PACKAGING CORP OF AMERICA
Form 10-K
February 26, 2016

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

Form 10-K
ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d)
OF THE SECURITIES EXCHANGE ACT OF 1934
For the fiscal year ended December 31, 2015
Commission file number 1-15399

(Exact Name of Registrant as Specified in its Charter)

Delaware	36-4277050
(State or Other Jurisdiction of Incorporation or Organization)	(I.R.S. Employer Identification No.)
1955 West Field Court, Lake Forest, Illinois	60045
(Address of Prinicpal Executive Offices)	(Zip Code)

Registrant's telephone number, including area code: (847) 482-3000

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

Title of Each Class	Name of Each Exchange On Which Registered
Common Stock, $0.01 par value	New York Stock Exchange

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

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.
Yes x No ¨
Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act.
Yes ¨ No x
Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes x No ¨
Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes x No ¨
Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§229.405 of this chapter) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.
x
Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer," and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer	x	Accelerated filer	¨

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

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

At June 30, 2015, the last day of the Registrant's most recently completed second fiscal quarter, the aggregate market value of Registrant's common equity held by non-affiliates was approximately $6,119,141,093 based upon the closing sale price as reported on the New York Stock Exchange. This calculation of market value has been made for the purposes of this report only and should not be considered as an admission or conclusion by the Registrant that any person is in fact an affiliate of the Registrant.

On February 19, 2016, there were 94,251,749 shares of Common Stock outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Specified portions of the Proxy Statement for the Registrant's 2016 Annual Meeting of Stockholders are incorporated by reference to the extent indicated in Part III of this Form 10-K.

Table of Contents

	PART I	
Item 1.	Business	1
	Packaging	2
	Paper	5
	Corporate and Other	7
	Employees	7
	Environmental Matters	7
	Executive Officers of the Registrant	7
Item 1A.	Risk Factors	8
Item 1B.	Unresolved Staff Comments	12
Item 2.	Properties	12
Item 3.	Legal Proceedings	12
Item 4.	Mine Safety Disclosure	12
PART II		
Item 5.	Market for Registrant's Common Equity, Related Stockholder Matters, and Issuer Purchases of Equity Securities	13
Item 6.	Selected Financial Data	16
Item 7.	Management's Discussion and Analysis of Financial Condition and Results of Operations	17
	Overview	17
	Executive Summary	17
	Industry and Business Conditions	18
	Outlook	19
	Results of Operations	19
	Liquidity and Capital Resources	23
	Commitments	27
	Off-Balance-Sheet Arrangements	28
	Inflation and Other General Cost Increases	28
	Environmental Matters	29
	Critical Accounting Policies and Estimates	30
	New and Recently Adopted Accounting Standards	33
	Reconciliations of Non-GAAP Financial Measures to Reported Amounts	34
Item 7A.	Quantitative and Qualitative Disclosures About Market Risk	36
Item 8.	Financial Statements and Supplementary Data	37
Item 9.	Changes In and Disagreements With Accountants on Accounting and Financial Disclosure	79

Item 9A.	Controls and Procedures	79
Item 9B.	Other Information	80
PART III		
Item 10.	Directors, Executive Officers, and Corporate Governance	81
Item 11.	Executive Compensation	81
Item 12.	Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters	81

Item 13.	Certain Relationships and Related Transactions, and Director Independence	82
Item 14.	Principal Accounting Fees and Services	82
PART IV		
Item 15.	Exhibits, Financial Statement Schedules	83
	Signatures	87

PART I

Item 1. BUSINESS

Packaging Corporation of America ("we," "us," "our," "PCA," or the "Company") is the fourth largest producer of containerboard and corrugated packaging products in the United States and the third largest producer of uncoated freesheet in North America, based on production capacity. We operate eight mills and 93 corrugated products manufacturing plants. We are headquartered in Lake Forest, Illinois, and have approximately 13,000 employees. Our operations are primarily in the United States and we have some converting and distribution operations in Canada.

On October 25, 2013, PCA acquired Boise Inc. for $2.1 billion, including the fair value of assumed debt. After the acquisition, we began reporting three reportable segments: Packaging, Paper, and Corporate and Other. We present information pertaining to each of our segments and the geographic areas in which they operate in Note 18, Segment Information, of the Notes to Consolidated Financial Statements in "Part II, Item 8. Financial Statements and Supplementary Data" of this Form 10-K. For more information about our acquisition of Boise, see Note 3, Acquisitions and Dispositions, of the Notes to Consolidated Financial Statements.

Production and Shipments

The following table summarizes the Packaging segment's containerboard production and corrugated products shipments and the Paper segment's production. Boise's historical data for the period prior to the acquisition on October 25, 2013, are included for comparative purposes only, and are not included in PCA's historical results.

			First Quarter	Second Quarter	Third Quarter	Fourth Quarter (a)	Full Year
Containerboard Production (b) (thousand tons)	PCA	2015	882	938	933	903	3,656
		2014	821	846	858	927	3,452
		2013	646	629	671	803	2,749
	Boise	2013	171	188	196	50	605
Corrugated Shipments (BSF)	PCA	2015	11.9	12.4	12.5	12.1	48.9
		2014	11.6	12.1	12.4	12.1	48.2
		2013	8.8	9.4	9.3	10.9	38.4
	Boise	2013	2.4	2.5	2.4	0.7	8.0
Newsprint Production (b) (thousand tons)	PCA	2015	—	—	—	—	—
		2014	56	56	50	—	162
		2013	—	—	—	44	44
	Boise	2013	53	58	60	15	186
White Paper (UFS) Production (thousand tons)	PCA	2015	288	273	294	262	1,117
		2014	286	275	296	287	1,144
		2013	—	—	—	208	208
	Boise	2013	303	301	323	76	1,003
Market Pulp Production (thousand tons)	PCA	2015	27	23	25	23	98
		2014	26	23	26	25	100
		2013	—	—	—	20	20
	Boise	2013	24	24	29	5	82

(a) Production and shipments activity prior to the acquisition of Boise on October 25, 2013, is included in the "Boise" fourth quarter 2013 production and shipments. Activity subsequent to the acquisition of Boise is included in the "PCA" fourth quarter 2013 production and shipments.

(b) PCA ceased production of newsprint and converted the No.3 newsprint machine at our DeRidder, Louisiana mill to containerboard in the third quarter of 2014. Sales of newsprint were recorded in the Packaging segment.

1

Below is a map of our locations:

Packaging

Packaging Products

Our corrugated products manufacturing plants produce a wide variety of corrugated packaging products, including conventional shipping containers used to protect and transport manufactured goods, multi-color boxes, and displays with strong visual appeal that help to merchandise the packaged product in retail locations. In addition, we are a large producer of packaging for meat, fresh fruit and vegetables, processed food, beverages, and other industrial and consumer products.

During the year ended December 31, 2015, our Packaging segment produced 3.7 million tons of containerboard at our mills. Our corrugated products manufacturing plants sold 48.9 billion square feet (BSF) of corrugated products. Our net sales to third parties totaled $4.5 billion in 2015.

Facilities

We manufacture our Packaging products at five containerboard mills, one containerboard machine (at our Wallula, Washington white paper mill), corrugated manufacturing operations, and protective packaging operations. The following provides more details of our operations:

Counce. Our Counce, Tennessee mill produces kraft linerboard. The year-end 2015 annual estimated production capacity, as reported to the American Forest and Paper Association (AF&PA), was 1,105,000 tons. In 2015, the mill produced 1,087,000 tons of kraft linerboard on two paper machines. The mill can produce basis weights from 26 lb. to 90 lb. The mill also produces a variety of performance and specialty grades of linerboard.

DeRidder. Our DeRidder, Louisiana mill produces kraft linerboard on its No. 1 machine and linerboard and medium on its No. 3 machine. The year-end 2015 annual estimated capacity reported to the AF&PA, on the two machines, was 995,000 tons. The No. 1 machine produced 578,000 tons of kraft linerboard during 2015. The No. 3 machine produced 129,000 tons of medium and 167,000 tons of linerboard. The No. 3 machine was converted from a newsprint machine to a containerboard machine in 2014. The mill can produce linerboard in basis weights of 26 lb. to 69 lb. and medium in basis weights of 23 lb. to 33 lb.

Valdosta. Our Valdosta, Georgia mill produces kraft linerboard. Its year-end 2015 annual estimated production capacity, as reported to the AF&PA, was 605,000 tons. In 2015, our single paper machine at Valdosta produced 603,000 tons of kraft linerboard. The mill can produce basis weights from 35 lb. to 96 lb.

Tomahawk. Our Tomahawk, Wisconsin mill produces semi-chemical corrugating medium. Its year-end 2015 annual estimated production capacity, as reported to the AF&PA, was 555,000 tons. In 2015, the mill produced 534,000 tons of semi-chemical corrugating medium on two paper machines. The Tomahawk mill can produce basis weights from 23 lb. to 47 lb. and a variety of performance and specialty grades of corrugating medium.

Filer City. Our Filer City, Michigan mill produces semi-chemical corrugating medium. Its year-end 2015 annual estimated production capacity, as reported to the AF&PA, was 445,000 tons. In 2015, the mill produced 428,000 tons on three paper machines. Filer City can produce corrugating medium in basis weights from 20 lb. to 47 lb.

Wallula. Our Wallula, Washington mill primarily produces white paper, but also produces corrugating medium on one of its paper machines. Its year-end 2015 annual estimated production capacity of medium, as reported to the AF&PA, was 145,000 tons. In 2015, the mill produced 130,000 tons of corrugating medium. Wallula can produce corrugating medium in basis weights from 23 lb. to 45 lb.

We operate 93 corrugated manufacturing operations, a technical and development center, eight regional design centers, a rotogravure printing operation, and a complement of packaging supplies and distribution centers. Of the 93 manufacturing facilities, 59 operate as combining operations, commonly called corrugated plants, which manufacture corrugated sheets and finished corrugated packaging products, 33 are sheet plants which procure combined sheets and manufacture finished corrugated packaging products, and one is a corrugated sheet-only manufacturer.

Corrugated products plants tend to be located in close proximity to customers to minimize freight costs. Each of our plants serve a market radius of around 150 miles. Our sheet plants are generally located in close proximity to our larger corrugated plants, which enables us to offer additional services and converting capabilities such as small volume and quick turnaround items.

Major Raw Materials Used

Fiber supply. Fiber is the largest raw material cost to manufacture containerboard. We consume both wood fiber and recycled fiber in our containerboard mills. We have no 100% recycled mills, or mills whose fiber consumption consists solely of recycled fiber. To reduce our fiber costs, we have invested in processes and equipment to ensure a high degree of fiber flexibility. Our mill system has the capability to shift a portion of its fiber consumption between softwood, hardwood, and recycled sources. All of our mills, other than the Valdosta mill, can utilize some recycled fiber in their containerboard production. Our ability to use various types of virgin and recycled fiber helps mitigate the impact of changes in the prices of various fibers. Our corrugated manufacturing operations generate recycled fiber as a by-product from the manufacturing process, which is consumed by our mills. In 2015, we were a net recycled fiber buyer of less than 17% of our packaging mills' fiber requirements.

We procure wood fiber through leases of cutting rights, long-term supply agreements, and market purchases. We currently lease the cutting rights to approximately 83,000 acres of timberland located near our Counce, Tennessee and Valdosta, Georgia mills. Virtually all of the acres under cutting rights agreements are located within 100 miles of these two mills which results in lower wood transportation costs and provides a secure source of wood fiber. These leased cutting rights agreements have terms with about 13 years remaining, on average.

We participate in the Sustainable Forestry Initiative® (SFI) and we are certified under the SFI sourcing standards. These standards are aimed at ensuring the long-term health and conservation of forestry resources. We are committed to sourcing wood fiber through environmentally, socially, and economically sustainable practices and promoting resource and conservation stewardship ethics.

Energy supply. Energy at our packaging mills is obtained through purchased or self-generated fuels and electricity. Fuel sources include natural gas, by-products of the containerboard manufacturing and pulping process (including black liquor and wood waste), purchased wood waste, coal, and oil. Each of our mills self-generates process steam requirements from by-products (black liquor and wood waste), as well as from the various purchased fuels. The process steam is used throughout the production process and also to generate electricity.

In 2015, our packaging mills consumed about 59 million MMBTU's of fuel to produce both steam and electricity. Of the 59 million MMBTU's consumed, about 59% was from mill generated by-products, and 41% was from purchased fuels. Of the 41% in purchased fuels, 54% was from natural gas, 32% was from purchased wood waste, and 14% was from coal and other purchased fuels.

Sales, Marketing, and Distribution

Our corrugated products are sold through a direct sales and marketing organization, independent brokers, and distribution partners. We have sales representatives and a sales manager at most of our corrugated manufacturing operations and also have corporate account managers who serve customer accounts with a national presence. Additionally, our design centers maintain an on-site dedicated graphics sales force. In addition to direct sales and marketing personnel, we utilize new product development engineers and product graphics and design specialists. These individuals are located at both the corrugated plants and the design centers. General marketing support is located at our corporate headquarters.

Our containerboard sales group is responsible for the coordination of linerboard and corrugating medium sales to our corrugated plants, to outside domestic customers, and to export customers. This group handles order processing for all shipments of containerboard from our mills to our corrugated plants. These personnel also coordinate and execute all containerboard trade agreements with other containerboard manufacturers.

Containerboard produced in our mills is shipped by rail or truck. Rail shipments typically represent approximately 65% of the tons shipped and the remaining 35% is shipped by truck. Our corrugated products are delivered by truck due to our large number of customers and their demand for timely service. Our corrugated manufacturing operations typically serve customers within a 150 mile radius. We sometimes use third-party warehouses for short-term storage of corrugated products.

Customers

We sell corrugated products to approximately 17,000 customers in over 33,000 locations. About three-quarters of our corrugated products sales are to regional and local accounts, which are broadly diversified across industries and geographic

locations. The remaining one-quarter of our customer base consists primarily of national accounts that have multiple locations and are served by a number of PCA plants. No single customer exceeds 10% of segment sales.

The primary end-use markets in the United States for corrugated products are shown below as reported in the 2014 Fibre Box Association annual report:

Food, beverages, and agricultural products	40	%
Paper and other products	23	%
Retail and wholesale trade	19	%
Miscellaneous manufacturing	10	%
Chemical, plastic, and rubber products	8	%

Competition

As of December 31, 2015, we were the fourth largest producer of containerboard and corrugated packaging products in the United States, according to industry sources and our own estimates. According to industry sources, corrugated products are produced by about 525 U.S. companies operating approximately 1,200 plants. The primary basis for competition for most of our packaging products includes quality, service, price, product design, and innovation. Most corrugated products are manufactured to the customer's specifications. Corrugated producers generally sell within a 150-mile radius of their plants and compete with other corrugated producers in their local region. Competition in our corrugated products operations tends to be regional, although we also face competition from large competitors with significant national account presence.

On a national level our primary competitors are International Paper Company, WestRock Company, Georgia-Pacific LLC, and KapStone Paper and Packaging Corporation. However, with our strategic focus on regional and local accounts, we also compete with the smaller, independent producers.

Paper

Our Paper segment operating under the trade name Boise Paper, was acquired with the acquisition of Boise Inc. on October 25, 2013. We are the third largest manufacturer of uncoated freesheet in North America, according to industry sources and our own estimates. We manufacture and sell white papers, including both commodity and specialty papers, which may have custom or specialized features such as colors, coatings, high brightness, and recycled content. White papers consist of communication papers (cut-size office papers and printing and converting papers) and pressure sensitive papers, including release liners, which our customers use to produce labels for use in consumer and commercially-packaged products. The Paper segment also produces market pulp on one paper machine at our Wallula, Washington mill, which is sold to outside customers to produce paper products.

Facilities

We have three white paper mills located in the United States. The following paragraphs describe our white paper mills:

Jackson. Our Jackson, Alabama mill produces both commodity and specialty papers. Its year-end 2015 annual estimated production capacity of white papers on two paper machines, as reported to the AF&PA, was 470,000 tons. In 2015, the mill produced 471,000 tons of white papers. On a converted basis, from rollstock to cut-size white papers, the mill produced 412,000 tons in 2015.

International Falls. Our International Falls, Minnesota mill produces both commodity and specialty papers. Its year-end 2015 annual estimated production capacity of white papers on two paper machines, as reported to the

AF&PA, was 460,000 tons. In 2015, the mill produced 458,000 tons of white papers. On a converted basis, from rollstock to cut-size white papers, the mill produced 348,000 tons in 2015.

Wallula. Our Wallula, Washington mill has the ability, on one machine, to switch production between pressure sensitive papers and a variety of white paper grades. The mill also produces corrugating medium and market pulp. Its year-end 2015 annual estimated production capacity of white paper grades and market pulp, as reported to the AF&PA, was 190,000 tons and 100,000 tons, respectively. The corrugating medium produced at Wallula is included in our Packaging segment as discussed above. In 2015, the mill produced 188,000 tons of white papers and 99,000 tons of market pulp.

Major Raw Materials Used

Fiber supply. Fiber is our principal raw material in this segment, including wood fiber, recycled fiber, and purchased pulp. We purchase both whole logs and wood chips, which are a byproduct of lumber and plywood production. At our mill in Jackson, Alabama, we also purchase recycled fiber to produce our line of recycled office papers. Our Jackson and International Falls paper mills also purchase pulp from third parties pursuant to contractual arrangements. We purchase wood fiber through contracts and open-market purchases.

We participate in the Sustainable Forestry Initiative® (SFI) and the Forest Stewardship Council® (FSC) and are certified under the SFI sourcing standards. We procure all wood fiber for our white paper mills through our certified systems that are managed in accordance with the SFI and FSC standards. These standards are aimed at ensuring the long-term health and conservation of forestry resources.

Energy supply. We obtain energy through purchased or self-generated fuels and electricity. Fuel sources include natural gas, electricity, by-products of the manufacturing and pulping process (including black liquor and wood waste), and purchased wood waste. Each of the paper mills self-generates process steam requirements from by-products (black liquor and wood waste), as well as from the various purchased fuels. The process steam is used throughout the production process and also to generate electricity.

In 2015, our white paper mills consumed about 30 million MMBTU’s of fuel to produce both steam and electricity. Of the 30 million MMBTU’s consumed, about 66% was from mill generated by-products, and 34% was from purchased fuels. Of the 34% in purchased fuels, 78% was from natural gas and 22% from purchased wood waste. During the third quarter of 2015, we installed and started up a 53 megawatt turbine generator to replace four older units at our International Falls, Minnesota mill. With the new turbine generator, the mill is now capable of producing 70% of its electrical power requirements compared to 38% previously.

Chemical supply. We consume various chemicals in the production of white papers and pulp, including starch, precipitated calcium carbonate, caustic soda, sodium chlorate, dyestuffs, and optical brighteners. Most of our chemicals are purchased under contracts, which are bid or negotiated periodically.

Sales, Marketing, and Distribution

Our white papers are sold primarily by our own sales personnel. We ship to customers both directly from our mills and through distribution centers and a network of outside warehouses by rail or truck. This allows us to respond quickly to customer requirements. Rail shipments typically represent approximately 65% of the tons shipped and the remaining 35% is shipped by truck.

Customers

We have over 200 customers in approximately 500 locations. These customers include paper merchants, commercial and financial printers, envelope converters, and customers who use our pressure sensitive paper for specialty applications such as consumer and commercial product labels. We have established long-term relationships with many of our customers. Office Depot, Inc. is our largest customer in the Paper segment. We have an agreement with Office Depot in which we will supply at least 50% of Office Depot's requirements for commodity office papers through December 2017; however, there are circumstances that could cause the agreement to terminate before 2017. If this were to occur, Office Depot's purchase obligations under the agreement would phase out over two years. Office Depot became our largest customer when it acquired OfficeMax Incorporated late in 2013. We previously had a long standing contractual relationship with OfficeMax Incorporated. In 2015, our sales revenue to Office Depot represented 45% of our Paper segment sales revenue.

Competition

The markets in which our Paper segment competes are large and highly competitive. Commodity grades of white paper are globally traded, with numerous worldwide manufacturers, and as a result, these products compete primarily on the basis of price. All of our paper manufacturing facilities are located in the United States, and although we compete primarily in the domestic market, we do face competition from foreign producers and have experienced increased foreign competition in recent years. The level of this competition varies depending on domestic and foreign demand and foreign currency exchange rates. In general, paper production does not rely on proprietary processes or formulas, except in highly specialized or custom grades.

In January 2015, we, along with the United Steel Workers (USW) and other domestic office paper producers, filed a petition before the United States International Trade Commission and the United States Department of Commerce, alleging that paper producers in China, Indonesia, Australia, Brazil, and Portugal are selling products in the United States in violation of international trade rules. The domestic producers also alleged that Chinese and Indonesian producers are receiving illegal government subsidies. The agencies conducted their investigations in 2015 and early 2016. In January 2016, the U.S. Department of Commerce made determinations of antidumping and countervailing duties at rates varying by country and producer and, in February 2016, the International Trade Commission determined that the domestic industry has been materially injured by these imports. Accordingly, the antidumping and countervailing duties will be imposed on imports from these countries.

Our largest competitors include Domtar Corporation, International Paper Company, and Georgia-Pacific LLC. Although price is the primary basis for competition in most of our paper grades, quality and service are also important competitive determinants. Our white papers compete with electronic data transmission, e-readers, electronic document storage alternatives, and paper grades we do not produce. Increasing shifts to these alternatives have had, and are likely to continue to have, an adverse effect on traditional print media and paper usage.

Corporate and Other

Our Corporate and Other segment includes corporate support staff services and related assets and liabilities, and foreign exchange gains and losses. This segment also includes transportation assets, such as rail cars and trucks, which we use to transport some of our products from our manufacturing sites and assets related to a 50% owned variable interest entity, Louisiana Timber Procurement Company, L.L.C. (LTP). For segment financial information see Note 18, Segment Information, of the Notes to Consolidated Financial Statements in "Part II, Item 8. Financial Statements and Supplementary Data" of this Form 10-K.

Employees

As of December 31, 2015, we had approximately 13,000 employees, including 3,900 salaried employees and 9,100 hourly employees. Approximately 70% of our hourly employees are represented by unions. The majority of our unionized employees are represented by the United Steel Workers (USW), the International Brotherhood of Teamsters (IBT), the International Association of Machinists (IAM), and the Association of Western Pulp and Paper Workers (AWPPW). We are currently in negotiations to renew or extend any union contracts that have recently expired or are expiring in the near future, including the agreement at our International Falls, Minnesota paper mill with the IAM union, which expires on April 30, 2016. During 2015, we experienced no work stoppages, and we believe we have satisfactory labor relations with our employees.

Environmental Matters

A discussion of the financial impact of our compliance with environmental laws is presented under the caption "Environmental Matters" in "Part II, Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations" of this Form 10-K.

Executive Officers of the Registrant

Brief statements setting forth the age at February 26, 2016, the principal occupation, employment during the past five years, the year in which such person first became an officer of PCA, and other information concerning each of our executive officers appears below.

Mark W. Kowlzan, 60, Chairman and Chief Executive Officer - Mr. Kowlzan has served as PCA's Chairman since January 2016 and as Chief Executive Officer and a director since July 2010. From 1998 through June 2010, Mr. Kowlzan led the company’s containerboard mill system, first as Vice President and General Manager and then as Senior Vice President - Containerboard. From 1996 through 1998, Mr. Kowlzan served in various senior mill-related operating positions with PCA and Tenneco Packaging, including as manager of the Counce linerboard mill. Prior to joining Tenneco Packaging, Mr. Kowlzan spent 15 years at International Paper Company, where he held a series of operational and managerial positions within its mill organization. Mr. Kowlzan is a member of the board of American Forest and Paper Association.

Thomas A. Hassfurther, 60, Executive Vice President - Corrugated Products - Mr. Hassfurther has served as Executive Vice President - Corrugated Products of PCA since September 2009. From February 2005 to September 2009, Mr. Hassfurther served as Senior Vice President - Sales and Marketing, Corrugated Products. Prior to this he held various senior-level management and sales positions at PCA and Tenneco Packaging. Mr. Hassfurther joined the company in 1977.

Robert P. Mundy, 54, Senior Vice President and Chief Financial Officer - Mr. Mundy has served as PCA's Senior Vice President since July 2015 and Chief Financial Officer since September 2015. He previously served as Senior Vice President and Chief Financial Officer of Verso Corporation, a leading North American supplier of coated papers to catalog and magazine publishers, from 2006 to June 2015. Verso Corporation filed for Chapter 11 bankruptcy in January 2016. Prior to that, he worked at International Paper Company, a global paper and packaging company, from 1983 to 2006, where he was Director of Finance of the Coated and Supercalendered Papers division from 2002 to 2006, Director of Finance Projects from 2001 to 2002, Controller of Masonite Corporation from 1999 to 2001, and Controller of the Petroleum and Minerals business from 1996 to 1999. He served in various business positions at International Paper from 1983 to 1996.

Thomas W.H. Walton, 56, Senior Vice President - Sales and Marketing, Corrugated Products - Mr. Walton has served as Senior Vice President - Sales and Marketing, Corrugated Products since October 2009. Prior to this, he served as a Vice President and Area General Manager within the Corrugated Products Group since 1998. Mr. Walton joined the company in 1981 and has also held positions in production, sales, and general management.

Kent A. Pflederer, 45, Senior Vice President, General Counsel and Secretary - Mr. Pflederer has served as General Counsel and Corporate Secretary since June 2007 and Senior Vice President since January 2013. Prior to joining PCA, Mr. Pflederer served as Senior Counsel, Corporate and Securities, at Hospira, Inc. from 2004 to 2007 and served in the corporate and securities practice at Mayer Brown, LLP from 1996 to 2004.

Charles J. Carter, 56, Senior Vice President - Containerboard Mill Operations - Mr. Carter has served as Senior Vice President - Containerboard Mill Operations since July 2013. Prior to this, he served as Vice President – Containerboard Mill Operations since January 2011. From March 2010 to January 2011, Mr. Carter served as PCA's Director of Papermaking Technology. Prior to joining PCA in 2010, Mr. Carter spent 28 years with various pulp and paper companies in managerial and technical positions of increasing responsibility, most recently as Vice President and General Manager of the Calhoun, Tennessee mill of Abitibi Bowater from 2007 to 2010 and as manager of SP Newsprint's Dublin, Georgia mill from 1999 to 2007.

Available Information

PCA's internet website address is www.packagingcorp.com. Our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and amendments to those reports filed or furnished pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 are available free of charge through our website as soon as reasonably practicable after they are electronically filed with, or furnished to, the Securities and Exchange Commission. In addition, our Code of Ethics may be accessed in the Investor Relations section of PCA's website. PCA's website and the information contained or incorporated therein are not intended to be incorporated into this report.

Item 1A. RISK FACTORS

Some of the statements in this report and, in particular, statements found in Management's Discussion and Analysis of Financial Condition and Results of Operations, that are not historical in nature are forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Forward-looking statements include statements about our expectations regarding our future liquidity, earnings, expenditures, and financial condition. These statements are often identified by the words "will," "should," "anticipate," "believe," "expect," "intend," "estimate," "hope," or similar expressions. These statements reflect management's current views with respect to future events and are subject to risks and uncertainties. There are important factors that could cause actual results to differ materially from those in forward-looking statements, many of which are beyond our control. These factors, risks and uncertainties include, but are not limited to, the factors described below.

Our actual results, performance, or achievement could differ materially from those expressed in, or implied by, these forward-looking statements, and accordingly, we can give no assurances that any of the events anticipated by the forward-looking statements will transpire or occur, or if any of them do so, what impact they will have on our results of operations or financial condition. In view of these uncertainties, investors are cautioned not to place undue reliance on these forward-looking statements. We expressly disclaim any obligation to publicly revise or otherwise update any forward-looking statements that have been made to reflect the occurrence of events after the date hereof.

In addition to the risks and uncertainties we discuss elsewhere in this Form 10-K (particularly in "Part II, Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations") or in our other filings with the

Securities and Exchange Commission (SEC), the following are important factors that could cause our actual results to differ materially from those we project in any forward-looking statement.

Industry Cyclicality - Changes in the prices of our products could materially affect our financial condition, results of operations, and liquidity. Macroeconomic conditions and fluctuations in industry capacity can create changes in prices, sales volumes, and margins for most of our products, particularly commodity grades of packaging and paper products. Prices for all of our products are driven by many factors, including general economic conditions, demand for our products, and competitive conditions in our industry, and we have little influence over the timing and extent of price changes, which may be unpredictable and volatile. If supply exceeds demand, prices for our products could decline, and our earnings and operating cash flows would be lower. Lower prices for our products could have a material adverse effect on our operating cash flows, profitability, and liquidity.

Competition - The intensity of competition in the industries in which we operate could result in downward pressure on pricing and volume, which could lower earnings and operating cash flows. Our industries are highly competitive, with no single containerboard, corrugated packaging, or white paper producer having a dominant position. Containerboard and commodity white paper products cannot generally be differentiated by producer, which tends to intensify price competition. The corrugated packaging industry is also sensitive to changes in economic conditions, as well as other factors including innovation, design, quality, and service. To the extent that one or more competitors are more successful than we are with respect to any key competitive factor, our business could be adversely affected. Our packaging products also compete, to some extent, with various other packaging materials, including products made of paper, plastics, wood, and various types of metal. The intensity of competition could lead to a reduction in our market share as well as lower sales prices for our products, both of which could reduce our earnings and operating cash flows.

Our white paper products compete with electronic data transmission and document storage alternatives. Increasing shifts to electronic alternatives have had and will continue to have an adverse effect on usage of these products. As a result of such competition, we are experiencing decreasing demand for most of our existing white paper products. As the use of these alternatives grows, demand for paper products is likely to further decline. Declines in demand for our paper products may adversely affect our earnings and operating cash flows.

Some of our competitors are larger than we are and may have greater financial and other resources, greater manufacturing economies of scale, greater energy self sufficiency, or lower operating costs, compared with our company. We may be unable to compete effectively with these companies particularly during economic downturns. Some of the factors that may adversely affect our ability to compete in the markets in which we participate include the entry of new competitors (including overseas producers, who have increased imports of white paper to the United States in recent years and have been found to have violated international trade rules) into the markets we serve, our competitors' pricing strategies, our inability to anticipate and respond to changing customer preferences, and our inability to maintain the cost-efficiency of our facilities. In February 2016, antidumping and countervailing duties were imposed on imports of certain white paper products from Australia, Brazil, China, Indonesia, and Portugal. While these duties will increase the costs of producers in these countries to sell products in the United States, we are unable to determine if domestic market conditions will improve.

Inflation and Other General Cost Increases - We may not be able to offset higher costs. We are subject to both contractual, inflationary, and other general cost increases, including with regard to our labor costs and purchases of raw materials. If we are unable to offset these cost increases by price increases, growth, and/or cost reductions in our operations, these inflationary and other general cost increases could have a material adverse effect on our operating cash flows, profitability, and liquidity.

In 2015, our total company costs including cost of sales (COS) and selling, general, and administrative expenses (SG&A) was $5.0 billion, and excluding non-cash costs (depreciation, pension and postretirement expense, and

share-based compensation expense) was $4.6 billion. A 1% increase in COS and SG&A costs would increase costs by $50 million and cash costs by $46 million.

Cost of Fiber - An increase in the cost of fiber could increase our manufacturing costs and lower our earnings. The market price of wood fiber varies based upon availability, source, and the costs of fuels used in the harvesting and transportation of wood fiber. The cost and availability of wood fiber can also be impacted by weather, general logging conditions, geography, and regulatory activity.

The availability and cost of recycled fiber depends heavily on recycling rates and the domestic and global demand for recycled products. We purchase recycled fiber for use at seven of our eight mills. In 2015, we purchased approximately 605,000

tons of recycled fiber, net of the recycled fiber generated by our corrugated box plants. The amount of recycled fiber purchased each year varies based upon production and the prices of both recycled fiber and wood fiber.

Periods of supply and demand imbalance have created significant price volatility. Periods of higher recycled fiber costs and unusual price volatility have occurred in the past and may occur again in the future, which could result in higher costs and lower earnings.

Cost of Purchased Fuels and Chemicals - An increase in the cost of purchased fuels and chemicals could lead to higher manufacturing costs, resulting in reduced earnings. We have the ability to use various types of purchased fuels in our manufacturing operations, including natural gas, bark, oil, and coal. Fuel prices, in particular prices for oil and natural gas, have fluctuated dramatically in the past. New and more stringent environmental regulations may discourage, reduce the availability of, or make more expensive, the use of certain fuels, particularly coal and fossil fuels. In addition, costs for key chemicals used in our manufacturing operations also fluctuate. These fluctuations impact our manufacturing costs and result in earnings volatility. If fuel and chemical prices rise, our production costs and transportation costs will increase and cause higher manufacturing costs and reduced earnings.

Material Disruption of Manufacturing - A material disruption at one of our manufacturing facilities could prevent us from meeting customer demand, reduce our sales, and/or negatively affect our results of operations and financial condition. Our business depends on continuous operation of our facilities, particularly at our mills. Any of our manufacturing facilities, or any of our machines within such facilities, could cease operations unexpectedly for a significant period of time due to a number of events, including:

- Unscheduled maintenance outages.
- Prolonged power failures.
- Equipment failure.
- Explosion of a boiler.
- Disruption in the supply of raw materials, such as wood fiber, energy, or chemicals.
- A chemical spill or release.
- Closure or curtailment related to environmental concerns.
- Labor difficulties.
- Disruptions in the transportation infrastructure, including roads, bridges, railroad tracks, and tunnels.
- Fires, floods, earthquakes, hurricanes, or other catastrophes.
- Terrorism or threats of terrorism.
- Other operational problems.

These events could harm our ability to serve our customers and lead to higher costs and reduced earnings.

Environmental Matters - PCA may incur significant environmental liabilities with respect to both past and future operations. We are subject to, and must comply with, a variety of federal, state and local environmental laws, particularly those relating to air and water quality, waste disposal and the cleanup of contaminated soil and groundwater. Because environmental regulations are constantly evolving, we have incurred, and will continue to incur, costs to maintain compliance with those laws. See Item 7. "Management's Discussion and Analysis of Financial Condition and Results of Operations - Environmental Matters" for estimates of expenditures we expect to make for environmental compliance in the next few years. New and more stringent environmental regulations may be adopted and may require us to incur significant additional capital expenditures to modify or replace certain of our boilers. In addition, environmental regulations may increase the cost of our raw materials and purchased energy. Although we have established reserves to provide for known environmental liabilities, these reserves may change over time due to

the enactment of new environmental laws or regulations or changes in existing laws or regulations, which might require additional significant environmental expenditures.

Customer Concentration - Office Depot represents a significant portion of PCA’s paper business. We have a supply agreement with Office Depot, our largest customer in the paper segment. The agreement requires Office Depot to buy, and us to supply, at least 50% of Office Depot's requirements for office papers through December 2017; however, there are circumstances that could cause the agreement to terminate before 2017. If this were to occur, Office Depot's purchase obligations under the agreement would phase out. Office Depot has agreed to be acquired by Staples, Inc. The pending acquisition by Staples is subject to the satisfaction of certain conditions, including regulatory approval, which is uncertain. If the acquisition of Office Depot by Staples is consummated, the risks described below may be intensified.

Our agreement with Office Depot will continue to remain in effect after a merger or acquisition as to the office paper requirements of the legacy Office Depot business. However, we cannot predict how any merger or acquisition will affect the

financial condition of the ultimate entity, the paper requirements of the legacy Office Depot business, the purchasing decisions of the ultimate entity or the effects on pricing or competition for office papers. In 2015, sales to Office Depot represented 45% of our Paper segment sales. If these sales are reduced, whether as a result of the future acquisition of Office Depot by Staples or otherwise, we would need to find new customers. We may not be able to fully replace any lost sales, and any new sales may be at lower prices or higher costs. Any significant deterioration in the financial condition of Office Depot (or its ultimate acquirer) affecting its ability to pay or any other change that results in its willingness to purchase our products will harm our business and results of operations.

Cyber Security - Risks related to security breaches of company, customer, employee, and vendor information, as well as the technology that manages our operations and other business processes, could adversely affect our business. We rely on various information technology systems to capture, process, store, and report data and interact with customers, vendors, and employees. Despite careful security and controls design, implementation, updating, and internal and independent third-party assessments, our information technology systems, and those of our third party providers, could become subject to cyber attacks or security breaches. Network, system, and data breaches could result in misappropriation of sensitive data or operational disruptions including interruption to systems availability and denial of access to and misuse of applications required by our customers to conduct business with us. Misuse of internal applications; theft of intellectual property, trade secrets, or other corporate assets; and inappropriate disclosure of confidential information could stem from such incidents. Delayed sales, slowed production, or other issues resulting from these disruptions could result in lost sales, business delays, and negative publicity and could have a material adverse effect on our operations, financial condition, or operating cash flows.

Debt obligations - Our debt service obligations may reduce our operating flexibility. At December 31, 2015, we had $2.3 billion of long-term debt outstanding and a $326.5 million undrawn revolving credit facility, after deducting letters of credit. We and our subsidiaries may incur additional indebtedness in the future. Our current borrowings, plus any future borrowings, may affect our ability to operate our business, including, without limitation:

- Result in significant cash requirements to make interest and maturity payments on our outstanding indebtedness;
- Increase our vulnerability to adverse changes in our business or industry conditions;
- Increase our vulnerability to increases in interest rates;
- Limit our ability to obtain additional financing for working capital, capital expenditures, general corporate, and other purposes;
- Limit our flexibility in planning for, or reacting to, changes in our business and our industry; and
- Limit our flexibility to make acquisitions.

Further, if we cannot service our indebtedness, we may have to take actions to secure additional cash by selling assets, seeking additional equity or reducing investments, which may not be achievable on acceptable terms or at all.

Market Price of our Common Stock - The market price of our common stock may be volatile, which could cause the value of the stock to decline. Securities markets worldwide periodically experience significant price declines and volume fluctuations. This market volatility, as well as general economic, market, or political conditions, could reduce the market price of our common stock in spite of our operating performance. In addition, our operating results could be below the expectations of public market analysts and investors, and in response, the market price of our common stock could decrease significantly.

General Economic Conditions - Adverse business and global economic conditions may have a material adverse effect on our business, results of operations, liquidity, and financial position. General global economic conditions adversely affect the demand and production of consumer goods, employment levels, the availability and cost of credit, and ultimately, the profitability of our business. High unemployment rates, lower family income, unfavorable currency exchange rates, lower corporate earnings, lower business investment, and lower consumer spending typically result in

decreased demand for our products and products of our customers which utilize our products. These conditions are beyond our control and may have a significant impact on our business, results of operations, liquidity, and financial position.

Item 1B. UNRESOLVED STAFF COMMENTS

None.

Item 2. PROPERTIES

We own and lease properties in our business. All of our leases are noncancelable and are primarily accounted for as operating leases. These leases are not subject to early termination except for standard nonperformance clauses.

Information concerning capacity and utilization of our principal operating facilities, the segments that use those facilities, and a map of geographical locations is presented in "Part I, Item 1. Business" of this Form 10-K. We assess the condition and capacity of our manufacturing, distribution, and other facilities needed to meet our operating requirements. Our properties have been generally well maintained and are in good operating condition. In general, our facilities have sufficient capacity and are adequate for our production and distribution requirements.

We currently own buildings and land for five containerboard mills and three white paper mills. Additionally, we have 93 corrugated manufacturing operations, of which the buildings and land for 50 are owned, including 42 combining operations, or corrugated plants, one corrugated sheet-only manufacturer, and seven sheet plants. For 17 corrugated plants and 26 sheet plants the buildings and land are leased. We own one warehouse and miscellaneous other properties, including sales offices and woodlands management offices. We lease space for regional design centers and numerous other distribution centers, warehouses, and facilities. The equipment in these leased facilities is, in virtually all cases, owned by us, except for forklifts and other rolling stock which are generally leased.

We lease the cutting rights to approximately 83,000 acres of timberland located near our Valdosta mill (76,000 acres) and our Counce mill (7,000 acres). On average, these cutting rights agreements have terms with approximately 13 years remaining. Additionally, we lease approximately 9,000 acres of land for a fiber farm, located near our Wallula mill, where we plant, grow, and harvest fiber.

Our corporate headquarters is located in Lake Forest, Illinois. The headquarter facilities are leased for the next six years with provisions for two additional five year lease extensions. We also lease an administrative office in Boise, Idaho, which is leased through March 2018.

Item 3. LEGAL PROCEEDINGS

Information concerning legal proceedings can be found in Note 19, Commitments, Guarantees, Indemnifications, and Legal Proceedings, of the Notes to Consolidated Financial Statements in "Part II, Item 8. Financial Statements and Supplementary Data" of this Form 10-K.

Item 4. MINE SAFETY DISCLOSURE

Not applicable.

PART II

Item 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS, AND ISSUER PURCHASES OF EQUITY SECURITIES

Market Information

PCA’s common stock is listed on the New York Stock Exchange (NYSE) under the symbol "PKG". The following table sets forth the high and low sales prices as reported by the NYSE and the cash dividends declared per common share during the last two years.

	2015			2014		
	Sales Price		Dividends	Sales Price		Dividends
Quarter Ended	High	Low	Declared	High	Low	Declared
March 31	$84.88	$73.03	$0.55	$75.10	$61.35	$0.40
June 30	78.98	62.48	0.55	72.74	65.00	0.40
September 30	73.60	58.29	0.55	72.82	63.11	0.40
December 31	70.04	59.54	0.55	80.14	57.06	0.40

Stockholders

On February 19, 2016, there were 70 holders of record of our common stock.

Dividend Policy

PCA expects to continue to pay regular cash dividends, although there is no assurance as to the timing or level of future dividend payments because these depend on future earnings, capital requirements, and financial condition. The timing and amount of future dividends are subject to the determination of PCA’s Board of Directors.

On February 26, 2015, PCA announced an increase of its quarterly cash dividend on its common stock from an annual payout of $1.60 per share to an annual payout of $2.20 per share. The first quarterly dividend of $0.55 per share was paid on April 15, 2015 to shareholders of record as of March 13, 2015.

Purchases of Equity Securities

Stock Repurchase Program

On July 21, 2015, PCA announced that its Board of Directors authorized the repurchase of an additional $150 million of the company’s outstanding common stock. Together with remaining authority under previously announced programs, at the time of the announcement, the company was authorized to repurchase approximately $205 million of additional shares. Repurchases may be made from time to time in open market or privately negotiated transactions in accordance with applicable securities regulations. The timing and amount of repurchases will be determined by the company in its discretion based on factors such as PCA’s stock price and market and business conditions.

In 2015, we paid $154.7 million to repurchase 2,326,493 shares of common stock. In 2014, the Company did not repurchase any shares of common stock. In 2013, the Company repurchased 171,263 shares of common stock for $7.8 million. All shares repurchased have been retired. As of December 31, 2015, $93.4 million of the authorized amount remained available for repurchase of the Company’s common stock.

Pursuant to its equity incentive plan, the Company withholds shares from vesting employee equity awards to cover employee tax liabilities. Total shares withheld in 2015 were 129,983 for $8.7 million. Total shares withheld in 2014 were 183,170 for $13.2 million. Total shares withheld in 2013 were 223,995 for $11.0 million. Shares withheld are included in the number of shares repurchased in the table below.

The following table presents information related to our repurchases of common stock made under repurchase plans authorized by PCA's Board of Directors, and shares withheld to cover taxes on vesting of equity awards, during the three months ended December 31, 2015:

Issuer Purchases of Equity Securities

Period	Total Number of Shares Purchased (a)		Average Price Paid Per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Approximate Dollar Value of Shares That May Yet Be Purchased Under the Plans or Programs (in millions)
October 1-31, 2015	56,684		$59.50	56,000	$146.7
November 1-30, 2015	4,854		69.15	—	146.7
December 1-31, 2015	872,621		62.14	858,099	93.4
Total	934,159	(a)	$62.01	914,099	$93.4

(a) 20,060 shares were withheld from employees to cover income and payroll taxes on equity awards that vested during the period.

Subsequent to year-end, we repurchased 1,868,487 shares of common stock for $93.4 million, fully depleting the July 2015 authorization of $150 million. On February 25, 2016, PCA announced that its Board of Directors authorized the repurchase of an additional $200 million of the Company's outstanding common stock. Repurchases may be made from time to time in the open market or privately negotiated transactions in accordance with applicable securities regulations. The timing and amount of repurchases will be determined by the Company in its discretion based on factors such as PCA's stock price and market and business conditions.

Performance Graph

The graph below compares PCA's cumulative 5-year total shareholder return on common stock with the cumulative total returns of the S&P 500 index; the S&P Midcap 400 index; and a Peer Group that includes two publicly-traded companies, which are International Paper Company and Kapstone Paper and Packaging Corporation. The graph tracks the performance of a $100 investment (including the reinvestment of all dividends) in our common stock, in each index, and in the peer groups' common stock from December 31, 2010, through December 31, 2015. The stock price performance included in this graph is not necessarily indicative of future stock price performance.

	Cumulative Total Return					
	December 31					
	2010	2011	2012	2013	2014	2015
Packaging Corporation of America	$100.00	$100.67	$158.40	$268.32	$338.33	$282.21
S&P 500	100.00	102.11	118.45	156.82	178.29	180.75
S&P Midcap 400	100.00	98.27	115.84	154.64	169.75	166.05
Peer Group	100.00	111.91	156.67	209.20	236.78	173.84

The information in the graph and table above is not deemed "filed" with the Securities and Exchange Commission and is not to be incorporated by reference in any of PCA's filings under the Securities Act of 1933 or the Securities Exchange Act of 1934, whether made before or after the date of this Annual Report on Form 10-K, except to the extent that PCA specifically incorporates such information by reference.

Item 6. SELECTED FINANCIAL DATA

The following table sets forth selected historical financial data of PCA (dollars and shares in millions, except per share data). The information contained in the table should be read in conjunction with the disclosures in "Part II, Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations" and "Part II, Item 8. Financial Statements and Supplementary Data" of this Form 10-K.

	Year Ended December 31				
	2015 (a)	2014 (a)	2013 (a)	2012	2011
Statement of Income Data (b):					
Net Sales	$5,741.7	$5,852.6	$3,665.3	$2,843.9	$2,620.1
Net Income	436.8	392.6	441.3	160.2	158.8
Net income per common share:					
— basic	4.47	3.99	4.57	1.66	1.60
— diluted	4.47	3.99	4.52	1.64	1.58
Weighted average common shares outstanding:					
— basic	96.6	97.0	96.6	96.4	99.3
— diluted	96.7	97.1	97.5	97.5	100.4
Earnings, before interest, taxes, depreciation, and amortization (EBITDA) (c)	$1,106.5	$1,083.7	$683.7	$608.3	$437.6
Cash dividends declared per common share	2.20	1.60	1.51	1.00	0.80
Balance Sheet Data (b):					
Total assets	$5,284.6	$5,272.8	$5,196.2	$2,494.9	$2,442.9
Total debt obligations	2,332.0	2,379.3	2,572.7	819.5	830.3
Stockholders' equity	1,633.3	1,521.4	1,356.8	1,008.2	971.2

____

(a) On October 25, 2013, we acquired Boise Inc. (Boise). Our financial results include Boise subsequent to acquisition.

(b) Effective December 31, 2015, the Company adopted Accounting Standards Update 2015-17, Balance Sheet Classification of Deferred Taxes. The guidance eliminates the requirement to classify deferred taxes between current and noncurrent and requires that all deferred tax assets and liabilities, along with any related valuation allowance, be classified as noncurrent on the balance sheet. Our total assets for all periods presented have been updated to reflect this adoption.

Effective January 1, 2014, the Company changed its method of accounting for inventories from lower of cost, as determined by the LIFO method, or market, to lower of cost, as determined by the average cost method, or market. The Company applied the change retrospectively to all prior periods presented herein in accordance with US generally accepted accounting principles (GAAP) relating to accounting changes.

(c) EBITDA represents income before interest (interest expense and interest income), income tax provision (benefit), and depreciation, amortization, and depletion. We present EBITDA because it provides a means to evaluate our performance on an ongoing basis using the same measure that is used by our management and because it is frequently used by investors and other interested parties in the evaluation of companies. EBITDA, however, is not a measure of our liquidity or financial performance under generally accepted accounting principles (GAAP) and should not be considered as an alternative to net income, income from operations, or any other performance measure derived in accordance with GAAP or as an alternative to cash flow from operating activities as a measure of our liquidity. Any analysis of non-GAAP financial measures should be done in conjunction with results presented in accordance with GAAP. The non-GAAP measures are not intended to be substitutes for GAAP financial measures and should not be used as such. See "Reconciliations of Non-GAAP Financial Measures to Reported Amounts" included in "Part II, Item 7. Management's Discussion and Analysis of Financial Condition

and Results of Operations" of this Form 10-K for a reconciliation of non-GAAP measures to the most comparable GAAP measure.

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

The following discussion and analysis of historical results of operations and financial condition should be read in conjunction with the audited financial statements and the notes thereto which appear elsewhere in this Form 10-K. This discussion includes forward-looking statements regarding our expectations with respect to our future performance, liquidity, and capital resources. Such statements, along with any other nonhistorical statements in the discussion, are forward-looking. See our discussion regarding forward-looking statements included under "Part I, Item 1A. Risk Factors" of this Form 10-K.

Overview

PCA is the fourth largest producer of containerboard and corrugated packaging products in the United States and the third largest producer of uncoated freesheet paper in North America, based on production capacity. We operate five containerboard mills, three paper mills, and 93 corrugated products manufacturing plants. Our corrugated products manufacturing plants produce a wide variety of corrugated packaging products, including conventional shipping containers used to protect and transport manufactured goods, multi-color boxes and displays with strong visual appeal that help to merchandise the packaged product in retail locations, and honeycomb protective packaging. In addition, we are a large producer of packaging for meat, fresh fruit and vegetables, processed food, beverages, and other industrial and consumer products. We also manufacture and sell white papers, including both commodity and specialty papers, which may have custom or specialized features such as colors, coatings, high brightness, and recycled content. We operate primarily in the United States and have some converting and distribution operations in Canada.

Executive Summary

In 2015, we reported $436.8 million of net income, or $4.47 per diluted share, compared with $392.6 million, or $3.99 per share in 2014. Excluding the special items discussed below, we recorded $442.6 million of net income, or $4.53 per diluted share in 2015, compared with $458.6 million and $4.66 per diluted share in 2014. Compared with 2014, we performed well, despite lower white papers prices and mix and lower export containerboard prices. In 2015, we completed the integration of Boise Inc., achieved a record $762.6 million of operating cash flow, and returned $355.5 million to our shareholders through share repurchases and dividends.

In our packaging segment, we reported $714.9 million of income in 2015, compared with $663.2 million in 2014, and earnings before interest, taxes, depreciation, amortization, and depletion (EBITDA) excluding special items was $1,009.3 million, compared with $1,015.0 million in 2014. In 2015, we achieved record volumes in both our packaging mills and corrugated products plants. We achieved full design capacity of 1,000 tons of production per day on the DeRidder No. 3 machine, which was converted to containerboard in 2014.

Paper segment income was $112.5 million, compared with $135.4 million in 2014, and EBITDA excluding special items was $160.7 million, compared with $186.0 million in 2014. Compared with 2014, total sales prices were lower and volumes were slightly up in 2015. We maintained strong margins through improved operations and lower costs in our paper mills which offset some of the impact of lower paper prices. During the third quarter of 2015, we installed and started up a 53 megawatt turbine generator to replace four older units at our International Falls, Minnesota mill. With the new turbine generator, the mill is now capable of producing 70% of its electrical power requirements compared to 38% previously.

17

Earnings per diluted share, excluding special items, in 2015 and 2014 were as follows:

	Year Ended December 31	
	2015	2014
Earnings per diluted share	$4.47	$3.99
Special items:		
DeRidder restructuring (a)	0.01	0.43
Integration-related and other costs (b)	0.10	0.13
Sale of St. Helens paper mill site (c)	(0.05)	—
Class action lawsuit settlement (d)	—	0.11
Total special items	0.06	0.67
Earnings per diluted share, excluding special items	$4.53	$4.66

(a) Includes amounts from restructuring activities at our mill in DeRidder, Louisiana, including costs related to the conversion of the No. 3 newsprint machine to containerboard, our exit from the newsprint business, and other improvements. The restructuring charges primarily related to accelerated depreciation.

(b) Includes Boise acquisition integration-related and other costs. These costs primarily relate to professional fees, severance, retention, relocation, travel, and other integration-related costs. 2014 also includes $1.5 million of expense related to write-off of deferred financing costs in connection with the debt refinancing.

(c) In September 2015, we sold the remaining land, buildings, and equipment at our paper mill site in St. Helens, Oregon, where we ceased paper production in December 2012. We recorded a $6.7 million gain on the sale.

(d) Includes $17.6 million of costs for the settlement of the Kleen Products LLC v Packaging Corp. of America et al class action lawsuit.

Management excludes special items and uses non-GAAP measures to focus on PCA’s on-going operations and assess its operating performance and believes that it is useful to investors because it enables them to perform meaningful comparisons of past and present operating results. Reconciliation of diluted EPS to diluted EPS excluding special items is included above and the reconciliations of other non-GAAP measures used in this Management's Discussion and Analysis of Financial Condition and Results of Operations, to the most comparable measure reported in accordance with GAAP, are included later in Item 7 under "Reconciliations of Non-GAAP Financial Measures to Reported Amounts." Any analysis of non-GAAP financial measures should be done in conjunction with results presented in accordance with GAAP. The non-GAAP measures are not intended to be substitutes for GAAP financial measures and should not be used as such.

Industry and Business Conditions

Trade publications reported that industry corrugated products shipments increased 1.2% during 2015, compared with 2014 and 1.6% per workday with one less workday in 2015. Reported industry containerboard production was 1.3% higher than 2014, with export shipments up 1.9%. In the first two months of 2016, a trade publication lowered its published prices for domestic linerboard and medium by $15 and $30 per ton, respectively.

The market for communication papers competes heavily with electronic data transmission and document storage alternatives. Increasing shifts to these alternatives have reduced usage of traditional print media and communication papers. Trade publications reported that uncoated freesheet paper shipments were down 1.0% in 2015, compared with 2014. Trade publication average prices for uncoated freesheet decreased $26 per ton, or 2.5%, in 2015, compared with 2014.

In January 2015, we, along with the United Steel Workers (USW) and other domestic paper producers, filed a petition before the United States International Trade Commission and the United States Department of Commerce, alleging that paper producers in China, Indonesia, Australia, Brazil, and Portugal are selling products in the United States in

violation of international trade rules. The domestic producers also alleged that Chinese and Indonesian producers are receiving illegal government subsidies. The agencies conducted their investigations in 2015 and early 2016. In January 2016, the U.S. Department of Commerce made determinations of antidumping and countervailing duties at rates varying by country and producer and, in February 2016, the International Trade Commission determined that the domestic industry has been materially injured by these imports. Accordingly, the antidumping and countervailing duties will be imposed on imports from these countries.

Outlook

Compared with fourth quarter 2015, we expect first quarter 2016 labor and benefits costs to be higher with annual wage increases and other timing-related expenses, and seasonally colder weather will increase wood and energy costs. Our tax rate will also be higher in the first quarter. These items will be partially offset by slightly higher corrugated products shipments and containerboard production, and lower scheduled mill outage costs. Finally, lower published prices for domestic linerboard and medium are expected to adversely affect earnings. As a result, we expect first quarter 2016 earnings to be lower than fourth quarter 2015.

Results of Operations

Year Ended December 31, 2015, Compared with Year Ended December 31, 2014

The historical results of operations of PCA for the years ended December 31, 2015 and 2014 are set forth below (dollars in millions):

	Year Ended December 31		
	2015	2014	Change
Packaging	$4,477.3	$4,540.3	$(63.0)
Paper	1,143.1	1,201.4	(58.3)
Corporate and other and eliminations	121.3	110.9	10.4
Net sales	$5,741.7	$5,852.6	$(110.9)
Packaging	$714.9	$663.2	$51.7
Paper	112.5	135.4	(22.9)
Corporate and other and eliminations	(77.4)	(95.9)	18.5
Income from operations	$750.0	$702.7	$47.3
Interest expense, net	(85.5)	(88.4)	2.9
Income before taxes	664.5	614.3	50.2
Income tax expense	(227.7)	(221.7)	(6.0)
Net income	$436.8	$392.6	$44.2
Net income excluding special items (a)	$442.6	$458.6	$(16.0)
EBITDA (a)	$1,106.5	$1,083.7	$22.8
EBITDA excluding special items (a)	$1,106.2	$1,143.6	$(37.4)

(a) See "Reconciliations of Non-GAAP Financial Measures to Reported Amounts" included in this Item 7 for a reconciliation of non-GAAP measures to the most comparable GAAP measure.

Net Sales

Net sales decreased $110.9 million, or 1.9%, to $5,741.7 million in 2015, compared with $5,852.6 million in 2014.

Packaging. Sales decreased $63.0 million, or 1.4%, to $4,477.3 million, compared with $4,540.3 million in 2014. Sales decreased $115.0 million due to the exit from our newsprint business in third quarter 2014 and the April 1, 2015, sale of our Hexacomb operations in Mexico and Europe. This decrease was partially offset by increased sales volumes in our corrugated products business ($17.0 million) and external containerboard sales ($31.0 million). Total corrugated products volume sold in 2015 increased approximately 1% over 2014. Our prices for corrugated products were approximately the same as 2014. With a full year of containerboard production on our D3 machine at our DeRidder, Louisiana mill, we increased our outside sales of containerboard, both domestic and export, by 52,000 tons compared with last year and we purchased 174,000 less tons of containerboard from the outside market in 2015. Our

export prices were down 7% compared with 2014, while pricing for domestic containerboard sales was flat with last year. Containerboard mill production in 2015 was 3,656,000 total tons, compared with 3,452,000 total tons in 2014.

Paper. Sales decreased $58.3 million, or 4.9%, to $1,143.1 million, compared with $1,201.4 million in 2014. The decrease was primarily due to 4.8% lower sales prices and changes in mix ($57.6 million).

Gross Profit

Gross profit decreased $21.5 million, or 1.7%, in 2015, compared with 2014. In 2015 and 2014, gross profit included expenses of $9.0 million and $58.1 million of special items, respectively, most of which related to incremental depreciation expense related to changing the estimated useful lives of assets in connection with our DeRidder mill restructuring. Excluding special items, gross profit decreased $70.6 million in 2015, compared with 2014. The decrease was primarily due to lower paper prices and changes in mix, lower export containerboard prices, and higher labor and benefit costs, partially offset by higher packaging sales volume and lower energy, chemical, and freight costs. Gross profit was 21.0% of net sales in both 2015 and 2014.

Selling, General, and Administrative Expenses

Selling, general, and administrative expenses decreased $18.2 million, or 3.9%, in 2015, compared with 2014. The decrease in 2015 was due primarily to lower administrative employee costs from the headcount reductions related to the Boise integration.

Other Expense, Net

Other expense, net, in 2015 was $6.7 million, compared with $57.3 million during 2014. Other expense in 2015 included $14.0 million of asset disposals and write-off charges and $12.9 million of Boise integration-related and other costs, partially offset by $7.1 million of income, net of expenses, related to the DeRidder restructuring, a $6.7 million gain on the sale of our St. Helens paper mill site, and $3.6 million of income from a refundable state tax credit received related to our investments and the jobs retained at our DeRidder mill, among other miscellaneous income and expense items. Other expense, net, in 2014 included $20.0 million of Boise integration-related and other costs, $17.6 million of costs for the settlement of the Kleen Products LLC v Packaging Corp. of America et al class action lawsuit, $10.1 million of asset disposals and write-off charges, and $7.3 million of DeRidder restructuring charges.

Income from Operations

Income from operations increased $47.3 million, or 6.7%, for the year ended December 31, 2015, compared with 2014. Our 2015 income from operations included $8.7 million of expense from special items, compared with $101.8 million of expense from special items in 2014. See "Reconciliations of Non-GAAP Financial Measures to Reported Amounts" in this Item 7 for more information on special items. Excluding special items, income from operations decreased $45.8 million in 2015, compared with 2014. The decrease in income from operations, excluding special items, was driven primarily by lower gross profit as described above, partially offset by a decrease in employee administrative costs and a $3.6 million state tax credit related to investments and jobs retained at our DeRidder mill.

Packaging. Segment income from operations increased $51.7 million, or 7.8%, to $714.9 million, compared with $663.2 million in 2014. Excluding expenses of $6.1 million of special items in 2015 and $70.7 million in 2014, segment income decreased $12.9 million to $721.0 million, compared with $733.9 million. The decrease is primarily related to higher labor and benefit costs ($19.7 million), lower export containerboard prices ($13.2 million), higher annual outage costs due mostly to the first quarter extended annual outage at our DeRidder mill ($8.6 million), increased depreciation ($8.7 million), freight ($7.6 million), and fiber ($4.6 million) costs, partially offset by higher volumes ($26.3 million) and lower energy costs ($23.6 million).

Paper. Segment income from operations decreased $22.9 million, or 16.9%, to $112.5 million, compared with $135.4 million for 2014. Excluding income of $6.7 million of special items in 2015, segment income decreased $29.6 million to $105.8 million. The decrease is due primarily to lower white paper prices and mix ($57.6 million), partially offset by lower freight ($10.8 million), chemical ($10.2 million), and energy costs ($8.9 million).

Interest Expense, Net, and Income Taxes

Interest expense, net, was $85.5 million in 2015, compared with $88.4 million in 2014. Interest expense in 2014 included $1.5 million of expense related to the write-off of deferred financing costs in connection with the refinancing of debt.

During 2015, we recorded $227.7 million of income tax expense, compared with $221.7 million of expense during 2014. The effective tax rate for 2015 and 2014 was 34.3% and 36.1%, respectively. The decrease in our effective tax rate in 2015 was primarily due to an increased domestic manufacturing deduction resulting from less tax net operating losses remaining from the acquisition of Boise Inc.

Year Ended December 31, 2014, Compared with Year Ended December 31, 2013

The historical results of operations of PCA for the years ended December 31, 2014 and 2013 are set forth below (dollars in millions):

	Year Ended December 31		
	2014 (a)	2013 (a)	Change
Packaging	$4,540.3	$3,431.7	$1,108.6
Paper	1,201.4	216.9	984.5
Corporate and other and eliminations	110.9	16.7	94.2
Net sales	$5,852.6	$3,665.3	$2,187.3
Packaging	$663.2	$554.2	$109.0
Paper	135.4	13.5	121.9
Corporate and other and eliminations	(95.9)	(85.8)	(10.1)
Income from operations	$702.7	$481.9	$220.8
Interest expense, net	(88.4)	(58.3)	(30.1)
Income before taxes	614.3	423.6	190.7
Income tax (expense) benefit	(221.7)	17.7	(239.4)
Net income	$392.6	$441.3	$(48.7)
Net income excluding special items (b)	$458.6	$325.2	$133.4
EBITDA (b)	$1,083.7	$683.7	$400.0
EBITDA excluding special items (b)	$1,143.6	$750.7	$392.9

(a) On October 25, 2013, we acquired Boise Inc. (Boise). Our financial results include Boise subsequent to acquisition.
(b) See "Reconciliations of Non-GAAP Financial Measures to Reported Amounts" included in this Item 7 for a reconciliation of non-GAAP measures to the most comparable GAAP measure.

Net Sales

Net sales increased $2,187.3 million, or 59.7%, to a record $5,852.6 million in 2014, compared with $3,665.3 million in 2013. The increase in 2014 related to a full year of Boise operations, compared with only two months and five days in 2013 ($1,962.8 million) and increased sales in PCA's historical operations ($224.5), which resulted from higher sales volumes and higher sales prices and mix.

Packaging. Sales increased $1,108.6 million, or 32.3%, to $4,540.3 million, compared with $3,431.7 million in 2013. A full year of Boise operations contributed $878.7 million of the increase and the remaining increase related to higher sales volumes ($160.5 million) and higher sales prices and mix ($69.4 million) in PCA's historical operations. Total corrugated products volume sold in 2014, including Boise, increased 25.5% over 2013 and shipments per workday

increased 25.0%. The year ended December 31, 2014, included 251 workdays, those days not falling on a weekend or holiday, compared with 250 workdays in 2013. Excluding Boise shipments, corrugated products shipments increased 4.7% in total, or 4.3% per workday in 2014, compared with 2013. The acquisition of Crockett Packaging in April 2014, contributed about 1.0% to the increase in shipments, with the rest of the increase coming from organic growth. We reduced our outside sales of containerboard, both

domestic and export, by 46,000 tons compared with last year and we purchased 182,000 tons of containerboard from the outside market in 2014. Containerboard mill production in 2014 was 3,452,000 total tons, including 801,000 tons from Boise, compared with 2,749,000 total tons in 2013, which included 141,000 tons from Boise.

Paper. Our paper segment sales include the sales for the white paper mills we acquired from Boise. Sales for 2014 were $1,201.4 million. In 2013, sales during the two months and five days we owned Boise were $216.9 million. In 2014, sales volumes of white paper were 1,114,000 tons, compared with 210,000 tons in 2013, for the period we owned Boise.

Gross Profit

Gross profit increased $362.0 million, or 41.7%, in 2014, compared with 2013. In 2014, gross profit included $58.1 million of expense from special items, most of which related to restructuring charges at our DeRidder, Louisiana mill, including incremental depreciation related to changing the estimated useful lives of newsprint-related assets in connection with our exit from the newsprint business in September 2014. In 2013, gross profit included $21.5 million of expense from special items related to the step-up in value of inventory acquired in the Boise acquisition. Excluding special items, gross profit increased $398.6 million. Approximately 90% of the increase was due to a full year of Boise operations, including realized synergies, and the remaining increase was from higher gross profit in PCA's historical packaging operations due to higher sales prices, volume, and mix, partially offset by increases in costs for labor, depreciation, freight, wood fiber, and chemical expenses. Gross profit as a percentage of net sales decreased to 21.0% of net sales in 2014 compared with 23.7% in 2013 due primarily to a full year impact of the white papers business whose products generally have lower margins than the products sold in the packaging business and the DeRidder restructuring charges described above.

Selling, General, and Administrative Expenses

Selling, general, and administrative expenses increased $142.9 million, or 43.8%, in 2014 compared with 2013. Approximately 90% of the increase relates to the acquired Boise businesses. The remaining increase in our historical PCA business is due primarily to a $12.0 million increase in salary and fringe benefit expenses and other increases, which were individually insignificant.

Other Expense, Net

Other expense, net, in 2014 was $57.3 million, which included Boise acquisition integration-related and other costs, which primarily relate to severance, retention, travel, and professional fees ($20.0 million), costs for the settlement of the Kleen Products LLC v Packaging Corp. of America et al class action lawsuit ($17.6 million), DeRidder mill restructuring costs primarily related to the conversion of the No. 3 newsprint machine to produce lightweight linerboard and corrugating medium and related start-up costs, and our exit from the newsprint business in September 2014 ($7.3 million), and asset disposals and write-offs charges ($10.1 million). In 2013, "Other expense, net" was $59.0 million, which primarily included acquisition-related costs ($17.2 million), Boise acquisition integration-related and other costs ($17.4 million), pension plan curtailment charges ($10.9 million), and asset disposals and write-offs charges ($13.2 million).

Income from Operations

Income from operations increased $220.8 million, or 45.8%, for the year ended December 31, 2014, compared with 2013. Our 2014 income from operations included $101.8 million of expense from special items, compared with $67.0 million of expense from special items in 2013. See "Reconciliations of Non-GAAP Financial Measures to Reported Amounts" in this Item 7 for more information on special items. Excluding special items, income from operations

increased $255.6 million in 2014, compared with 2013. Approximately 90% of the increase was due to a full year of Boise operations, including realized synergies, and the remaining 10% was due to improvement in PCA's historical earnings.

Packaging. Segment income from operations increased $109.0 million, or 19.7%, to $663.2 million, compared with $554.2 million in 2013. Excluding $70.7 million of special items in 2014 and $30.3 million in 2013, segment income increased $149.4 million to $733.9 million, compared with $584.5 million. The increase primarily related to a full year of Boise operations in 2014 (approximately 90% of the change, including realized synergies, and excluding special items) and increased income in PCA's historical packaging business, which related to higher sales price and improved mix ($69.4 million), higher sales volume ($12.8 million), partially offset by increased costs for labor and benefits ($28.4 million), depreciation ($16.6 million), transportation ($10.9 million), energy ($10.2 million), wood fiber ($5.0 million), chemicals ($2.8 million), and repairs ($2.8 million).

Paper. Segment income from operations was $135.4 million in 2014, compared with $13.5 million for the two months and five days after the Boise acquisition in 2013. Segment income in 2013 included $3.5 million of acquisition inventory step-up costs included in cost of sales, partially offset by $1.9 million of income for an insurance settlement related to Boise's former St. Helens, Oregon, mill, net of other expenses. Excluding these special items, segment income in 2013 for the white papers business was $15.1 million.

Interest Expense, Net, and Income Taxes

Interest expense, net, was $88.4 million in 2014, compared with $58.3 million in 2013. The increase in interest expense primarily related to higher average outstanding borrowings following the acquisition of Boise in October of 2013. Interest expense in 2014 and 2013 included $1.5 million and $1.1 million of expense, respectively, related to the write-off of deferred financing costs in connection with the repayment of debt. Also, 2013 included $10.5 million of expenses related to financing the acquisition of Boise.

In 2013, we recorded a $17.7 million income tax benefit, which included $166.0 million of income tax benefits from the reversal of the reserve for unrecognized tax benefits from alternative energy tax credits. The IRS completed its audit of PCA’s 2008 and 2009 Federal income tax returns and all claimed alternative energy tax credits were allowed. In November 2013, PCA received a confirmation letter from the Joint Committee on Taxation that their review was complete. As a result, a $103.9 million ($102.0 million of tax plus $1.9 million of accrued interest) reserve for unrecognized tax benefits for the Filer City mill’s cellulosic biofuel tax credit was fully reversed as a benefit to income taxes in 2013. Excluding the alternative energy tax credits, the 2013 effective tax rate was 35.0%, compared with 36.1% in 2014. The credits are described in Note 7, Alternative Energy Tax Credits, of the Notes to Consolidated Financial Statements in "Part II, Item 8. Financial Statements and Supplementary Data" of this Form 10-K. The effective tax rate in 2014 varies from the U.S. federal statutory tax rate of 35.0% principally due to the impact of state and local income taxes and the domestic manufacturers’ deduction.

Liquidity and Capital Resources

Sources and Uses of Cash

Our primary sources of liquidity are net cash provided by operating activities and available borrowing capacity under our revolving credit facility. We ended the year with $184.2 million of cash and $326.5 million of unused borrowing capacity under the revolving credit facility, net of letters of credit. Currently, our primary uses of cash are for operations, capital expenditures, debt service (including voluntary payments of debt), declared common stock dividends and share repurchases. We believe that net cash generated from operating activities, cash on hand, available borrowings under our revolving credit facility and available capital through access to capital markets will be adequate to meet our liquidity and capital requirements, including payments of any declared common stock dividends for the foreseeable future. As our debt or credit facilities become due, we will need to repay, extend or replace such facilities. Our ability to do so will be subject to future economic conditions and financial, business, and other factors, many of which are beyond our control.

Below is a summary table of our cash flows, followed by a discussion of our sources and uses of cash through operating activities, investing activities, and financing activities (dollars in millions):

	Year Ended December 31		
	2015	2014	2013
Net cash provided by (used for):			
Operating activities	$762.6	$736.1	$608.2
Investing activities	(298.1)	(451.1)	(1,411.4)

Financing activities	(405.2)	(351.1)	786.8
Net increase (decrease) in cash and cash equivalents	$59.3	$(66.1)	$(16.4)

Operating Activities

2015

During 2015, net cash provided by operating activities was $762.6 million, compared with $736.1 million for 2014, an increase of $26.5 million. Cash from operations excluding changes in cash used for operating assets and liabilities decreased $0.7 million. The remaining $27.2 million increase from changes in cash used for operating assets and liabilities was primarily due to the following: (a) no inventory prebuild for our first quarter 2016 planned maintenance outages due to additional capacity added at our reconfigured DeRidder, Louisiana mill and (b) a decrease in accounts receivable related to differences in the timing of collections of receivables. These changes were partially offset by (a) higher required cash tax payments resulting from less net operating loss utilization and (b) a decrease in accrued liabilities due primarily to lower compensation and benefits accruals. Cash requirements for operating activities are subject to PCA's operating needs and the timing of collection of receivables and payments of payables and expenses.

2014

During 2014, net cash provided by operating activities was $736.1 million, compared with $608.2 million for 2013, an increase of $127.9 million. Cash from operations excluding changes in cash used for operating assets and liabilities increased $216.2 million due to record earnings in 2014, which was driven by the acquisition of Boise in fourth quarter 2013. Cash used for operating assets and liabilities, excluding acquisitions, totaled $97.0 million in 2014, compared with $8.7 million in 2013. The higher requirements for operating assets and liabilities, excluding acquisitions, in 2014 were driven primarily by higher containerboard and office papers inventory levels built in advance of four of our five containerboard mills and two of our three white papers mills taking maintenance outages in the first half of 2015 and lower accounts payable levels due to the timing of payments, partially offset by a decrease in federal and state income taxes receivable at December 31, 2014, compared with December 31, 2013.

Investing Activities

2015

We used $298.1 million for investing activities in 2015, compared with $451.1 million in 2014. In 2015, we spent $314.5 million for capital investments, compared with $420.2 million in 2014. The decrease in capital spending was due primarily to $104.2 million invested in 2014 for the the conversion of the No. 3 newsprint machine at our DeRidder, Louisiana mill to produce containerboard. We received $23.0 million of cash proceeds for the sale of our Hexacomb corrugated manufacturing operations in Mexico and Europe during 2015. In 2014, we paid $20.5 million to acquire the assets of Crockett Packaging, a corrugated products manufacturer.

The details of capital expenditures for property and equipment, excluding acquisitions, by segment for the years ended December 31, 2015, 2014, and 2013, are included in the table below (dollars in millions).

	Year Ended December 31		
	2015	2014	2013
Packaging	$250.3	$362.1	$222.2
Paper	58.5	51.7	10.0
Corporate and Other	5.7	6.4	2.2
	$314.5	$420.2	$234.4

We expect capital investments in 2016 to be between $250.0 million and $265.0 million, including capital required for Boiler MACT spending, but excluding any acquisitions. These expenditures could increase or decrease as a result of a

number of factors, including our financial results, future economic conditions, and our regulatory compliance requirements. We currently estimate capital expenditures to comply with Boiler MACT regulations (as discussed below under "Environmental Matters") in 2016 of up to $3.0 million and we expect other environmental capital expenditures of about $5.0 million in 2016. Our estimated environmental expenditures could vary significantly depending upon the enactment of new environmental laws and regulations, including those related to greenhouse gas emissions and industrial boilers. For additional information, see "Environmental Matters" in this Management's Discussion and Analysis of Financial Condition and Results of Operations.

At December 31, 2015, PCA had commitments for capital expenditures of $83.7 million. PCA believes that cash-on-hand combined with cash flow from operations will be sufficient to fund these commitments.

2014

We used $451.1 million for investing activities in 2014, compared with $1,411.4 million in 2013. In 2014, we spent $420.2 million for capital investments, compared with $234.4 million in 2013. The increase in capital spending was due primarily to having a full year of Boise capital investments, including $104.2 million for the the conversion of the No. 3 newsprint machine at our DeRidder, Louisiana mill to produce containerboard. In 2014, we spent $20.5 million for the acquisition of Crockett Packaging. In 2013 we spent $1,174.5 million on the acquisition of Boise, net of $121.7 million of cash acquired.

Financing Activities

2015

In 2015, we used $405.2 million for financing activities, compared with $351.1 million in 2014. The increase in cash used for financing activities primarily relates to share repurchases and increased dividend payments, partially offset by a decrease in debt repayments, net of proceeds received. In 2015, we made $47.6 million of principal payments on long-term debt and capital leases, compared with $193.6 million of payments, net of debt proceeds received, in 2014. In 2014, we also paid $3.4 million of financing costs. We paid $200.8 million of dividends in 2015, compared with $157.4 million of dividends in 2014. On February 26, 2015, PCA's Board of Directors increased the regular quarterly cash dividend to $0.55 per share from the previous $0.40 per share dividend, beginning with the dividend paid on April 15, 2015. During 2015, we paid $154.7 million to repurchase 2,326,493 shares of common stock, and we withheld 129,983 shares from vesting equity awards to cover employee tax liabilities of $8.7 million, compared with no share repurchases and $13.2 million of shares withheld on equity award vesting in 2014. Tax benefits from share-based awards and proceeds from the exercise of stock options contributed $6.0 million in 2015, compared with $15.9 million in 2014.

Subsequent to year-end, we repurchased 1,868,487 shares of common stock for $93.4 million, fully depleting the July 2015 authorization of $150 million. On February 25, 2016, PCA announced that its Board of Directors authorized the repurchase of an additional $200 million of the Company's outstanding common stock. Repurchases may be made from time to time in the open market or privately negotiated transactions in accordance with applicable securities regulations. The timing and amount of repurchases will be determined by the Company in its discretion based on factors such as PCA's stock price and market and business conditions.

For more information about our debt, commitments, and treasury lock derivative instruments, see Note 10, Debt, Note 19, Commitments, Guarantees, Indemnifications, and Legal Proceedings, and Note 14, Derivative Instruments and Hedging Activities, respectively, of the Notes to Consolidated Financial Statements in "Part II, Item 8. Financial Statements and Supplementary Data" of this Form 10-K.

2014

In 2014, we used $351.1 million for financing activities, while financing activities provided $786.8 million in 2013. In 2014, we made $592.5 million of principal payments on long-term debt and capital leases and received $398.9 million of proceeds (net of debt discount) from long-term debt issuances, for a net reduction in debt of $193.6 million. To reduce exposure to variable interest rates, in September 2014, we issued $400 million of ten-year notes with a fixed interest rate of 3.65% and used the proceeds to pay down a portion of our five-year, variable-rate term loan. In October 2013, we entered into $2.35 billion of new credit facilities, including a $350.0 million revolver which remains undrawn. We used the proceeds from borrowings under these facilities and cash on hand to finance the acquisition of Boise, repay $953.6 million of indebtedness, which included $829.8 million of acquired Boise debt, and for general corporate purposes. In addition, in 2013, we repaid $12.2 million of outstanding debt prior to the acquisition of Boise and repaid $109.0 million under our receivables credit facility that we terminated in December 2013. In 2014, we also paid $3.4 million of financing costs, compared with $19.4 million in 2013. We paid $157.4 million of dividends in 2014, compared with $109.1 million of dividends and $7.8 million of common stock repurchases in 2013. The lower dividends paid in 2013 resulted from accelerating the dividends that would have been paid in January 2013 to December 2012. During 2014, we withheld 183,170 shares from vesting equity awards to cover employee tax liabilities of $13.2 million, compared with $11.0 million in 2013. Proceeds from the exercise of stock options and tax benefits from share-based awards contributed $15.9 million in 2014, compared with $10.7 million in 2013.

Commitments

Contractual Obligations

The table below sets forth our enforceable and legally binding obligations as of December 31, 2015, for the categories described below. Some of the amounts included in the table are based on management's estimates and assumptions about these obligations, including their duration, the possibility of renewal, anticipated actions by third parties, and other factors. Because these estimates and assumptions are necessarily subjective, our actual payments may vary from those reflected in the table. Purchase orders made in the ordinary course of business are excluded from the table below. Any amounts for which we are liable under purchase orders are reflected on the Consolidated Balance Sheets as accounts payable and accrued liabilities (dollars in millions):

	Payments Due by Period				
	Total	Less Than 1 Year	1-3 Years	3-5 Years	More Than 5 Years
Term loan, due October 2018	$25.0	$—	$25.0	$—	$—
Term loan, due October 2020	637.0	6.5	13.0	617.5	—
6.50% Senior Notes, due March 2018	150.0	—	150.0	—	—
3.90% Senior Notes, due June 2022	400.0	—	—	—	400.0
4.50% Senior notes, due November 2023	700.0	—	—	—	700.0
3.65% Senior notes, due September 2024	400.0	—	—	—	400.0
Total short-term and long-term debt (a)	2,312.0	6.5	188.0	617.5	1,500.0
Interest on long-term debt (b)	560.4	85.5	162.7	146.0	166.2
Capital lease obligations, including interest	33.9	2.7	5.4	5.4	20.4
Operating leases (c)	248.4	54.4	81.9	42.9	69.2
Capital commitments	83.7	83.7	—	—	—
Purchase commitments:					
Raw materials (d)	271.2	63.4	79.4	51.4	77.0
Energy related (e)	40.8	31.9	8.9	—	—
Other long-term liabilities reflected on our Consolidated Balance Sheet (f):					
Compensation and benefits (g)	354.3	30.1	91.4	104.4	128.4
Other (h)	73.5	20.7	8.7	4.2	39.9
	$3,978.2	$378.9	$626.4	$971.8	$2,001.1

(a) The table assumes our long-term debt is held to maturity and includes the current portion of long-term debt. See Note 10, Debt, of the Notes to Consolidated Financial Statements in "Part II, Item 8. Financial Statements and Supplementary Data" of this Form 10-K. Amounts are reported gross and do not include unamortized debt discounts of $2.8 million at December 31, 2015.

(b) Amounts represent estimated future interest payments as of December 31, 2015, assuming our long-term debt is held to maturity and using interest rates in effect at December 31, 2015. See "Item 7A. Quantitative and Qualitative Disclosures About Market Risk" for the impact of changes in interest rates on PCA's future cash flows.

(c) We enter into operating leases in the normal course of business. We lease some of our operating facilities, as well as other property and equipment, under operating leases. Some lease agreements provide us with the option to renew the lease or purchase the leased property. Our operating lease obligations would change if we exercised these renewal options and/or if we entered into additional operating lease agreements.

(d) Included among our raw materials purchase obligations are contracts to purchase approximately $237.3 million of wood fiber. Purchase prices under most of these agreements are set quarterly, semiannually, or annually based on regional market prices, and the estimate is based on contract terms or first quarter 2016 pricing. Except for deposits

required pursuant to wood supply contracts, these obligations are not recorded in our consolidated financial statements until contract payment terms take effect. Our log, fiber, and wood chip obligations are subject to change based on, among other things, the effect of governmental laws and regulations, our manufacturing operations not operating in the normal course of business, log and fiber availability, and the status of environmental appeals.

(e) We enter into utility contracts for the purchase of electricity and natural gas. We also purchase these services under utility tariffs. The contractual and tariff arrangements include multiple-year commitments and minimum annual purchase requirements. Our payment obligations were based upon prices in effect on December 31, 2015, or contract language, if available.

(f) Long-term deferred income taxes of $347.0 million and unrecognized tax benefits of $6.7 million, including interest and penalties, are excluded from this table, because the timing of their future cash outflows are uncertain.

(g) Amounts primarily consist of pension and postretirement obligations, including current portion of $2.9 million. We have minimum qualified pension contributions of approximately $27 million in 2016. See Note 11, Employee Benefit Plans and Other Postretirement Benefits, of the Notes to Consolidated Financial Statements in "Part II, Item 8. Financial Statements and Supplementary Data" of this Form 10-K, for additional information.

(h) Amounts primarily consist of workers compensation, environmental, and asset retirement obligations.

Off-Balance-Sheet Arrangements

The Company does not have any off-balance sheet arrangements as of December 31, 2015.

Inflation and Other General Cost Increases

We are subject to both contractual, inflation, and other general cost increases. If we are unable to offset these cost increases by price increases, growth, and/or cost reductions in our operations, these inflation and other general cost increases could have a material adverse effect on our operating cash flows, profitability, and liquidity.

In 2015, our total company costs including cost of sales (COS) and selling, general, and administrative expenses (SG&A) was $5.0 billion, and excluding non-cash costs (depreciation, pension and postretirement expense, and share-based compensation expense) was $4.6 billion. A 1% increase in COS and SG&A costs would increase costs by $50 million and cash costs by $46 million.

Certain items of product input costs have historically been subject to more cost volatility including fiber, purchased energy, and chemicals.

Energy

In 2015, our mills, including both packaging and paper mills, consumed about 89 million MMBTU’s of fuel, including internally generated and externally purchased, to produce both steam and electricity. The following table for 2015 provides the total MMBTU's purchased externally by fuel type each quarter and the average cost per MMBTU by fuel type for the year. Our mills represent about 90% of our total purchased fuel costs. The cost per MMBTU includes the cost of the fuel plus our transportation and delivery costs.

	2015 Fuel Purchased (millions of MMBTU's)					2015 Avg.
Fuel Type	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Full Year	Cost / MMBTU
Natural gas	5.14	4.89	5.29	5.69	21.01	$3.65
Purchased bark	2.56	2.53	2.21	2.52	9.82	2.66
Coal	1.03	0.46	0.10	0.03	1.62	3.91
Other fuels	0.42	0.56	0.45	0.43	1.86	3.58
Total mills	9.15	8.44	8.05	8.67	34.31	$3.38

In addition, the mills purchased 22.10 million CkWh (hundred kilowatt hours) of purchased electricity in 2015. The purchases by quarter and the average cost per CkWh were as follows:

2015 Purchased Electricity (millions of CkWh)	2015 Avg.

	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Full Year	Cost / CkWh
Purchased electricity	5.66	5.51	5.78	5.15	22.10	$5.69

Environmental Matters

Environmental compliance requirements are a significant factor affecting our business. We employ processes in the manufacture of containerboard, paper, and pulp which result in various discharges, emissions and waste disposal. These processes are subject to numerous federal, state, local and foreign environmental laws and regulations. We operate and expect to continue to operate, under environmental permits and similar authorizations from various governmental authorities that regulate such discharges, emissions, and waste disposal. The most significant of these laws affecting the Company are:

- Resource Conservation and Recovery Act (RCRA);
- Clean Water Act (CWA);
- Clean Air Act (CAA);
- The Emergency Planning and Community Right-to-Know-Act (EPCRA);
- Toxic Substance Control Act (TSCA); and
- Safe Drinking Water Act (SDWA).

We believe that we are currently in material compliance with these and all applicable environmental rules and regulations. Because environmental regulations are constantly evolving, the Company has incurred, and will continue to incur, costs to maintain compliance with these and other environmental laws. The Company works diligently to anticipate and budget for the impact of applicable environmental regulations, and does not currently expect that future environmental compliance obligations will materially affect its business or financial condition. For the years ended December 31, 2015, 2014, and 2013, we spent $42.6 million, $43.9 million, and $41.1 million, respectively, to comply with the requirements of these and other environmental laws.

As is the case with any industrial operation, PCA has, in the past, incurred costs associated with the remediation of soil or groundwater contamination, as required by the federal Comprehensive Environmental Response, Compensation and Liability Act, commonly known as the federal "Superfund" law, and analogous state laws. Cleanup requirements arise with respect to properties the Company currently owns or operates, former facilities and off-site facilities where the Company has disposed of hazardous substances. As part of the sale to PCA of the containerboard and corrugated products business of Pactiv Corporation in April 1999, Pactiv agreed to retain all liability for all former facilities and all sites associated with pre-closing off-site waste disposal. Pactiv also retained environmentally impaired real property in Filer City, Michigan unrelated to current mill operations. In addition, OfficeMax (now an indirect, wholly owned subsidiary of Office Depot) retains responsibility for certain environmental liabilities related to some of the businesses, facilities, and assets we acquired from Boise. Generally, this responsibility relates to hazardous substance releases and other environmental incidents that arose before 2004. Some of these liabilities could be significant; however, Office Depot may not have sufficient funds to satisfy its indemnification obligations, and in some cases, we may not be entitled to such indemnification.

In January 2013, the U.S. Environmental Protection Agency (the "EPA") established a three year deadline for compliance with the Boiler MACT regulations, establishing air emissions standards and certain other requirements for industrial boilers. PCA’s compliance actions involve modifying or replacing certain of its boilers. PCA estimates that its remaining Boiler MACT compliance obligations will require capital expenditures of $3.0 million in 2016. We currently expect other environmental capital expenditures of about $5.0 million in 2016. Total capital expenditures for environmental matters were $16.0 million in 2015, $29.0 million in 2014, and $6.2 million for 2013.

Because liability for remediation costs under environmental laws is strict, meaning that liability is imposed without fault, joint and several, meaning that liability is imposed on each party without regard to contribution, and retroactive, PCA could receive notifications of cleanup liability in the future and this liability could be material. From 2006 through 2015, there were no significant environmental remediation costs at PCA's mills and corrugated plants. As of December 31, 2015, we maintained an environmental reserve of $24.3 million relating to on-site landfills and surface

impoundments as well as ongoing and anticipated remedial projects. The Company believes that it is not reasonably possible that future environmental expenses above the $24.3 million accrued at December 31, 2015, will have a material impact on its financial condition, results of operations, and cash flows.

While legislation regarding the regulation of greenhouse gas emissions has been proposed at the federal level, it is uncertain whether such legislation will be passed and, if so, what the breadth and scope of such legislation will be. The result of the regulation of greenhouse gas emissions could be an increase in our future environmental compliance costs, through caps, taxes or additional capital expenditures to modify facilities, which may be material. However, climate change legislation and

the resulting future energy policy could also provide us with opportunities if the use of renewable energy is encouraged. We currently self-generate a significant portion of our power requirements at our mills using bark, black liquor and biomass as fuel, which are derived from renewable resources. While we believe we are well-positioned to take advantage of any renewable energy incentives, it is uncertain what the ultimate costs and opportunities of any climate change legislation will be and how our business and industry will be affected.

Critical Accounting Policies and Estimates

Management’s discussion and analysis of financial condition and results of operations are based upon the Company’s consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States of America. The preparation of these financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses, and related disclosures of contingent assets and liabilities. On an ongoing basis, PCA evaluates its estimates, including those related to business combinations, goodwill and intangible assets, pensions and other postretirement benefits, environmental liabilities, income taxes, and long-lived asset impairment, among others. PCA bases its estimates on historical experience and on various other assumptions that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

Critical accounting estimates are those that are most important to the portrayal of our financial condition and results. These estimates require management's most difficult, subjective, or complex judgments. We review the development, selection, and disclosure of our critical accounting estimates with the Audit Committee of our board of directors. The Company believes that of its significant accounting policies, the following involve a higher degree of judgment and/or complexity:

Pensions

The Company accounts for defined benefit pension plans in accordance with Accounting Standards Codification (ASC) 715, "Compensation - Retirement Benefits." The calculation of pension expense and pension liabilities requires decisions about a number of key assumptions that can significantly affect expense and liability amounts, including discount rates, expected return on plan assets, expected rate of compensation increases, longevity and service lives of participants, expected contributions, and other factors. The pension assumptions used to measure pension expense and liabilities are discussed in Note 11, Employee Benefit Plans and Other Postretirement Benefits.

We recognize the funded status of our pension plans on our Consolidated Balance Sheet and recognize the actuarial and experience gains and losses and the prior service costs and credits as a component of "Accumulated Other Comprehensive Loss" in our Consolidated Statement of Changes in Stockholders' Equity. Actual results that differ from assumptions are accumulated and amortized over future periods and, therefore, generally affect recognized expense in future periods. At December 31, 2015, we had approximately $103.3 million of actuarial losses, net of tax, recorded in "Accumulated other comprehensive loss" on our Consolidated Balance Sheet. Accumulated losses in excess of 10% of the greater of the projected benefit obligation or the market-related value of assets will be recognized on a straight-line basis over the average remaining service period of active employees, which is between seven to ten years, to the extent that losses are not offset by gains in subsequent years. While we believe that the assumptions used to measure our pension obligations are reasonable, differences in actual experience or changes in assumptions may materially affect our pension obligations and future expense.

We believe that the accounting estimate related to pensions is a critical accounting estimate because it is highly susceptible to change from period to period. As discussed above, the future effects of pension plans on our financial position and results of operations will depend on economic conditions, employee demographics, mortality rates, retirement rates, investment performance, and funding decisions, among other factors. The following table presents selected assumptions used and expected to be used in the measurement of pension expense in the following periods (dollars in millions):

	Year Ending December 31, 2016	Year Ended December 31	
		2015	2014
Pension expense	$26.8	$31.3	$25.3
Assumptions			
Discount rate	4.50 %	4.14 %	5.00 %
Expected rate of return on plan assets	6.57 %	6.73 %	6.69 %

A change of 0.25% in either direction to the discount rate or the expected rate of return on plan assets would have had the following effect on 2015 and 2016 pension expense (dollars in millions):

	Base Expense	Increase (Decrease) in Pension Expense (a)	
		0.25% Increase	0.25% Decrease
2015 Expense			
Discount rate	$31.3	$(3.0)	$3.5
Expected rate of return on plan assets	31.3	(2.0)	2.0
2016 Expense (b)			
Discount rate	$26.8	$(2.2)	$2.9
Expected rate of return on plan assets	26.8	(1.9)	1.9

(a) The sensitivities shown above are specific to 2015 and 2016. The sensitivities may not be additive, so the impact of changing multiple factors simultaneously cannot be calculated by combining the individual sensitivities shown.

(b) Beginning in 2016, we refined the method used to determine the service and interest cost components of our net periodic benefit cost. Previously, the cost was determined using a single weighted-average discount rate derived from the yield curve. Under the refined method, known as the spot rate approach, we will use individual spot rates along the yield curve that correspond with the timing of each benefit payment. We believe this change provides a more precise measurement of service and interest costs by improving the correlation between projected cash outflows and corresponding spot rates on the yield curve. Compared to the previous method, the spot rate approach will decrease the service and interest components of our benefit costs by about $8 million in 2016.

For more information related to our pension benefit plans, see Note 11, Employee Benefit Plans and Other Postretirement Benefits, of the Notes to Consolidated Financial Statements in "Part II, Item 8. Financial Statements and Supplementary Data" of this Form 10-K.

Goodwill and Intangible Asset Impairment

Goodwill represents the excess of the cost of an acquired business over the fair value of the identifiable tangible and intangible assets acquired and liabilities assumed in a business combination. At December 31, 2015, we had $544.0 million of goodwill, of which we recorded $458.6 million in connection with the acquisition of Boise in fourth quarter 2013. At December 31, 2015, we had $488.8 million and $55.2 million of goodwill recorded in our Packaging and Paper segments, respectively. All of our intangible assets, excluding goodwill, are amortized over their estimated

useful lives.

We maintain two reporting units for purposes of our goodwill and intangible asset impairment testing, Packaging and Paper, which are the same as our operating segments discussed in Note 18, Segment Information, of the Notes to Consolidated Financial Statements in "Part II, Item 8. Financial Statements and Supplementary Data" of this Form 10-K. We test goodwill for impairment annually in the fourth quarter or sooner if events or changes in circumstances indicate that the carrying value of the asset may exceed fair value.

In conducting our goodwill impairment analysis, we utilize the income approach, based on a discounted cash flow model (Level 3 measurement). The fair value was also calculated using the market approach based primarily on comparable company EBITDA multiples (Level 2 measurement) and was compared to and supported the fair value based upon the discounted cash flow approach. We believe that the discounted cash flow model captures our estimates regarding the results of our future prospects; however, we also considered the market's expectations based on observable market information. The discounted cash flow model estimates the projected future cash flows to be generated by our reporting units, discounted to present value using a discount rate for a potential market participant. The market approach estimates fair value based on multiples of EBITDA. The following assumptions are key to our estimates of fair value:

Business Projections. The discounted cash flow model utilizes business projections that are developed internally by management for use in managing the business. These projections include significant assumptions such as estimates of future revenues, profits, income taxes, and capital expenditures. Our forecasts take into consideration recent sales data for existing products, planned timing of capital projects, and key economic indicators to estimate future production volumes, selling prices, and key input costs for our manufactured products. Our pricing assumptions are estimated based upon an assessment of industry supply and demand dynamics for our major products.

Growth Rates. A growth rate is used to calculate the terminal value in the discounted cash flow model. The growth rate is the expected rate at which earnings or revenue is projected to grow beyond the forecast period.

Discount Rates. Future cash flows are discounted at a rate that is consistent with a weighted average cost of capital for a potential market participant. The weighted average cost of capital is an estimate of the overall after-tax rate of return required by equity and debt holders of a business enterprise. The discount rates selected are based on existing conditions within our industry and reflect adjustments for potential risk premiums in those markets as well as weighting of the market cost of equity versus debt.

EBITDA Multiples. The market approach requires the use of a valuation multiple to calculate the estimated fair value of a reporting unit. We use an EBITDA multiple based on a selection of comparable companies and recent acquisition transactions within our industries.

Based on the results of the first step of the goodwill impairment test, we determined that the fair value of our Packaging and Paper reporting units were substantially in excess of the carrying amount, and therefore, no goodwill impairment existed. As a result, the second step of the goodwill impairment test was not required to be completed.

If management's estimates of future operating results materially change or if there are changes to other assumptions, the estimated fair value of our identifiable intangible assets and goodwill could change significantly. Such change could result in impairment charges in future periods, which could have a significant noncash impact on our operating results and financial condition. We cannot predict the occurrence of future events that might adversely affect the reported value of our goodwill and intangible assets. As additional information becomes known, we may change our estimates.

Long-Lived Asset Impairment

An impairment of a long-lived asset exists when the carrying value of an asset is not recoverable through future undiscounted cash flows from operations and when the carrying value of the asset exceeds its fair value. Long-lived asset impairment is a critical accounting estimate, as it is susceptible to change from period to period.

We review the carrying value of long-lived assets for impairment when events or changes in circumstances indicate that the carrying amount of assets may not be recoverable. For purposes of testing for impairment, we group our long-lived assets at the lowest level for which identifiable cash flows are largely independent of the cash flows from other assets and liabilities. Our asset groupings vary based on the related business in which the long-lived asset is employed and the interrelationship between those long-lived assets in producing net cash flows. Asset groupings could change in the future if changes in the operations of the business or business environment affect the way particular long-lived assets are employed or the interrelationships between assets. To estimate whether the carrying value of an asset or asset group is impaired, we estimate the undiscounted cash flows that could be generated under a range of possible outcomes. To measure future cash flows, we are required to make assumptions about future production volumes, future product pricing, and future expenses to be incurred. In addition, estimates of future cash flows may change based on the availability of fiber, environmental requirements, capital spending, and other strategic management decisions. We estimate the fair value of an asset or asset group based on quoted market prices for similar assets and liabilities or inputs that are observable either directly (Level 1 measurement) or indirectly

(the amount for which the asset(s) could be bought or sold in a current transaction with a third party) when available (Level 2 measurement). When quoted market prices are not available, we use a discounted cash flow model to estimate fair value (Level 3 measurement).

We periodically assess the estimated useful lives of our assets. Changes in circumstances, such as changes to our operational or capital strategy, changes in regulation, or technological advances, may result in the actual useful lives differing from our estimates. Revisions to the estimated useful lives of assets requires judgment and constitutes a change in accounting estimate, which is accounted for prospectively by adjusting or accelerating depreciation and amortization rates. During the years ended December 31, 2015 and 2014, we recognized $9.0 million and $42.0 million, respectively, of accelerated depreciation expense related to shortening the useful lives of assets at the DeRidder, Louisiana mill, which primarily related to the newsprint business we exited in 2014.

Income Taxes

We account for income taxes and separately recognize deferred tax assets and deferred tax liabilities. We are subject to income taxes in both the U.S. and foreign jurisdictions. Significant judgments and estimates are required in determining the consolidated income tax expense and our tax basis in assets and liabilities.

PCA’s annual tax rate is determined based on income, statutory tax rates and the tax impacts of items treated differently for tax purposes than for financial reporting purposes. Tax law requires some items to be included in the tax return at different times than the items reflected in the financial statements. As a result, the annual tax rate in the financial statements is different than the rate reported on PCA’s tax return. Some of these differences are permanent, such as expenses that are not deductible in the tax return, and some differences are temporary, reversing over time, such as depreciation expense. These temporary differences create deferred tax assets and liabilities. We also recognize only the impact of tax positions that, based on their technical merits, are more likely than not to be sustained upon an audit by the taxing authority.

Inherent in determining the annual tax rate are judgments regarding business plans, planning opportunities, and expectations about future outcomes. Significant management judgments are required for the following items:

- Management reviews PCA’s deferred tax assets for realizability. Valuation allowances are established when management believes that it is more likely than not that some portion of the deferred tax assets will not be realized. Changes in valuation allowances from period to period are included in the tax provision.
- PCA establishes accruals for unrecognized tax benefits when, despite the belief that PCA’s tax return positions are fully supported, PCA believes that an uncertain tax position does not meet the recognition threshold of ASC 740, "Income Taxes." The tax contingency accruals are adjusted in light of changing facts and circumstances, such as the progress of tax audits, the expiration of the statute of limitations for the relevant taxing authority to examine a tax return, case law and emerging legislation. While it is difficult to predict the final outcome or timing of resolution for any particular tax matter, PCA believes that the accruals for unrecognized tax benefits at December 31, 2015, reflect the likely outcome of known tax contingencies as of such date in accordance with accounting for uncertainty in income taxes under ASC 740.

The calculation of our tax liabilities involves dealing with uncertainties in the application of complex U.S. and foreign tax regulations, exposures from not filing in some jurisdictions, and transfer pricing exposures from allocation of income between jurisdictions. It is inherently difficult and subjective to estimate uncertain tax positions, because we have to determine the probability of various possible outcomes. We evaluate these uncertain tax positions on a quarterly basis. This evaluation is based on factors including, but not limited to, changes in facts or circumstances, changes in tax law, effectively settled issues under audit, and new audit activity. Such a change in recognition or measurement would result in the recognition of a tax benefit or an additional charge to the tax provision.

New and Recently Adopted Accounting Standards

For a listing of our new and recently adopted accounting standards, see Note 2, Summary of Significant Accounting Policies, of the Notes to Consolidated Financial Statements in "Part II, Item 8. Financial Statements and Supplementary Data" of this Form 10-K.

Reconciliations of Non-GAAP Financial Measures to Reported Amounts

Income from operations and net income excluding special items are non-GAAP financial measures. Management excludes special items and uses non-GAAP measures to focus on PCA's on-going operations and assess its operating performance and believes that it is useful to investors because it enables them to perform meaningful comparisons of past and present operating results. Any analysis of non-GAAP financial measures should be done in conjunction with results presented in accordance with GAAP. The non-GAAP measures are not intended to be substitutes for GAAP financial measures and should not be used as such. Reconciliations of the non-GAAP measures to the most comparable measure reported in accordance with GAAP for the years ended December 31, 2015, 2014, and 2013, follow (dollars in millions):

	Year Ended December 31					
	2015		2014		2013 (a)	
	Income from Operations	Net Income	Income from Operations	Net Income	Income from Operations	Net Income
As reported in accordance with GAAP	$750.0	$436.8	$702.7	$392.6	$481.9	$441.3
Special items:						
DeRidder restructuring (b)	2.0	1.3	65.8	42.1	—	—
Integration-related and other costs (c)	13.4	8.9	18.4	12.7	17.4	11.0
Sale of St. Helens paper mill site (d)	(6.7)	(4.4)	—	—	—	—
Class action lawsuit settlement (e)	—	—	17.6	11.2	—	—
Alternative energy tax credits (f)	—	—	—	—	—	(166.0)
Acquisition inventory step-up (g)	—	—	—	—	21.5	13.6
Acquisition-related costs (h)	—	—	—	—	17.2	10.9
Acquisition-related financing costs (h)	—	—	—	—	—	7.4
Pension curtailment charges (i)	—	—	—	—	10.9	7.0
Total special items	8.7	5.8	101.8	66.0	67.0	(116.1)
Excluding special items	$758.7	$442.6	$804.5	$458.6	$548.9	$325.2

(a) On October 25, 2013, we acquired Boise Inc. Our financial results include Boise subsequent to acquisition.

(b) 2015 and 2014 include amounts from restructuring activities at our mill in DeRidder, Louisiana including costs related to the conversion of the No. 3 newsprint machine to containerboard, our exit from the newsprint business, and other improvements.

(c) All periods presented included include Boise acquisition integration-related and other costs, primarily for severance, retention, travel, and professional fees. 2014 also includes $1.5 million of expense related to the write-off of deferred financing costs in connection with the debt refinancing.

(d) In September 2015, we sold the remaining land, buildings, and equipment at our paper mill site in St. Helens, Oregon where we ceased paper production in December 2012. We recorded a $6.7 million gain on the sale.

(e) Includes $17.6 million of costs for the settlement of the Kleen Products LLC v Packaging Corp. of America et al class action lawsuit. See Note 19, Commitments, Guarantees, Indemnifications, and Legal Proceedings, for more information.

(f) 2013 includes the reversal of $166.0 million of tax reserves related to alternative energy tax credits. Approximately $103.9 million of the reversal is due to the completion of the IRS audit of PCA's Filer City mill's cellulosic biofuel tax credits and $62.1 million is from the reversal of a reserve for the taxability of the alternative energy tax credits acquired in the acquisition of Boise.

(g) Generally accepted accounting principles required us to value the inventory from the acquisition of Boise at fair value, which increased the value of the inventory by $21.5 million. This reduced the profit on the sale of the acquired inventory to that portion attributable to the selling effort. This step-up in value increased expenses by $21.5 million as the acquired inventory was sold and charged to cost of sales.

(h) Includes acquisition-related costs, primarily for professional fees related to transaction-advisory services and expenses related to financing the acquisition of Boise.

(i) Includes $10.9 million of non-cash pension curtailment charges related to pension plan changes in which certain hourly corrugated and containerboard mill employees will transition from a defined benefit pension plan to a defined contribution 401k plan.

The following table reconciles net income (loss) to EBITDA and EBITDA excluding special items for the periods indicated (dollars in millions):

	Year Ended December 31				
	2015	2014	2013	2012	2011
Net income	$436.8	$392.6	$441.3	$160.2	$158.8
Interest expense, net	85.5	88.4	58.3	62.9	29.2
Provision (benefit) for income taxes	227.7	221.7	(17.7)	214.5	86.0
Depreciation, amortization, and depletion	356.5	381.0	201.8	170.8	163.6
EBITDA (a)	$1,106.5	$1,083.7	$683.7	$608.4	$437.6
Special items:					
DeRidder restructuring	$(7.0)	$23.9	$—	$—	$—
Integration-related and other costs	13.4	18.4	17.4	—	—
Sale of St. Helens paper mill site	(6.7)	—	—	—	—
Class action lawsuit settlement	—	17.6			