for claims incurred but not reported. These estimates are based on management’s assessment of outstanding claims, historical analyses and current payment trends. The Company recorded an estimate for the claims incurred, but not reported using an estimated lag period based upon historical information.

The Company has certain deductibles applied to various insurance policies including general liability, product, vehicle and workers’ compensation. The Company maintains liabilities totaling $11.0 million and $11.8 million for anticipated costs related to general liability, product, vehicle and workers’ compensation claims as of October 31, 2017 and 2016, respectively. These costs include an estimate for expected settlements on pending claims, defense costs and an estimate for claims incurred but not reported. These estimates are based on the Company’s assessment of its deductibles, outstanding claims, historical analysis, actuarial information and current payment trends.

Income Taxes

Income taxes are accounted for under ASC 740, “Income Taxes.” In accordance with ASC 740, deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases, as measured by enacted tax rates that are expected to be in effect in the periods when the deferred tax assets and liabilities are expected to be settled or realized. Valuation allowances are established when management believes it is more likely than not that some portion of the deferred tax assets will not be realized.

The Company’s effective tax rate is impacted by the amount of income generated in each taxing jurisdiction, statutory tax rates and tax planning opportunities available to the Company in the various jurisdictions in which the Company operates. Significant judgment is required in determining the Company’s effective tax rate and in evaluating its tax positions.

Tax benefits from uncertain tax positions are recognized when it is more likely than not that the position will be sustained upon examination, including resolutions of any related appeals or litigation processes, based on the technical merits. The amount recognized is measured as the largest amount of tax benefit that is greater than 50 percent likely of being realized upon settlement. The Company’s effective tax rate includes the impact of reserve provisions and changes to reserves on uncertain tax positions that are not more likely than not to be sustained upon examination as well as related interest and penalties.

Table of Contents

A number of years may elapse before a particular matter, for which the Company has established a reserve, is audited and finally resolved. The number of years with open tax audits varies depending on the tax jurisdiction. While it is often difficult to predict the final outcome or the timing of resolution of any particular tax matter, the Company believes that its reserves reflect the probable outcome of known tax contingencies. Unfavorable settlement of any particular issue would require use of the Company’s cash. Favorable resolution would be recognized as a reduction to the Company’s effective tax rate in the period of resolution.

Equity earnings of unconsolidated affiliates, net of tax

Equity earnings of unconsolidated affiliates, net of tax represent the Company’s share of earnings of affiliates in which the Company does not exercise control and has a 20 percent or more voting interest. Investments in such affiliates are accounted for using the equity method of accounting. If the fair value of an investment in an affiliate is below its carrying value and the difference is deemed to be other than temporary, the difference between the fair value and the carrying value is charged to earnings. The Company has an equity interest in two such affiliates as of October 31, 2017, including the addition of an equity method investment in 2016. For additional information regarding the addition of the equity method investment in 2016 refer to Note 2 to these consolidated financial statements.

Other Comprehensive Income

Our other comprehensive income is significantly impacted by foreign currency translation, effective cash flow hedges and defined benefit pension and postretirement benefit adjustments.

The impact of foreign currency translation is affected by the translation of assets, liabilities and operations of the Company's foreign subsidiaries which are denominated in functional currencies other than the U.S. dollar and the recognition of accumulated foreign currency translation upon the disposal of foreign entities. The primary assets and liabilities affecting the adjustments are: cash and cash equivalents; accounts receivable; inventory; properties, plants and equipment; accounts payable; pension and other postretirement benefit obligations; and certain intercompany loans payable and receivable. The primary currencies in which these assets and liabilities are denominated are the euro, Brazilian real, and Chinese yuan.

The impact of effective cash flow hedges is reclassified into earnings in the same period or periods during which the hedged transaction affects earnings. Currently, interest rate swaps are held by the Company to effectively convert a portion of floating rate debt to a fixed rate basis, thus reducing the impact of interest rate increase on future interest expense. The Company uses the regression method for assessing the effectiveness of the swaps.

The impact of defined benefit pension and postretirement benefit adjustments is primarily affected by unrecognized actuarial gains and losses related to the Company's defined benefit and other postretirement benefit plans, as well as the subsequent amortization of gains and losses from accumulated other comprehensive income in periods following the initial recording of such items. These actuarial gains and losses are determined using various assumptions, the most significant of which are (i) the weighted average rate used for discounting the liability, (ii) the weighted average expected long-term rate of return on pension plan assets, (iii) the method used to determine market-related value of pension plan assets, (iv) the weighted average rate of future salary increases and (v) the anticipated mortality rate tables.

Restructuring Charges

The Company accounts for all exit or disposal activities in accordance with ASC 420, “Exit or Disposal Cost Obligations.” Under ASC 420, a liability is measured at its fair value and recognized as incurred.

Employee-related costs primarily consist of one-time termination benefits provided to employees who have been involuntarily terminated. A one-time benefit arrangement is an arrangement established by a plan of termination that applies for a specified termination event or for a specified future period. A one-time benefit arrangement exists at the date the plan of termination meets all of the following criteria and has been communicated to employees:

(1) Management, having the authority to approve the action, commits to a plan of termination.

(2) The plan identifies the number of employees to be terminated, their job classifications or functions and their locations, and the expected completion date.

(3)

The plan establishes the terms of the benefit arrangement, including the benefits that employees will receive upon termination (including but not limited to cash payments), in sufficient detail to enable employees to determine the type and amount of benefits they will receive if they are involuntarily terminated.

(4) Actions required to complete the plan indicate that it is unlikely that significant changes to the plan will be made or that the plan will be withdrawn.

Table of Contents

Facility exit and other costs consist of equipment relocation costs and project consulting fees. A liability for other costs associated with an exit or disposal activity shall be recognized and measured at its fair value in the period in which the liability is incurred (generally, when goods or services associated with the activity are received). The liability shall not be recognized before it is incurred, even if the costs are incremental to other operating costs and will be incurred as a direct result of a plan.

Pension and Postretirement Benefits

Under ASC 715, “Compensation – Retirement Benefits,” employers recognize the funded status of their defined benefit pension and other postretirement plans on the consolidated balance sheet and record as a component of other comprehensive income, net of tax, the gains or losses and prior service costs or credits that have not been recognized as components of the net periodic benefit cost.

Transfer and Servicing of Assets

An indirect wholly-owned subsidiary of Greif, Inc. agrees to sell trade receivables meeting certain eligibility requirements that it had purchased from other indirect wholly-owned subsidiaries of Greif, Inc., under a non-U.S. factoring agreement. The structure of the transactions provide for a legal true sale, on a revolving basis, of the receivables transferred from the various Greif, Inc. indirect subsidiaries to the respective banks or their affiliates. The banks and their affiliates fund an initial purchase price of a certain percentage of eligible receivables based on a formula with the initial purchase price approximating 75 percent to 90 percent of eligible receivables. The remaining deferred purchase price is settled upon collection of the receivables. At the balance sheet reporting dates, the Company removes from accounts receivable the amount of proceeds received from the initial purchase price since they meet the applicable criteria of ASC 860, “Transfers and Servicing,” and continues to recognize the deferred purchase price in its other current assets or other current liabilities, as the case may be. The receivables are sold on a non-recourse basis with the total funds in the servicing collection accounts pledged to the banks between settlement dates.

Stock-Based Compensation Expense

The Company recognizes stock-based compensation expense in accordance with ASC 718, “Compensation – Stock Compensation.” ASC 718 requires the measurement and recognition of compensation expense, based on estimated fair values, for all share-based awards made to employees and directors, including stock options, restricted stock, restricted stock units and participation in the Company’s employee stock purchase plan.

ASC 718 requires companies to estimate the fair value of share-based awards on the date of grant using an option-pricing model. The value of the portion of the award that is ultimately expected to vest is recognized as expense in the Company’s consolidated statements of income over the requisite service periods. No stock options were granted in 2017, 2016 or 2015. For any options granted in the future, compensation expense will be based on the grant date fair value estimated in accordance with the standard.

Revenue Recognition

The Company recognizes revenue when title passes and risks and rewards of ownership have transferred to customers or services have been rendered, with appropriate provision for returns and allowances. Revenue is recognized in accordance with ASC 605, “Revenue Recognition.”

Timberland disposals, timber sales, higher and better use (“HBU”) land, surplus and development property sales revenues are recognized when closings have occurred, required down payments have been received, title and possession have been transferred to the buyer and all other criteria for sale and profit recognition have been satisfied. The Company reports the sale of timberland property in "timberland gains," the sale of HBU and surplus property in “gain on disposal of properties, plants and equipment, net” and the sale of timber and development property under “net sales” and “cost of products sold" in its consolidated statements of income. All HBU and development property, together with surplus property, is used by the Company to productively grow and sell timber until the property is sold.

Shipping and Handling Fees and Costs

The Company includes shipping and handling fees and costs in cost of products sold.

Other Expense, net

Other expense, net primarily represents non-United States trade receivables program fees, currency transaction gains and losses and other infrequent non-operating items.

Table of Contents

Currency Translation

In accordance with ASC 830, “Foreign Currency Matters,” the assets and liabilities denominated in a foreign currency are translated into United States dollars at the rate of exchange existing at period-end, and revenues and expenses are translated at average exchange rates.

The cumulative translation adjustments, which represent the effects of translating assets and liabilities of the Company’s international operations, are presented in the consolidated statements of changes in shareholders’ equity in accumulated other comprehensive income (loss). Transaction gains and losses on foreign currency transactions denominated in a currency other than an entity’s functional currency are credited or charged to income. The amounts included in other expense, net related to transaction losses were $6.4 million, $6.7 million and $3.8 million in 2017, 2016 and 2015, respectively.

Derivative Financial Instruments

In accordance with ASC 815, “Derivatives and Hedging,” the Company records all derivatives in the consolidated balance sheet as either assets or liabilities measured at fair value. Dependent on the designation of the derivative instrument, changes in fair value are recorded to earnings or shareholders’ equity through other comprehensive income (loss).

The Company may from time to time use interest rate swap agreements to hedge against changing interest rates. For interest rate swap agreements designated as cash flow hedges, the effective portion of the net gain or loss on the derivative instrument is reported as a component of other comprehensive income (loss) and reclassified into earnings in the same period or periods during which the hedged transaction affects earnings.

The Company's interest rate swap agreements effectively convert a portion of floating rate debt to a fixed rate basis, thus reducing the impact of interest rate increases on future interest expense. The Company uses the regression method for assessing the effectiveness of these swaps. The effectiveness of these swaps is reviewed at least every quarter. Hedge ineffectiveness has not been material during any of the years presented herein.

The Company enters into currency forward contracts to hedge certain currency transactions and short-term intercompany loan balances with its international businesses. Such contracts limit the Company’s exposure to both favorable and unfavorable currency fluctuations. These contracts are adjusted to reflect market value as of each balance sheet date, with the resulting changes in fair value being recognized in other expense, net.

Any derivative contract that is either not designated as a hedge, or is so designated but is ineffective, has its changes to market value recognized in earnings immediately. If a cash flow or fair value hedge ceases to qualify for hedge accounting, the contract would continue to be carried on the balance sheet at fair value until settled and have the adjustments to the contract’s fair value recognized in earnings. If a forecasted transaction were no longer probable to occur, amounts previously deferred in accumulated other comprehensive income (loss) would be recognized immediately in earnings.

Fair Value

The Company uses ASC 820, “Fair Value Measurements and Disclosures” to account for fair value. ASC 820 defines fair value, establishes a framework for measuring fair value in GAAP and expands disclosures about fair value measurements. Additionally, this standard established a three-level fair value hierarchy that prioritizes the inputs used to measure fair value. This hierarchy requires entities to maximize the use of observable inputs and minimize the use of unobservable inputs.

The three levels of inputs used to measure fair values are as follows:

- Level 1 – Observable inputs such as unadjusted quoted prices in active markets for identical assets and liabilities.
- Level 2 – Observable inputs other than quoted prices in active markets for identical assets and liabilities.
- Level 3 – Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets and liabilities.

The Company presents various fair value disclosures in Notes 9 and 12 to these consolidated financial statements.

Newly Adopted Accounting Standards

In February 2015, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") 2015-02, “Consolidation (Topic 810): Amendments to the Consolidation Analysis,” which makes changes to both the variable interest model and the voting interest model and eliminates the indefinite deferral of FASB Statement No.

167, included in ASU 2010-10, for

63

certain investment funds. All reporting entities that hold a variable interest in other legal entities were required to re-evaluate their consolidation conclusions as well as disclosure requirements. The Company adopted the new guidance beginning on November 1, 2016, and the adoption did not have a material impact on the Company's financial position, results of operations, comprehensive income, cash flows or disclosures.
In May 2015, the FASB issued ASU 2015-07, "Disclosures for Investments in Certain Entities that Calculate Net Asset Value per Share (or its Equivalent)", which removes the requirement to present investments for which the practical expedient is used to measure fair value at net asset value within the fair value hierarchy table. The Company adopted this guidance beginning November 1, 2016 and has applied it retrospectively for all periods presented, and the adoption of this guidance did not have a material impact on the Company's financial position, results of operations, comprehensive income, cash flows or disclosures.
In January 2017, the FASB issued ASU 2017-04, “Intangibles - Goodwill and Other (Topic 350),” which simplifies the subsequent measurement of goodwill in Accounting Standards Codification ("ASC") 350 by eliminating the step 2 requirement to perform procedures to determine the fair value at the impairment testing date of assets and liabilities in order to calculate goodwill impairment based on the implied fair value of goodwill. This amendment modifies the concept of impairment from the condition that exists when the carrying amount of goodwill exceeds its implied fair value to the condition that exists when the carrying amount of a reporting unit exceeds its fair value. The Company elected to adopt the new guidance beginning on February 1, 2017 using a prospective approach, and utilized the new guidance for the August 1, 2017 goodwill impairment assessment. The adoption did not have a material impact on the Company's financial position, results of operations, comprehensive income, cash flows or disclosures.
Recently Issued Accounting Standards
In May 2014, the FASB issued ASU 2014-09, “Revenue from Contracts with Customers (Topic 606),” which supersedes the revenue recognition requirements in ASC 605, Revenue Recognition. This ASU is based on the principle that revenue is recognized to depict the transfer of goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. The ASU also requires additional disclosure about the nature, amount, timing and uncertainty of revenue and cash flows arising from customer contracts, including significant judgments and changes in judgments and assets recognized from costs incurred to obtain or fulfill a contract. The update is effective for the Company on November 1, 2018 using one of two retrospective application methods. The Company is in the process of determining the potential impact of adopting the new revenue standards including conducting internal training sessions and global revenue surveys. The Company anticipates that the impact of adoption will be limited to expanded disclosures with no material impact on its financial position, results of operations, comprehensive income or cash flows.

In February 2016, the FASB issued ASU 2016-02, "Leases (Topic 842)," which amends the lease accounting and disclosure requirements in ASC 840, "Leases". The objective of this update is to increase transparency and comparability among organizations recognizing lease assets and lease liabilities on the balance sheet and disclosing key information about lease arrangements. This ASU will require the recognition of lease assets and lease liabilities for those leases classified as operating leases under previous GAAP. The update is effective for the Company on November 1, 2019 using a modified retrospective approach. The Company is in the process of determining the potential impact of adopting this guidance on its financial position, results of operations, comprehensive income, cash flows and disclosures.
In October 2016, the FASB issued ASU 2016-16, "Intra-Equity Transfers of Assets Other Than Inventory (Topic 740)," which improves the accounting for income tax consequences of intra-entity transfers of assets other than inventory. The update is effective for the Company on November 1, 2018 using a modified retrospective approach and early adoption is permitted, including any interim period. The Company is in the process of determining the potential impact of adopting this guidance on its financial position, results of operations, comprehensive income, cash flows and disclosures.
In March 2017, the FASB issued ASU 2017-07, "Compensation - Retirement Benefits (Topic 715)," which provides additional guidance in ASC 715 for the presentation of net periodic benefit cost in the income statement and on the components eligible for capitalization in assets. This ASU will require the reporting of the service cost component to

be in the same line item as other compensation costs arising from services rendered by the pertinent employees. Also, the other components of net benefit cost will be required to be presented in the income statement separately from the service cost component and outside a subtotal of income from operations. This update also allows only the service cost component to be eligible for capitalization when applicable. The update is effective for the Company on November 1, 2018 using a retrospective approach for the presentation of the service cost component and the other components of net periodic pension cost and net periodic post-retirement benefit cost in the income statement and prospectively, on and after the effective date, for the capitalization of the service cost component of net periodic pension cost and net periodic post-retirement benefit in assets. The Company plans to early adopt ASU 2017-07 on November 1, 2017 and expects the update to have no material impact on the Company's financial position, results of operations, comprehensive income, cash flows or disclosures.

In August 2017, the FASB issued ASU 2017-12, "Derivatives and Hedging (Topic 815)," which amends the accounting and disclosure requirements in ASC 815, "Derivatives and Hedging." The objective of the ASU is to improve transparency and reduce the complexity of hedge accounting. The update is effective for the Company on November 1, 2019 using a modified retrospective approach and early adoption is permitted. The Company plans to early adopt ASU 2017-12 on November 1, 2017 and expects the update to have no material impact on the Company's financial position, results of operations, comprehensive income, cash flows or disclosures.

NOTE 2 – ACQUISITIONS AND DIVESTITURES

During 2017, the Company completed two divestitures, completed no acquisitions, deconsolidated two nonstrategic businesses, and liquidated two non-U.S. nonstrategic businesses. The Company completed two divestitures of businesses in the Rigid Industrial Packaging & Services segment. The Company deconsolidated one nonstrategic business in the Flexible Products & Services segment and one nonstrategic business in the Rigid Industrial Packaging & Services segment. The Company liquidated two non-U.S. nonstrategic businesses in the Rigid Industrial Packaging & Services segment. The loss on disposal of businesses was $1.7 million for the year ended October 31, 2017. Proceeds from divestitures were $5.1 million for the year ended October 31, 2017. Proceeds from divestitures that were completed in fiscal year 2015 and collected during the year ended October 31, 2017 were $0.8 million. The Company has $4.3 million of notes receivable recorded from the sale of businesses, ranging in remaining terms of up to fourteen months.

During 2016, the Company completed four divestitures, one partial sale of ownership interest resulting in deconsolidation of a then wholly-owned indirect subsidiary and no material acquisitions. The divestitures were of nonstrategic businesses: three in the Rigid Industrial Packaging & Services segment and one in the Flexible Products & Services segment. The loss on disposal of businesses was $14.5 million for the year ended October 31, 2016, consisting of an $18.1 million loss on the partial sale of ownership interest and a net gain of $3.6 million for the four divestitures. Proceeds from divestitures and the partial sale of ownership interest were $24.1 million. Additionally, the Company recorded notes receivable of $2.4 million for the sale of two businesses in the second quarter which are expected to be collected in fiscal year 2018.

The partial sale of ownership interest resulting in deconsolidation of a then wholly-owned indirect subsidiary was the result of the sale of 51 percent ownership interest in Earthminded Benelux, NV, a subsidiary in the Rigid Industrial Packaging & Services segment, which, together with the relinquishment of the Company's power to direct the activities that most significantly impact the subsidiary's performance, resulted in deconsolidation. As of September 1, 2016, the Company accounts for its investment in this subsidiary under the equity method of accounting due to the Company's noncontrolling ownership interest.

The $18.1 million loss on the partial sale of ownership interest resulting in deconsolidation was measured as the difference between (a) the fair value of the retained noncontrolling interest of $0.3 million and the consideration transferred of $0.3 million from the unrelated third party purchaser and (b) the carrying value of the former subsidiary's net assets of $18.7 million.

During 2015, the Company completed eight divestitures and no material acquisitions. The divestitures were of nonstrategic businesses: six in the Rigid Industrial Packaging & Services segment and two in the Flexible Products & Services segment. The loss on disposal of businesses was $9.2 million for the year ended October 31, 2015. Proceeds from divestitures were $19.6 million. Additionally, the Company recorded notes receivable of $2.9 million for the sale of these businesses, with terms ranging from three months to five years.

None of the above-referenced divestitures in 2017, 2016 or 2015 qualified as discontinued operations as they do not, individually or in the aggregate, represent a strategic shift that has had a major impact on the Company’s operations or financial results.

NOTE 3 – SALE OF NON-UNITED STATES ACCOUNTS RECEIVABLE

On April 27, 2012, Cooperage Receivables Finance B.V. (the “Main SPV”) and Greif Coordination Center BVBA, an indirect wholly owned subsidiary of Greif, Inc. (“Seller”), entered into the Nieuw Amsterdam Receivables Purchase Agreement (the “European RPA”) with affiliates of a major international bank (the “Purchasing Bank Affiliates”). On April 18, 2017, the Main SPV and Seller amended and extended the term of the existing European RPA. Under the European RPA, as amended, the maximum amount of receivables that may be sold and outstanding under the

European RPA at any time is €100 million ($116.1 million as of October 31, 2017). Under the terms of the European RPA, the Company has the ability to loan excess cash back to the Purchasing Bank Affiliates in the form of a subordinated loan receivable. As of October 31, 2015, the Company had loaned $44.2 million of excess cash back to the Purchasing Bank Affiliates, which was included in prepaid expenses and other current assets. During the first quarter of 2016, the Company collected $44.2 million that had been loaned to the Purchasing Bank Affiliates as excess cash at the end of fiscal 2015.

Table of Contents

Under the terms of the European RPA, the Company has agreed to sell trade receivables meeting certain eligibility requirements that the Seller had purchased from other of the Company's indirect wholly-owned subsidiaries under a factoring agreement. The structure of the transactions provide for a legal true sale, on a revolving basis, of the receivables transferred from the Company's various subsidiaries to the respective banks and their affiliates. The purchaser funds an initial purchase price of a certain percentage of eligible receivables based on a formula, with the initial purchase price approximating 75 percent to 90 percent of eligible receivables. The remaining deferred purchase price is settled upon collection of the receivables. At the balance sheet reporting dates, the Company removes from accounts receivable the amount of proceeds received from the initial purchase price since they meet the applicable criteria of ASC 860, “Transfers and Servicing,” and the Company continues to recognize the deferred purchase price in prepaid expenses and other current assets or other current liabilities. The receivables are sold on a non-recourse basis with the total funds in the servicing collection accounts pledged to the banks between settlement dates.

In October 2007, Greif Singapore Pte. Ltd., an indirect wholly-owned subsidiary of Greif, Inc., entered into the Singapore Receivable Purchase Agreement (the “Singapore RPA”) with a major international bank. The maximum amount of aggregate receivables that may be financed under the Singapore RPA is 15.0 million Singapore Dollars ($11.0 million as of October 31, 2017). Under the terms of the Singapore RPA, the Company has agreed to sell trade receivables in exchange for an initial purchase price of approximately 90 percent of the eligible receivables. The remaining deferred purchase price is settled upon collection of the receivables.

The table below contains information related to the Company’s accounts receivables programs:

	Year Ended October 31,		
(in millions)	2017	2016	2015
European RPA			
Gross accounts receivable sold to third party financial institution	$715.1	$620.3	$715.2
Cash received for accounts receivable sold under the programs	633.4	548.1	633.6
Deferred purchase price related to accounts receivable sold	81.8	71.7	76.2
Loss associated with the programs	0.5	0.8	1.5
Expenses associated with the programs	—	—	—
Singapore RPA			
Gross accounts receivable sold to third party financial institution	$50.1	$44.1	$48.1
Cash received for accounts receivable sold under the programs	43.0	36.4	48.1
Deferred purchase price related to accounts receivable sold	7.1	7.1	—
Loss associated with the programs	0.6	—	0.1
Expenses associated with the programs	0.4	—	0.1
Total RPAs and Agreements			
Gross accounts receivable sold to third party financial institution	$765.2	$664.4	$763.3
Cash received for accounts receivable sold under the program	676.4	584.5	681.7
Deferred purchase price related to accounts receivable sold	88.9	78.8	76.2
Loss associated with the program	1.1	0.8	1.6
Expenses associated with the program	0.4	—	0.1

Table of Contents

(in millions)	October 31, 2017	October 31, 2016
European RPA		
Accounts receivable sold to and held by third party financial institution	$116.3	$106.7
Deferred purchase price asset (liability) related to accounts receivable sold	(4.2)	(0.4)
Singapore RPA		
Accounts receivable sold to and held by third party financial institution	$3.8	$4.0
Uncollected deferred purchase price related to accounts receivable sold	0.5	0.5
Total RPAs and Agreements		
Accounts receivable sold to and held by third party financial institution	$120.1	$110.7
Deferred purchase price asset (liability) related to accounts receivable sold	(3.7)	0.1

The deferred purchase price related to the accounts receivable sold is reflected as prepaid expenses and other current assets or other current liabilities on the Company's consolidated balance sheet and was initially recorded at an amount which approximates its fair value due to the short-term nature of these items. The cash received initially and the deferred purchase price relate to the sale or ultimate collection of the underlying receivables and are not subject to significant other risks given their short nature; therefore, the Company reflects all cash flows under the accounts receivable sales programs as operating cash flows on the Company's consolidated statements of cash flows. Additionally, the Company performs collections and administrative functions on the receivables sold similar to the procedures it uses for collecting all of its receivables, including receivables that are not sold under the European RPA and the Singapore RPA. The servicing liability for these receivables is not material to the consolidated financial statements.

NOTE 4 – ASSETS AND LIABILITIES HELD FOR SALE AND DISPOSALS OF PROPERTY, PLANT AND EQUIPMENT, NET

As of October 31, 2017, there were two asset groups within the Rigid Industrial Packaging Products & Services segment classified as assets and liabilities held for sale. The assets held for sale are being marketed for sale, and it is the Company's intention to complete the sales of these assets within twelve months following their initial classification into assets held for sale. During the third quarter of 2017, one asset group in the Flexible Products & Services segment classified as assets and liabilities held for sale as of October 31, 2016, was reclassified into held and used as of October 31, 2017 and 2016. During the fourth quarter of 2017, one asset group in the Rigid Industrial Packaging & Services segment classified as assets and liabilities held for sale beginning in the first quarter of 2017 was reclassified into held and used as of October 31, 2017. The Company's decision not to sell the asset group resulted in a $2.7 million loss as of October 31, 2017 and is included in the (gain) loss on disposal of properties, plants and equipment, net in the Consolidated Statements of Income.

During 2017, the Company recorded a gain on disposal of properties, plants and equipment, net of $0.4 million. This included special use property sales that resulted in gains of $2.5 million in the Land Management segment, disposals of assets in the Flexible Products & Services segment that resulted in gains of $0.9 million, partially offset by disposals of assets that resulted in a net loss of $0.2 million in the Rigid Industrial Packaging Services segment, a $2.7 million loss on the reclassification of an asset group from held for sale to held and used in the Rigid Industrial Packaging & Services segment, and disposals of assets in the Paper Packaging segment that resulted in a net loss of $0.1 million. For additional information regarding the sale of businesses refer to Note 2 to these consolidated financial statements.

For the year ended October 31, 2016, the Company recorded a gain on disposal of properties, plants and equipment, net of $10.3 million. This included insurance recoveries that resulted in gains of $6.4 million in the Rigid Industrial Packaging & Services segment, disposals of assets in the Flexible Products & Services segment classified as held for sale that resulted in gains of $1.3 million, sales of surplus properties in the Land Management segment that resulted in gains of $1.6 million, insurance recoveries that resulted in gains of $0.2 million in the Paper Packaging & Services segment, and other net gains totaling an additional $0.8 million.

For the year ended October 31, 2015, the Company recorded a gain on disposal of properties, plants and equipment, net of $7.0 million. There were sales of HBU and surplus properties which resulted in gains of $2.7 million in the Land Management segment, a disposal of an asset group previously classified as held for sale in the Rigid Industrial Packaging & Services segment that resulted in a gain of $4.4 million, insurance recoveries which resulted in gains of $3.0 million in the Rigid Industrial Packaging & Services segment, a $3.0 million loss in the Flexible Products & Services segment resulting from the fair market value adjustment of an asset previously classified as held for sale and other miscellaneous losses of $0.1 million.

Table of Contents

For the years ended October 31, 2017 and 2016, the Company recorded no gains relating to the sale of timberland. For the year ended October 31, 2015, the Company recorded a gain of $24.3 million relating to the sale of timberland.

NOTE 5 – GOODWILL AND OTHER INTANGIBLE ASSETS

The following table summarizes the changes in the carrying amount of goodwill by segment for the years ended October 31, 2017 and 2016:

(in millions)	Rigid Industrial Packaging & Services [1]	Paper Packaging & Services	Flexible Products & Services [1]	Land Management	Total
Balance at October 31, 2015	$ 747.6	$ 59.5	$ —	$ —	$ 807.1
Goodwill acquired	—	—	—	—	—
Goodwill allocated to divestitures and businesses held for sale	(17.6)	—	—	—	(17.6)
Goodwill adjustments	—	—	—	—	—
Goodwill impairment charge	—	—	—	—	—
Currency translation	(3.1)	—	—	—	(3.1)
Balance at October 31, 2016	$ 726.9	$ 59.5	$ —	$ —	$ 786.4
Goodwill acquired	—	—	—	—	—
Goodwill allocated to divestitures and businesses held for sale	(9.2)	—	—	—	(9.2)
Goodwill adjustments	—	—	—	—	—
Goodwill impairment charge	(13.0)	—	—	—	(13.0)
Currency translation	21.2	—	—	—	21.2
Balance at October 31, 2017	$ 725.9	$ 59.5	$ —	$ —	$ 785.4

[1] Accumulated goodwill impairment loss was $63.3 million as of October 31, 2017. Included in the accumulated goodwill impairment loss was $13.0 million related to the Rigid Industrial Packaging & Services segment and $50.3 million related to the Flexible Products & Services segment. Accumulated goodwill impairment loss was $50.3 million as of October 31, 2016 and 2015, related to the Flexible Products & Services segment.

The Company reviews goodwill by reporting unit and indefinite-lived intangible assets for impairment as required by ASC 350, “Intangibles – Goodwill and Other,” either annually in the fourth quarter as of August 1, or whenever events and circumstances indicate impairment may have occurred. A reporting unit is the operating segment, or a business one level below that operating segment (the component level) if discrete financial information is prepared and regularly reviewed by segment management. The components are aggregated into reporting units for purposes of goodwill impairment testing to the extent they share similar qualitative and quantitative characteristics.

During the fourth quarter of 2017 the Company performed an assessment of its operating segments and determined that as a result of changes in the way the chief operating decision maker receives and reviews financial information, a realignment of its operating segment structure was necessary. As a result of the operating segment realignment, the Company's reporting unit structure was updated for consistency. As of August 1, 2017, the Company realigned its operating segments to include eight operating segments: Rigid Industrial Packaging & Services – North America; Rigid Industrial Packaging & Services – Latin America; Rigid Industrial Packaging & Services – Europe, Middle East and Africa; Rigid Industrial Packaging & Services – Asia Pacific; and Rigid Industrial Packaging & Services – Tri-Sure; Paper Packaging & Services; Flexible Products & Services; and Land Management. The Company's eight operating segments are aggregated into four reportable business segments by combining the Rigid Industrial Packaging & Services – North America; Rigid Industrial Packaging & Services – Latin America; Rigid Industrial Packaging & Services – Europe, Middle East and Africa; Rigid Industrial Packaging & Services – Asia Pacific; and Rigid Industrial Packaging & Services – Tri-Sure operating segments. The Company’s reporting units are the same as the operating segments. As a result of the realignment, goodwill was reassigned to each of the Rigid Industrial Packaging & Services reporting units using a relative fair value approach.

The Company performed its annual goodwill review as of August 1, 2017, for each of the reporting units with a goodwill balance under both the former and current reporting unit structure. The impairment test under the former reporting unit structure concluded that no impairment existed as of August 1, 2017. The impairment test under the updated reporting unit structure concluded that the carrying value of the Rigid Industrial Packaging & Services – Latin America reporting unit exceeded the fair value of the reporting unit and the goodwill of the Rigid Industrial Packaging & Services – Latin America reporting unit of $13.0 million was fully impaired.

Table of Contents

The fair value of the Rigid Industrial Packaging & Services – Latin America reporting unit was determined using a combination of the income approach by discounting estimated future cash flows and the market multiple approach. The cash flow projections were prepared based upon the evaluation of the historical performance and future growth expectations for the reporting unit. Revenue was based on the 2017 forecast as of August 1, 2017 with a long-term growth rate applied to future periods. The most critical assumptions within the cash flow projections are revenue growth rates and forecasted gross margin percentages. The most critical assumption within the market multiple calculation is the multiple selected.

Prior to the change in the fourth quarter of 2017, the Company's reporting unit structure consisted of five reporting units: Rigid Industrial Packaging & Services – Americas; Rigid Industrial Packaging & Services – Europe, Middle East, Africa and Asia Pacific; Paper Packaging & Services; Flexible Products & Services; and Land Management. The Company performed its annual goodwill impairment test as of August 1, 2016 and 2015 which resulted in no goodwill impairment under the then-current reporting unit structure.

Refer to Note 9 herein for further discussion regarding goodwill allocated to divestitures and businesses held for sale.

The following table summarizes the carrying amount of net intangible assets by class as of October 31, 2017 and 2016:

(in millions)	Gross Intangible Assets	Accumulated Amortization	Net Intangible Assets
October 31, 2017:			
Indefinite lived:			
Trademarks and patents	$ 13.4	$ —	$ 13.4
Definite lived:			
Customer relationships	$ 170.2	$ 99.7	$ 70.5
Trademarks and patents	11.6	4.9	6.7
Non-compete agreements	—	—	—
Other	23.4	16.0	7.4
Total	$ 218.6	$ 120.6	$ 98.0
October 31, 2016:			
Indefinite lived:			
Trademarks and patents	$ 13.0	$ —	$ 13.0
Definite lived:			
Customer relationships	$ 167.6	$ 86.9	$ 80.7
Trademarks and patents	12.1	4.8	7.3
Non-compete agreements	1.0	0.9	0.1
Other	23.5	14.0	9.5
Total	$ 217.2	$ 106.6	$ 110.6

Gross intangible assets increased by $1.4 million for the year ended October 31, 2017. The increase was attributable to $6.2 million of currency fluctuations and the write-off of $4.8 million of fully-amortized assets. Amortization expense was $13.5 million, $16.8 million and $18.4 million for the years ended October 31, 2017, 2016 and 2015, respectively. Amortization expense for the next five years is expected to be $14.9 million in 2018, $14.8 million in 2019, $14.2 million in 2020, $12.7 million in 2021 and $8.9 million in 2022.

Definite lived intangible assets for the periods presented are subject to amortization and are being amortized using the straight-line method over periods that are contractually or legally determined or through purchase price accounting. Indefinite lived intangibles of approximately $13.4 million as of October 31, 2017, related primarily to the Tri-Sure trademark and trade names related to Blagden Express, Closed-loop and Box Board, are not amortized.

Table of Contents

NOTE 6 – RESTRUCTURING CHARGES

The following is a reconciliation of the beginning and ended restructuring reserve balances for the years ended October 31, 2017 and 2016:

(in millions)	Employee Separation Costs	Other Costs	Total
Balance at October 31, 2015	$ 14.7	$ 6.6	$21.3
Costs incurred and charged to expense	16.7	10.2	26.9
Costs paid or otherwise settled	(22.2)	(15.6)	(37.8)
Balance at October 31, 2016	$ 9.2	$ 1.2	$10.4
Costs incurred and charged to expense	9.0	3.7	12.7
Costs paid or otherwise settled	(14.3)	(3.6)	(17.9)
Balance at October 31, 2017	$ 3.9	$ 1.3	$5.2

The focus for restructuring activities in 2017 was to continue to rationalize operations and close underperforming assets in the Rigid Industrial Packaging & Services and Flexible Products & Services segments. During the year ended October 31, 2017, the Company recorded restructuring charges of $12.7 million, as compared to $26.9 million of restructuring charges recorded during the year ended October 31, 2016. The restructuring activity for the year ended October 31, 2017 consisted of $9.0 million in employee separation costs and $3.7 million in other restructuring costs, primarily consisting of professional fees and other fees associated with restructuring activities. There were two plants closed in 2017, and a total of 157 employees severed throughout 2017 as part of the Company's restructuring efforts.

The following is a reconciliation of the total amounts expected to be incurred from open restructuring plans or plans that are being formulated and have not been announced as of the filing date of this Form 10-K. Remaining amounts expected to be incurred were $14.9 million as of October 31, 2017:

(in millions)	Total Amounts Expected to be Incurred	Amounts Incurred During the year ended October 31, 2017	Amounts Remaining to be Incurred
Rigid Industrial Packaging & Services:			
Employee separation costs	$ 20.3	$ 8.0	12.3
Other restructuring costs	4.4	3.2	1.2
	24.7	11.2	13.5
Flexible Products & Services:			
Employee separation costs	1.2	0.7	0.5
Other restructuring costs	1.4	0.5	0.9
	2.6	1.2	1.4
Paper Packaging & Services:			
Employee separation costs	0.3	0.3	—
Other restructuring costs	—	—	—
	0.3	0.3	—
	$ 27.6	$ 12.7	$ 14.9

The focus for restructuring activities in 2016 was to rationalize operations and close underperforming assets in the Rigid Industrial Packaging & Services and Flexible Products & Services segments. During 2016, the Company recorded restructuring charges of $26.9 million, consisting of $16.7 million in employee separation costs and $10.2 million in other restructuring costs, primarily consisting of professional fees incurred for services specifically associated with employee separation and relocation. There were four plants closed and a total of 254 employees severed throughout 2016 as part of the Company's restructuring efforts.

The focus for restructuring activities in 2015 was to rationalize and close underperforming assets throughout all segments. During 2015, the Company recorded restructuring charges of $40.0 million, consisting of $27.8 million in employee separation costs and $12.2 million in other restructuring costs, primarily consisting of professional fees incurred for services specifically associated with employee separation and relocation. There were eight plants closed and a total of 1,020 employees severed throughout 2015 as part of the Company's restructuring efforts.

NOTE 7 – CONSOLIDATION OF VARIABLE INTEREST ENTITIES

The Company evaluates whether an entity is a variable interest entity ("VIE") whenever reconsideration events occur and performs reassessments of all VIE's quarterly to determine if the primary beneficiary status is appropriate. The Company consolidates VIE's for which it is the primary beneficiary. If the Company is not the primary beneficiary and an ownership interest is held, the VIE is accounted for under the equity or cost methods of accounting, as appropriate. When assessing the determination of the primary beneficiary, the Company considers all relevant facts and circumstances, including: the power to direct the activities of the VIE that most significantly impact the VIE's economic performance; and the obligation to absorb the expected losses and/or the right to receive the expected returns of the VIE.

Significant Nonstrategic Timberland Transactions

On March 28, 2005, Soterra LLC (a wholly owned subsidiary) entered into two real estate purchase and sale agreements with Plum Creek Timberlands, L.P. ("Plum Creek") to sell approximately 56,000 acres of timberland and related assets located primarily in Florida for an aggregate sales price of approximately $90 million, subject to closing adjustments. In connection with the closing of one of these agreements, Soterra LLC sold approximately 35,000 acres of timberland and associated assets in Florida, Georgia and Alabama for $51.0 million, resulting in a pretax gain of $42.1 million, on May 23, 2005. The purchase price was paid in the form of cash and a $50.9 million purchase note payable (the "Purchase Note") by an indirect subsidiary of Plum Creek (the "Buyer SPE"). Soterra LLC contributed the Purchase Note to STA Timber LLC ("STA Timber"), one of the Company's indirect wholly owned subsidiaries. The Purchase Note is secured by a Deed of Guarantee issued by Bank of America, N.A., London Branch, in an amount not to exceed $52.3 million (the "Deed of Guarantee"), as a guarantee of the due and punctual payment of principal and interest on the Purchase Note.

The Company completed the second and final phase of these transactions in the first and second quarters of 2006, respectively, with the sale of 15,300 acres and another approximately 5,700 acres.

On May 31, 2005, STA Timber issued in a private placement its 5.20% Senior Secured Notes due August 5, 2020 (the "Monetization Notes") in the principal amount of $43.3 million. In connection with the sale of the Monetization Notes, STA Timber entered into note purchase agreements with the purchasers of the Monetization Notes (the "Note Purchase Agreements") and related documentation. The Monetization Notes are secured by a pledge of the Purchase Note and the Deed of Guarantee. The Monetization Notes may be accelerated in the event of a default in payment or a breach of the other obligations set forth therein or in the Note Purchase Agreements or related documents, subject in certain cases to any applicable cure periods, or upon the occurrence of certain insolvency or bankruptcy related events. The Monetization Notes are subject to a mechanism that may cause them, subject to certain conditions, to be extended to November 5, 2020. The proceeds from the sale of the Monetization Notes were primarily used for the repayment of indebtedness. Greif, Inc. and its other subsidiaries have not extended any form of guaranty of the principal or interest on the Monetization Notes. Accordingly, Greif, Inc. and its other subsidiaries will not become directly or contingently liable for the payment of the Monetization Notes at any time.

The Buyer SPE is deemed to be a VIE since the assets of the Buyer SPE are not available to satisfy the liabilities of the Buyer SPE. The Buyer SPE is a separate and distinct legal entity from the Company and no ownership interest in the Buyer SPE is held by the Company, but the Company is the primary beneficiary because it has (1) the power to direct the activities of the VIE that most significantly impact the VIE's economic performance, and (2) the obligation to absorb losses of the VIE that could potentially be significant to the VIE or the right to receive benefits from the VIE that could potentially be significant to the VIE. As a result, Buyer SPE has been consolidated into the operations of the Company.

As of October 31, 2017 and 2016, assets of the Buyer SPE consisted of $50.9 million of restricted bank financial instruments which are expected to be held to maturity. For each of the years ended October 31, 2017, 2016 and 2015, the Buyer SPE recorded interest income of $2.4 million.

As of October 31, 2017 and 2016, STA Timber had long-term debt of $43.3 million. For each of the years ended October 31, 2017, 2016 and 2015, STA Timber recorded interest expense of $2.2 million. STA Timber is exposed to

credit-related losses in the event of nonperformance by the issuer of the Deed of Guarantee.
Flexible Packaging Joint Venture
On September 29, 2010, Greif, Inc. and one of its indirect subsidiaries formed a joint venture (referred to herein as the “Flexible Packaging JV” or "FPS VIE") with Dabbagh Group Holding Company Limited and one of its subsidiaries, originally National

Table of Contents

Scientific Company Limited and now Gulf Refined Packaging for Industrial Packaging Company LTD ("GRP"). The Flexible Packaging JV owns the operations in the Flexible Products & Services segment. The Flexible Packaging JV has been consolidated into the operations of the Company as of its formation date of September 29, 2010.

The Flexible Packaging JV is deemed to be a VIE since the total equity investment at risk is not sufficient to permit the legal entity to finance its activities without additional subordinated financial support. The major factors that led to the conclusion that the Company was the primary beneficiary of this VIE was that (1) the Company has the power to direct the most significant activities due to its ability to direct the operating decisions of the FPS VIE, which power is derived from the significant CEO discretion over the operations of the FPS VIE combined with the Company's sole and exclusive right to appoint the CEO of the FPS VIE, and (2) the significant variable interest through the Company's equity interest in the FPS VIE.

The economic and business purpose underlying the Flexible Packaging JV is to establish a global industrial flexible products enterprise through a series of targeted acquisitions and major investments in plant, machinery and equipment. All entities contributed to the Flexible Packaging JV were existing businesses acquired by an indirect subsidiary of the Company and that were reorganized under Greif Flexibles Asset Holding B.V. and Greif Flexibles Trading Holding B.V. (“Asset Co.” and “Trading Co.”), respectively. The Flexibles Packaging J.V. also includes Global Textile Company LLC (“Global Textile”), which owned and operated a fabric hub in the Kingdom of Saudi Arabia that commenced operations in the fourth quarter of 2012 and ceased operations in the fourth quarter of 2014. The Company has 51 percent ownership in Trading Co. and 49 percent ownership in Asset Co. and Global Textile. However, the Company and GRP have equal economic interests in the Flexible Packaging JV, notwithstanding the actual ownership interests in the various legal entities.

All investments, loans and capital contributions are to be shared equally by the Company and GRP and each partner has committed to contribute capital of up to $150.0 million and obtain third party financing for up to $150.0 million as required.

The following table presents the Flexible Packaging JV total net assets:

(in millions)	October 31, 2017	October 31, 2016
Cash and cash equivalents	$ 14.4	$ 15.2
Trade accounts receivable, less allowance of $2.1 in 2017 and $2.8 in 2016	52.5	43.3
Inventories	53.3	50.9
Properties, plants and equipment, net	31.2	25.0
Other assets	25.8	37.3
Total assets	$ 177.2	$ 171.7
Accounts payable	$ 33.8	$ 30.7
Other liabilities	30.2	43.7
Total liabilities	$ 64.0	$ 74.4

Net (income) loss attributable to the noncontrolling interest in the Flexible Packaging JV for the years ended October 31, 2017, 2016 and 2015 were $(6.3) million, $8.2 million and $14.2 million, respectively.

Non-United States Accounts Receivable VIE

As further described in Note 3, Cooperage Receivables Finance B.V. is a party to the European RPA. Cooperage Receivables Finance B.V. is deemed to be a VIE since this entity is not able to satisfy its liabilities without the financial support from the Company. While this entity is a separate and distinct legal entity from the Company and no ownership interest in this entity is held by the Company, the Company is the primary beneficiary because it has (1) the power to direct the activities of the VIE that most significantly impact the VIE’s economic performance, and (2) the obligation to absorb losses of the VIE that could potentially be significant to the VIE. As a result, Cooperage Receivables Finance B.V. has been consolidated into the operations of the Company.

EarthMinded Benelux NV VIE

On August 31, 2016, a wholly owned indirect subsidiary of Greif, Inc. sold 51 percent of its shares in its then wholly owned subsidiary, EarthMinded Benelux NV for $0.3 million.

Table of Contents

EarthMinded Benelux NV is a VIE due to insufficient equity investment at risk. The Company is not the primary beneficiary of this VIE since (1) the Company does not have the power to direct the most significant activities due to its lack of ability to direct the financing, capital and operating decisions of the VIE, and (2) the Company does not have the obligation to absorb losses of the VIE that could potentially be significant to the VIE. As a result, EarthMinded Benelux NV was deconsolidated from the operations of the Company as of August 31, 2016. The retained noncontrolling interest of $0.4 million as of October 31, 2017 and $0.3 million as of October 31, 2016 is included in prepaid expenses and other current assets in the consolidated balance sheets and the Company's share of the operations is classified in equity earnings of unconsolidated affiliates, net of tax, in the consolidated statements of income.

NOTE 8 – LONG-TERM DEBT

Long-term debt is summarized as follows:

(in millions)	October 31, 2017	October 31, 2016
2017 Credit Agreement	$ 323.8	$ —
Prior Credit Agreement	—	201.2
Senior Notes due 2017	—	300.1
Senior Notes due 2019	248.0	247.0
Senior Notes due 2021	230.9	216.6
Receivables Facility	150.0	—
Other debt	6.5	9.7
	959.2	974.6
Less current portion	15.0	—
Less deferred financing costs	6.4	—
Long-term debt	$ 937.8	$ 974.6

2017 Credit Agreement

On November 3, 2016, the Company and certain of its international subsidiaries entered into a new senior secured credit agreement (the “2017 Credit Agreement”) with a syndicate of financial institutions. The 2017 Credit Agreement replaced in its entirety the $1.0 billion senior secured credit agreement entered into on December 19, 2012, by the Company and two of its international subsidiaries ("Prior Credit Agreement") with a syndicate of financial institutions. The total available borrowing under the 2017 Credit Agreement was $753.1 million as of October 31, 2017, which has been reduced by $11.9 million for outstanding letters of credit, all of which was then available without violating covenants.

The 2017 Credit Agreement provides for an $800.0 million revolving multicurrency credit facility expiring November 3, 2021, and a $300.0 million term loan, with quarterly principal installments that commenced on April 30, 2017, through maturity on November 3, 2021, both with an option to add an aggregate of $550.0 million to the facilities with the agreement of the lenders. The Company used the term loan on February 1, 2017, to repay the principal of the Company’s $300.0 million 6.75% Senior Notes that matured on that date. The revolving credit facility is available to fund ongoing working capital and capital expenditure needs, for general corporate purposes, and to finance acquisitions. Interest is based on either a Eurodollar rate or a base rate that resets periodically plus a calculated margin amount. On November 3, 2016, a total of approximately $208.0 million was used to pay the obligations outstanding under the Prior Credit Agreement in full and certain costs and expenses incurred in connection with the 2017 Credit Agreement. The financing costs associated with the 2017 Credit Agreement totaled $5.6 million as of October 31, 2017, and are recorded as a direct deduction from the long-term debt liability.

The 2017 Credit Agreement contains certain covenants, which include financial covenants that require the Company to maintain a certain leverage ratio and an interest coverage ratio. The leverage ratio generally requires that at the end of any fiscal quarter the Company will not permit the ratio of (a) its total consolidated indebtedness, to (b) the Company's net income plus depreciation, depletion, and amortization, interest expense (including capitalized interest), and income taxes, minus certain extraordinary gains and non-recurring gains (or plus certain extraordinary losses and non-recurring losses) and plus or minus certain other items for the preceding twelve months ("adjusted EBITDA") to be greater than 4.00 to 1.00 (or 3.75 to 1.00, during any collateral release period). The interest coverage ratio generally requires that at the end of any fiscal quarter the Company will not permit the ratio of (a) adjusted EBITDA, to (b) the consolidated interest expense to the extent paid or payable, to be less than 3.00 to 1.00, during the applicable preceding twelve month period.

Table of Contents

The terms of the 2017 Credit Agreement limit the Company's ability to make "restricted payments", which include dividends and purchases, redemptions and acquisitions of equity interests of the Company. The repayment of this facility is secured by a security interest in the personal property of the Company and certain of its United States subsidiaries, including equipment and inventory and certain intangible assets, as well as a pledge of the capital stock of substantially all of the Company's United States subsidiaries and is secured, in part, by the capital stock of the non-U.S. borrowers. However, in the event that the Company receives and maintains an investment grade rating from either Moody's Investors Service, Inc. or Standard & Poor's Corporation, the Company may request the release of such collateral. The payment of outstanding principal under the 2017 Credit Agreement and accrued interest thereon may be accelerated and become immediately due and payable upon the Company's default in its payment or other performance obligations or its failure to comply with the financial and other covenants in the 2017 Credit Agreement, subject to applicable notice requirements and cure periods as provided in the 2017 Credit Agreement.

As of October 31, 2017, $323.8 million was outstanding under the 2017 Credit Agreement. The current portion of the 2017 Credit Agreement was $15.0 million and the long-term portion was $308.8 million. The weighted average interest rate on the 2017 Credit Agreement was 2.20% for the year ended October 31, 2017. The actual interest rate on the 2017 Credit Agreement was 2.70% as of October 31, 2017.

Senior Notes due 2017

On February 9, 2007, the Company issued $300.0 million of 6.75% Senior Notes due February 1, 2017. These Senior Notes were paid in full on February 1, 2017 with $300.0 million of term loan proceeds borrowed under the 2017 Credit Agreement.

Senior Notes due 2019

On July 28, 2009, the Company issued $250.0 million of 7.75% Senior Notes due August 1, 2019. Interest on these Senior Notes is payable semi-annually. The financing costs associated with the Senior Notes due 2019 totaled $0.8 million as of October 31, 2017, and are recorded as a direct deduction from the long-term liability.

Senior Notes due 2021

On July 15, 2011, Greif, Inc.’s wholly-owned subsidiary, Greif Nevada Holdings, Inc., S.C.S. issued €200.0 million of 7.375% Senior Notes due July 15, 2021. These Senior Notes are fully and unconditionally guaranteed on a senior basis by Greif, Inc. Interest on these Senior Notes is payable semi-annually.

United States Trade Accounts Receivable Credit Facility

On September 28, 2016, certain domestic subsidiaries of the Company, including Greif Receivables Funding LLC (“Greif Funding”) and Greif Packaging LLC (“Greif Packaging”),entered into a receivables financing facility (the “Receivables Facility”) with Cooperatieve Rabobank U.A., New York Branch (“Rabobank”), as the agent, managing agent, administrator and committed investor, by executing and delivering the Second Amended and Restated Transfer and Administration Agreement (the “Second Amended TAA”). The Second Amended TAA was renewed and amended on September 27, 2017 to extend the facility through September 26, 2018 and to add The Bank of Tokyo-Mitsubishi UFJ Ltd. as a managing agent, an administrator and a committed investor. The maximum amount available to be borrowed under the Receivables Facility is $150.0 million, subject to the amounts of eligible receivables.

The Second Amended TAA replaced in its entirety the Amended and Restated Transfer and Administration Agreement, dated as of September 30, 2013 with PNC Bank, National Association, as a committed investor, managing agent, administrator and agent (the "Prior TAA"), which provided for a $150.0 million Receivables Facility.

Greif Funding is a direct subsidiary of Greif Packaging and is included in the Company’s consolidated financial statements. However, because Greif Funding is a separate and distinct legal entity from the Company, the assets of Greif Funding are not available to satisfy the liabilities and obligations of the Company, Greif Packaging or other subsidiaries of the Company, and the liabilities of Greif Funding are not the liabilities or obligations of the Company or its other subsidiaries.

The Second Amended TAA, as amended, provides for the ongoing purchase by Rabobank and The Bank of Tokyo-Mitsubishi UFJ Ltd. of receivables from Greif Funding, which Greif Funding will have purchased from Greif Packaging and certain other domestic subsidiaries of the Company as the originators under the Second Amended and Restated Sale Agreement, dated as of September 28, 2016 (the “Second Amended Sale Agreement”). Greif Packaging will service and collect on behalf of Greif Funding those receivables sold to Greif Funding under the Second Amended Sale Agreement. The maturity date of the Receivables Facility is September 26, 2018, subject to earlier termination as provided in the Second Amended TAA, including acceleration upon an event of default as provided therein, or such later date to which the purchase commitment may be extended by agreement of the parties. In addition, Greif Funding can terminate the Receivables Facility at any time upon five days prior written notice. The Company has guaranteed the performance by Greif Funding, Greif Packaging and its other participating subsidiaries of their respective obligations under the Second Amended TAA, as amended, the Second Amended Sale Agreement and related agreements, but has not guaranteed the collectability of the receivables. A significant portion of the proceeds from the Receivables Facility were used to pay the obligations under the Prior TAA. The remaining proceeds are to be used to pay certain fees, costs and expenses incurred in connection with the Receivables Facility and for working capital and general corporate purposes.

The Receivables Facility is secured by certain trade accounts receivables relating to the Rigid Industrial Packaging and Paper Packaging & Services businesses of Greif Packaging and other domestic subsidiaries of the Company in the United States and bears interest at a variable rate based on the London Interbank Offered Rate or an applicable base rate, plus a margin, or a commercial paper rate, all as provided in the Second Amended TAA, as amended. Interest is payable on a monthly basis and the principal balance is payable upon termination of the Receivables Facility.

Other

In addition to the amounts borrowed under the 2017 Credit Agreement and proceeds from the Senior Notes and the Receivables Facility, as of October 31, 2017, the Company had outstanding other debt of $6.5 million in long-term debt and $14.5 million in short-term borrowings, compared to other debt of $9.7 million in long-term debt and $51.6 million in short-term borrowings, as of October 31, 2016. There are no financial covenants associated with this other debt.

Annual maturities are $165.0 million in 2018, $268.7 million in 2019, $30.0 million in 2020, $254.0 million in 2021, $241.3 million in 2022 and $0.2 million thereafter.

Table of Contents

NOTE 9 – FINANCIAL INSTRUMENTS AND FAIR VALUE MEASUREMENTS

Recurring Fair Value Measurements

The following table presents the fair value of those assets and (liabilities) measured on a recurring basis as of October 31, 2017 and 2016:

	October 31, 2017				
	Fair Value Measurement				Balance Sheet Location
(in millions)	Level 1	Level 2	Level 3	Total	
Interest rate derivatives	$—	$ 8.9	$ —	$8.9	Other long-term assets
Foreign exchange hedges	—	0.1	—	0.1	Prepaid expenses and other current assets
Foreign exchange hedges	—	(0.6)	—	(0.6)	Other current liabilities
Insurance annuity	—	—	20.7	20.7	Other long-term assets
Total[1]	$—	$ 8.4	$ 20.7	$29.1	

	October 31, 2016				
	Fair Value Measurement				Balance Sheet Location
(in millions)	Level 1	Level 2	Level 3	Total	
Foreign exchange hedges	$—	$ 0.3	$ —	$0.3	Prepaid expenses and other current assets
Foreign exchange hedges	—	(0.3)	—	(0.3)	Other current liabilities
Insurance annuity	—	—	20.1	20.1	Other long-term assets
Total	$—	$ —	$ 20.1	$20.1	

The carrying amounts of cash and cash equivalents, trade accounts receivable, notes receivable, accounts payable, current liabilities and short-term borrowings as of October 31, 2017 and 2016 approximate their fair values because of the short-term nature of these items and are not included in this table.

Interest Rate Derivatives

The Company has various borrowing facilities which charge interest based on the one month U.S. dollar LIBOR rate plus an interest spread. During the first quarter of 2017, the Company entered into a forward interest rate swap with a notional amount of $300.0 million. As of February 1, 2017, the Company began to receive variable rate interest payments based upon one month U.S. dollar LIBOR and in return was obligated to pay interest at a fixed rate of 1.194%. This effectively converted the borrowing rate on $300.0 million of debt from a variable rate to a fixed rate. This derivative is designated as a cash flow hedge for accounting purposes. Accordingly, any effective portion of the gain or loss on this derivative instrument is reported as a component of other comprehensive income and reclassified into earnings in the same line item associated with the forecasted transaction and in the same period during which the hedged transaction affects earnings. Any ineffective portion of the gain or loss on the derivative instrument is recognized into earnings. For additional disclosures of the gain or loss included with other comprehensive income, see Note 18 to these consolidated financial statements. The assumptions used in measuring fair value of the interest rate derivative are considered level 2 inputs, which are based upon LIBOR and interest paid based upon a designated fixed rate over the life of the swap agreements.

The Company had two interest rate derivatives (floating to fixed swap agreements designated as cash flow hedges) with a total notional amount of $150.0 million through December of fiscal 2015. The effective portion of the gain or loss on these derivative instruments was reported as a component of other comprehensive income and reclassified into earnings in the same line item associated with the forecasted transaction and in the same period during which the hedged transaction affected earnings.

Losses reclassified to earnings under these contracts were $0.3 million, zero and $0.2 million for the years ended October 31, 2017, 2016 and 2015, respectively. These losses were recorded within the consolidated statements of income as interest expense, net.

Foreign Exchange Hedges

The Company conducts business in various international currencies and is subject to risks associated with changing foreign exchange rates. The Company's objective is to reduce volatility associated with foreign exchange rate changes. Accordingly, the

76

Company enters into various contracts that change in value as foreign exchange rates change to protect the value of certain existing foreign currency assets and liabilities, commitments and anticipated foreign currency cash flows.

As of October 31, 2017, the Company had outstanding foreign currency forward contracts in the notional amount of $80.1 million ($78.9 million as of October 31, 2016). Adjustments to fair value are recognized in earnings, offsetting the impact of the hedged item. The assumptions used in measuring fair value of foreign exchange hedges are considered level 2 inputs, which were based on observable market pricing for similar instruments, principally foreign exchange futures contracts. Realized losses recorded in other expense, net under fair value contracts were $1.8 million, $2.7 million and $6.0 million for the years ended October 31, 2017, 2016 and 2015, respectively.

Other Financial Instruments

The fair values of the Company's 2017 Credit Agreement and the Receivables Facility do not materially differ from carrying value as the Company's cost of borrowing is variable and approximates current borrowing rates. The fair values of the Company's long-term obligations are estimated based on either the quoted market prices for the same or similar issues or the current interest rates offered for the debt of the same remaining maturities, which are considered level 2 inputs in accordance with ASC Topic 820, "Fair Value Measurements and Disclosures."

The following table presents the estimated fair values for the Company's Senior Notes and Assets held by special purpose entities:

(in millions)	October 31, 2017	October 31, 2016
Senior Notes due 2017 estimated fair value	$ —	$ 302.4
Senior Notes due 2019 estimated fair value	272.0	280.1
Senior Notes due 2021 estimated fair value	281.0	264.9
Assets held by special purpose entities estimated fair value	52.5	54.3

Pension Plan Assets

On an annual basis the Company compares the asset holdings of its pension plan to targets it previously established. The pension plan assets are categorized as equity securities, debt securities, fixed income securities, insurance annuities or other assets, which are considered level 1, level 2 and level 3 fair value measurements. The typical asset holdings include:

- Common Stock: Valued based on quoted prices and are primarily exchange-traded.
- Mutual funds: Valued at the Net Asset Value "NAV" available daily in an observable market.
- Common collective trusts: Unit value calculated based on the observable NAV of the underlying investment.