PACKAGING CORPORATION OF AMERICA | 2013 ANNUAL REPORT



People • Customers • Trust

IDEAS AND SOLUTIONS.INNOVATION.SUSTAINABLE.STR PEOPLE MAKE THE DIFFERENCE.BOTTOM-LINE RESULTS.E DOING THE HARD-TO-DO.RESPONSIBLE PRACTICES.GROV ERVICE.RELATIONSHIPS BASED ON TRUST.STABILITY.AN

Packaging Corporation of America is an ideas and solutions company — a company of people with a long history of excellence in the design, engineering and manufacturing of corrugated products. The acquisition of Boise Inc., completed in October 2013, provides new opportunities for PCA to apply its expertise and business philosophy to a broader market. This expansion allows our company to better serve our customers with additional converting facilities and capabilities, increased mill capacity and an extended product range, including Boise's white paper business.

PCA's common stock is listed on the New York Stock Exchange under the ticker symbol PKG.

OUR PEOPLE BUILD RELATIONSHIPS THAT WORK.



People • Customers • Trust

PCA is the fourth largest producer of containerboard and corrugated products in the United States. We manufacture many grades of kraft linerboard and corrugating medium at our six containerboard mills and produce a wide variety of corrugated containers and displays at our 98 plants.

With the acquisition of Boise Inc., our packaging product portfolio now includes:

- >> Hexacomb, a paper-based honeycomb protective packaging solution that is a fully customizable structural complement to PCA's corrugated products.
- >> Tharco™ stock boxes, a product line that extends PCA's corrugated packaging offerings to customers who do not require custom packaging solutions.

Boise Paper is the third largest producer of uncoated freesheet in North America. Our team is dedicated to providing high-quality products, outstanding customer service and supply chain performance. Boise Paper brings office, printing and converting, and pressure sensitive papers into the PCA product lineup.

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, 2013 Commission file number 1-15399



(Exact Name of Registrant as Specified in its Charter)

Delaware

(State or Other Jurisdiction of Incorporation or Organization)

36-4277050

(I.R.S. Employer Identification No.)

1955 West Field Court, Lake Forest, Illinois

(Address of Principal Executive Offices)

60045

 $(Zip\ Code)$

Registrant's telephone number, including area code $(847)\ 482\text{-}3000$

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 r Act. Yes ☑ No □	egistrant is a well-known seas	soned issuer, as defined in Rule 405 o	of the Securities
Indicate by check mark if the r Act. Yes ☐ No ☑	egistrant is not required to file	e reports pursuant to Section 13 or Se	ction 15(d) of the
	receding 12 months (or for suc	Il reports required to be filed by Section shorter period that the registrant ways. Yes No	
Interactive Data File required to be	submitted and posted pursuan	electronically and posted on its corput to Rule 405 of Regulation S-T (§23 t was required to submit and post suc	2.405 of this chapter) during the
	ntained, to the best of registra	suant to Item 405 of Regulation S-K (nt's knowledge, in definitive proxy of endment to this Form 10-K.	
		lerated filer, an accelerated filer, a no ""accelerated filer," and "smaller rep	
Large accelerated filer 🗸	Accelerated filer	Non-accelerated filer	Smaller reporting company
	(Do not c	heck if a smaller reporting company))
Indicate by check mark whether Act). Yes ☐ No ☑	er the registrant is a shell com	pany (as defined in Rule 12b-2 of the	Exchange

At June 30, 2013, 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 \$4,735,149,656 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 January 31, 2014, there were 98,206,211 shares of Common Stock outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Specified portions of the Proxy Statement for the Registrant's 2014 Annual Meeting of Stockholders are incorporated by reference to the extent indicated in Part III of this Form 10-K.

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PART I

Item 1. BUSINESS

Packaging Corporation of America ("we", "us", "our", "PCA" or the "Company") is the fourth largest producer of containerboard in the United States, based on production capacity. We are headquartered in Lake Forest, Illinois and have approximately 13,600 employees. We operate primarily in the United States and have some converting operations in Europe, Mexico, and Canada.

On October 25, 2013, PCA acquired Boise Inc. ("Boise") for \$2.1 billion, including the fair value of assumed debt. The acquisition expands PCA's corrugated products geographic reach and offerings, provides additional containerboard capacity for continued growth in the packaging business, and provides meaningful opportunities in the white paper business as the third largest producer of white papers in North America in terms of production capacity. Boise's results are included in our results for the period of October 25, 2013, through December 31, 2013. We historically reported our financial information in one reportable segment. After the acquisition, we began reporting in 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 19, 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 Note 8, Debt, of the Notes to Consolidated Financial Statements.

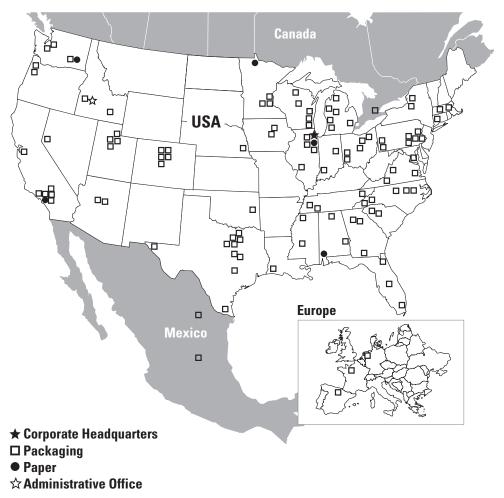
Production and Shipments

The following table summarizes the Packaging segment's containerboard production and corrugated products shipments and the Paper segment's production, including Boise Inc. Boise's historical data for periods 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 (thousand tons)	PCA	2013	646	629	671	803	2,749
		2012	640	638	670	652	2,600
	Boise	2013	171	188	196	50	605
		2012	186	180	189	193	748
Corrugated Shipments (BSF)	PCA	2013	8.8	9.4	9.3	10.9	38.4
		2012	8.5	8.8	8.6	8.8	34.7
	Boise	2013	2.4	2.5	2.4	0.7	8.0
		2012	2.3	2.4	2.5	2.4	9.6
Newsprint Production (thousand tons)	PCA	2013	_	_	_	44	44
	Boise	2013	53	58	60	15	186
		2012	55	58	60	60	233
White Paper (UFS) Production (thousand tons)	PCA	2013	_	_	_	208	208
	Boise	2013	303	301	323	76	1,003
		2012	320	313	323	293	1,249
Market Pulp Production (thousand tons)	PCA	2013	_	_	_	20	20
	Boise	2013	24	24	29	5	82
		2012	39	30	26	25	120

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

Below is a map of our locations following the acquisition:



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, 2013, our Packaging segment produced 2.7 million tons of containerboard at our mills. Our corrugated products manufacturing plants sold about 38.4 billion square feet (BSF) of corrugated products. Our net sales to third parties totaled \$3.7 billion in 2013.

After the acquisition of Boise, we are also a producer of newsprint with one machine located at our DeRidder, Louisiana, mill. We sell primarily to newspaper publishers in the southern and southwestern United States. Newsprint operations are reported in the Packaging segment.

Facilities

We manufacture our Packaging products at five containerboard mills, one containerboard machine at our Wallula, Washington, white paper mill, corrugated manufacturing operations, protective packaging operations, and one newsprint machine. The following paragraphs describe the mills at which we produce containerboard:

Counce. Our Counce, Tennessee, mill is one of the largest kraft linerboard mills in the United States. Its year-end 2013 annual estimated production capacity, as reported to the American Forest and Paper Association ("AF&PA"), was 1,065,000 tons. In 2013, the mill produced 1,063,000 tons of kraft linerboard on two paper machines. The mill can produce a broad range of basis weights from 26 lb. to 90 lb. The mill also produces a variety of performance and specialty grades of linerboard.

DeRidder. We acquired the DeRidder, Louisiana, mill in the acquisition of Boise. It is a mill that produces both linerboard and newsprint on two paper machines. Its year-end 2013 annual estimated production capacity, as reported to the AF&PA, was 610,000 tons of linerboard and 230,000 tons of newsprint. During the twelve months of 2013, it produced 607,000 tons of linerboard and 230,000 tons of newsprint. DeRidder's linerboard machine can produce a broad range of basis weights from 26 lb. to 69 lb.

Valdosta. Our Valdosta, Georgia, mill is a kraft linerboard mill. Its year-end 2013 annual estimated production capacity, as reported to the AF&PA, was 560,000 tons. In 2013, our single paper machine at Valdosta produced 557,000 tons of kraft linerboard. The mill can produce a range of basis weights from 35 lb. to 96 lb.

Tomahawk. Our Tomahawk, Wisconsin, mill is one of the largest semi-chemical corrugating medium mills in the United States. Its year-end 2013 annual estimated production capacity, as reported to the AF&PA, was 550,000 tons. In 2013, the mill produced 547,000 tons of semi-chemical corrugating medium on two paper machines. The Tomahawk mill can produce a broad range of 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 is a semi-chemical corrugating medium mill. Its year-end 2013 annual estimated production capacity on three paper machines, as reported to the AF&PA was 445,000 tons. In 2013, the mill produced 441,000 tons of corrugating medium on three paper machines at Filer City. Filer City can produce corrugating medium grades ranging in basis weight from 20 lb. to 47 lb.

Wallula. We acquired the Wallula, Washington, mill with the acquisition of Boise. It is primarily a white paper mill, but also produces corrugating medium on one of its paper machines. Its year-end 2013 annual estimated production capacity of medium, as reported to the AF&PA was 140,000 tons. During the twelve months of 2013, the mill produced 139,000 tons of corrugating medium. Wallula can produce corrugating medium grades ranging in basis weight from 23 lb. to 38 lb.

We operate 98 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 98 manufacturing facilities, 64 operate as combining operations, commonly called corrugated plants, which manufacture corrugated sheets and finished corrugated containers, 33 are sheet plants which procure combined sheets and manufacture finished corrugated containers, and one is a corrugated sheet-only manufacturer.

We have corrugated manufacturing operations in 32 states in the U.S. We also have converting operations outside of the continental U.S., including three facilities in Europe, two in Mexico, and one in Canada.

Corrugated products plants tend to be located in close proximity to customers to minimize freight costs. The U.S. corrugated products industry consists of approximately 570 companies and 1,240 plants. 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. We produce a wide variety of products ranging from basic corrugated shipping containers to specialized packaging such as wax-coated boxes for the agriculture industry. We also have multicolor printing capabilities to make high-impact graphics boxes and displays that offer customers more attractive packaging.

Major Raw Materials Used

Fiber supply. Fiber is the single largest 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 sold to our mills directly or through trade agreements. If we had we owned Boise for the full year, we would have been a net recycled fiber buyer of less than 15% 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 88,000 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 10 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, and 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 2013, our packaging mills, including Boise mills for the full year as if we had acquired Boise on January 1, 2013, consumed about 62 million MMBTU's of fuel to produce both steam and electricity. Of the 62 million MMBTU's consumed, about 64% was from mill generated by-products, and 36% was from purchased fuels. Of the 36% in purchased fuels, 39% was from purchased wood waste, 33% was from natural gas, and 20% was from coal.

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 other 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 60% of the tons shipped and the remaining 40% is comprised of truck shipments. 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 miles radius. We use third-party warehouses for short-term storage of corrugated products.

Customers

We sell corrugated products to over 15,000 customers in over 25,000 locations. About two-thirds of our corrugated products sales are to regional and local accounts, which are broadly diversified across industries and geographic locations. The remaining one-third 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 2012 Fibre Box Association annual report:

Food, beverages, and agricultural products	42%
Paper products	21%
General, retail, and wholesale trade	18%
Petroleum, plastic, synthetic, and rubber products	8%
Miscellaneous manufacturing	6%
Appliances, vehicles, and metal products	3%
Textile mill products and apparel	2%

Competition

As of December 31, 2013, we believe we are the fourth largest producer of containerboard and corrugated products in the United States according to industry sources and our own estimates. According to industry sources, corrugated products are produced by about 570 U.S. companies operating approximately 1,240 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 product operations tends to be regional, although we also face competition from large competitors with significant national account presence, and competition varies based on each type of corrugated container we sell.

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

Paper

Our Paper segment operating under the trade name Boise Paper, a Division of Packaging Corporation of America, was acquired with the acquisition of Boise Inc. on October 25, 2013. 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. We are the third largest manufacturer of white papers in North America, according to industry sources and our own estimates. 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 2013 annual estimated production capacity of white papers on two paper machines, as reported to the AF&PA was 480,000 tons. The mill produced 497,000 tons of white papers during the twelve months of 2013. On a converted basis, from rollstock to cut-size white papers, the mill produced 427,000 tons in 2013.

International Falls. Our International Falls, Minnesota, mill produces both commodity and specialty papers. Its year-end 2013 annual estimated production capacity of white papers on two paper machines, as reported to the AF&PA was 425,000 tons. The mill produced 523,000 tons of white papers during the twelve months of 2013. In October 2013, two machines were shut down which reduced annual capacity by 115,000 tons. On a converted basis, from rollstock to cut-size white papers, the mill produced 325,000 tons in 2013.

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 2013 annual estimated production capacity of white paper grades and market pulp, as reported to the AF&PA was 190,000 tons and 120,000 tons, respectively. The corrugating medium produced at Wallula is included in our Packaging segment as discussed above. The mill produced 192,000 tons of white papers and 102,000 tons of market pulp in 2013.

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 negotiate these arrangements periodically, and terms can fluctuate based on prevailing pulp market conditions, including pricing and supply dynamics.

We purchase wood fiber through contracts and open-market purchases. Our contracts are generally with suppliers located in close proximity to the specific facility they supply, and they commonly contain price adjustment mechanisms to account for market price and expense volatility.

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. Our white paper business consumes substantial amounts of energy, obtained 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.

For the full year 2013, as if PCA had acquired Boise on January 1, 2013, the white paper mills consumed about 31.5 million MMBTU's of fuel to produce both steam and electricity. Of the 31.5 million MMBTU's consumed, about 63% was from mill generated by-products, and 37% was from purchased fuels. Of the 37% in purchased fuels, 73% was from natural gas and 27% from purchased wood waste.

Chemical supply. We consume a significant amount of chemicals in the production of white papers, including starch, caustic soda, sodium chlorate, precipitated calcium carbonate, dyestuffs, and optical brighteners. Most of our chemicals are purchased under contracts, which contain price adjustment mechanisms designed to provide greater pricing stability than open-market purchases. These contracts are negotiated periodically at prevailing rates.

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 70% of the tons shipped and the remaining 30% is comprised of truck shipments.

Customers

We have over 600 paper customers including paper merchants, commercial and financial printers, paper converters such as envelope and form manufacturers, 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. OfficeMax is our Paper segment's largest customer. In November 2013, OfficeMax merged with its competitor, Office Depot. We have an agreement with OfficeMax in which we will supply at least 80% of OfficeMax'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, OfficeMax's purchase obligations under the agreement would phase out over two years. Our agreement with OfficeMax survived the merger with respect to the office paper requirements of the legacy OfficeMax business. For the period of October 25, 2013, through December 31, 2013, our sales to Office Depot (including OfficeMax), our largest paper segment customer, represented 38% 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. 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.

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 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. In response to lower demand, two machines were shut down at our International Falls, Minnesota mill in October 2013.

Corporate and Other

Our Corporate and Other segment includes corporate support services, related assets and liabilities, and foreign exchange gains and losses. This segment includes Louisiana Timber Procurement Company, L.L.C. (LTP) a variable-interest entity that supplies fiber to some of our facilities and transportation assets, such as rail

cars and trucks, which we use to transport our products from our manufacturing sites. Rail cars and trucks are typically leased. For segment financial information see Note 19, 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, 2013, we had approximately 13,600 employees, including 4,300 salaried employees and 9,300 hourly employees. Approximately 75% 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 agreements at our Jackson, Alabama, paper mill, which expire August 31, 2014. During 2013, we experienced no work stoppages and believe we have satisfactory labor relations with our employees.

Environmental Matters

Our 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.

Executive Officers of the Registrant

Brief statements setting forth the age at February 28, 2014, 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, 58, Chief Executive Officer and Director — Mr. Kowlzan has served as Chief Executive Officer and a director of PCA 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, 58, 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.

Richard B. West, 61, Senior Vice President and Chief Financial Officer — Mr. West has served as Chief Financial Officer of PCA since March 1999 and as Senior Vice President since March 2002. From April 1999 to June 2007, Mr. West also served as Corporate Secretary. From 1995 through April 1999, Mr. West served in various senior financial positions with PCA and Tenneco Packaging. Prior to joining Tenneco Packaging, Mr. West spent 20 years with International Paper Company in various financial positions.

Judith M. Lassa, **55**, Senior Vice President — Paper — Ms. Lassa joined PCA from Boise Inc. as Senior Vice President, Paper in October 2013. She served Boise as Executive Vice President and Chief Operating Officer from January 2013 until the acquisition. Ms. Lassa served as Senior Vice President of Boise's paper and

specialty products operations from November 2010 to December 2012. From February 2008 to October 2010, Ms. Lassa served as Vice President of Boise's Packaging segment. From October 2004 to February 2008, Ms. Lassa served as Vice President, Packaging, of Boise Cascade, L.L.C. Prior to 2004, Ms. Lassa served in a number of capacities with Boise Cascade Corporation, including Vice President, Packaging, and packaging business leader.

Thomas W.H. Walton, 54, 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, **43**, Senior Vice President, General Counsel and Secretary — Mr. Pflederer has served as Senior Vice President since January 2013 and Corporate Secretary since June 2007. He served as Vice President and General Counsel from June 2007 to 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, 54, 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 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 Risks

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 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 are often volatile. If supply exceeds demand, prices for our products could decline, resulting in decreased earnings and cash generated from operations. Additionally, market conditions beyond our control can affect the prices for our commodity products. Our ability to achieve acceptable operating performance and margins depends primarily upon managing our cost structure and general operating conditions. If the prices for our products decline or if we are unable to control our costs, it 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 cash generated from operations. 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. Our white paper products compete with electronic data transmission and document storage alternatives. Increasing shifts to these alternatives have had and will continue to have an adverse effect on usage of these products. 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 cash flow.

Several 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 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) 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.

Company Risks

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, and geography.

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 2013, including Boise's operations as if we had acquired Boise on January 1, 2013, we would have purchased approximately 480,000 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 tended to create 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 lower or volatile earnings.

Cost of Purchased Energy and Chemicals — An increase in the cost of purchased energy 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 coal, bark, natural gas and oil. Energy prices, in particular prices for oil and natural gas, have fluctuated dramatically in the past. New and more stringent environmental regulations may discourage, or make more expensive, the use of certain fuels. In addition, costs for key chemicals used in our manufacturing also fluctuate. These fluctuations impact our manufacturing costs and result in earnings volatility. If energy 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 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, including new U.S. Environmental Protection Agency rules relating to industrial boiler emissions known as the Boiler MACT rules, are expected to 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 as of the date of this filing, 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 — OfficeMax represents a significant portion of PCA's paper business. We have a supply agreement with OfficeMax, our largest customer in the paper segment. The agreement requires OfficeMax to buy, and us to supply, at least 80% of OfficeMax's requirements for office papers through December 2017; however, there are circumstances that could cause the agreement to terminate before 2017. In November 2013, OfficeMax merged with Office Depot. Our agreement with OfficeMax provides that it survives the merger with respect to the office paper requirements of the legacy OfficeMax business. We cannot predict how the merger will affect the financial condition of the combined company, the paper requirements of the legacy OfficeMax business, or the effects on the pricing and competition for office papers. In 2013, for the period of October 25, 2013, to December 31, 2013, our sales revenue to Office Depot (including OfficeMax) accounted for 38% of Paper segment sales. Significant reductions in paper purchases from the post-merger entity would cause our paper business to attempt to expand its customer base and could potentially decrease its profitability if new customer sales required either a decrease in its pricing and/or an increase in its cost of sales. Any significant change in the willingness to continue to purchase our products could harm our business and results of operations.

Acquisition Integration — The acquired businesses of Boise may underperform relative to our expectations, and we may not be able to successfully integrate the businesses. The acquired businesses of Boise may underperform relative to our expectations, which may cause our financial results to differ from our own or the investment community's expectations. If the acquired businesses underperform relative to our expectations, or if we fail to successfully integrate the businesses, our business, financial condition and results of operations may be materially and adversely affected.

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 repercussions 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 cash flows.

Risks Related to Economic, Financial, and Investment Risk

Increased leverage may harm our financial condition and results of operations. We increased our indebtedness in connection with our acquisition of Boise from \$807.6 million (including capital leases) as of September 30, 2013, to approximately \$2,572.7 million at December 31, 2013. We and our subsidiaries may incur additional indebtedness in the future. The increase in indebtedness from the acquisition of Boise, plus any future borrowings, may affect our future operations, including, without limitation:

 Result in additional cash requirements to make interest and maturity payments on our outstanding indebtedness;

- Increase our vulnerability to adverse changes in our business or industry conditions;
- 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.

Market Price of our Common Stock — The market price of our common stock may be volatile, which could cause the value of your investment 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, lower corporate earnings, lower business investment, and lower consumer spending typically result in decreased demand for 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 five containerboard mills and three white paper mills. Additionally, we have 98 corrugated manufacturing operations, of which 54 are owned, including 46 combining operations, or corrugated plants, one corrugated sheet-only manufacturer, and seven sheet plants. 18 corrugated plants and 26 sheet plants are leased. We own one warehouse and miscellaneous other properties, including sales offices and woodlands management offices. We lease the 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 88,000 acres of timberland located near our Valdosta mill (77,000 acres) and our Counce mill (11,000 acres). On average, these cutting rights agreements have terms with approximately 10 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 headquarters facility is leased for the next eight years with provisions for two additional five year lease extensions. We also lease an office in Boise, Idaho, which is leased through March 2018.

Item 3. LEGAL PROCEEDINGS

Information concerning legal proceedings can be found in Note 20, 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.

	2013				2012		
	Sales Price		Dividends	Sales Price		Dividends	
Quarter Ended	High	Low	Declared	High	Low	Declared	
March 31	\$44.93	\$37.86	\$0.31	\$30.62	\$24.82	\$0.25	
June 30	50.78	42.36	0.40	29.80	25.77	0.25	
September 30	61.32	48.45	0.40	36.68	27.59	0.25	
December 31	64.39	55.66	0.40	38.67	33.89	0.25	

Stockholders

On January 31, 2014, there were 76 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 January 14, 2013, PCA announced an increase in its quarterly cash dividend on its company stock from an annual payout of \$1.00 per share to \$1.25 per share. The first quarterly dividend of \$0.3125 per share was paid to stockholders on April 15, 2013.

On May 15, 2013, PCA announced another increase in its quarterly cash dividend on its company stock from an annual payout of \$1.25 per share to \$1.60 per share. The first quarterly dividend of \$0.40 per share was paid on July 15, 2013.

Purchases of Equity Securities

Stock Repurchase Program

On December 14, 2011, PCA announced that its Board of Directors had authorized the repurchase of an additional \$150.0 million of its common stock. In 2013, the Company repurchased 171,263 shares of common stock for \$7.8 million, or an average price of \$45.54 per share. All shares repurchased under this authorization were retired prior to the end of the year. As of December 31, 2013, \$98.1 million of the \$150.0 million authorization remained available for repurchase of the Company's common stock. PCA did not repurchase any shares of its common stock during the fourth quarter of 2013.

Beginning in 2013, the Company began withholding shares from vesting equity awards to cover employee tax liabilities. Total shares withheld in 2013 were 223,995 at an average price of \$48.91, or \$11.0 million.

The following table presents information related to our repurchases of common stock made under our plan announced on December 14, 2011, and shares withheld to cover taxes on vesting of equity awards, during the three months ended December 31, 2013:

Iccuer	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
October 1-31, 2013	_	\$ —	_	\$98,086
November 1-30, 2013	_	_	_	98,086
December 1-31, 2013	1,297	62.61	=	98,086
Total	<u>1,297</u>	\$62.61(a)	=	<u>\$98,086</u>

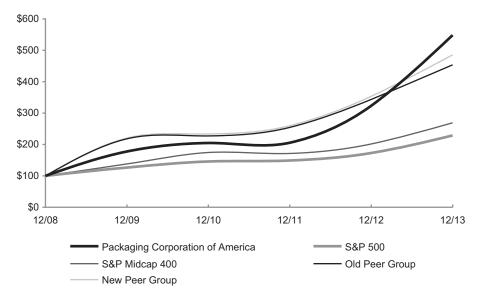
⁽a) 1,297 shares were withheld from employees to cover income and payroll taxes on equity awards that vested during the period.

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 two customized peer groups. The companies included in our Old Peer Group are International Paper Company and Rock-Tenn Company. PCA has revised its Peer Group due to acquiring Boise Inc. on October 25, 2013. The companies included in our New Peer Group are International Paper Company, Kapstone Paper & Packaging Corp., and Rock-Tenn Company. 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, 2008 through December 31, 2013. The stock price performance included in this graph is not necessarily indicative of future stock price performance.

COMPARISON OF 5 YEAR CUMULATIVE TOTAL RETURN*

Among Packaging Corporation of America, the S&P 500 Index, the S&P Midcap 400 Index, Old Peer Group, and New Peer Group



^{*\$100} invested on 12/31/08 in stock or index, including reinvestment of dividends. Fiscal year ending December 31.

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	Cumulative Total Return						
	December 31						
	2008	2009	2010	2011	2012	2013	
Packaging Corporation of America	\$100.00	\$177.39	\$204.19	\$205.56	\$323.44	\$547.88	
S&P 500		126.46	145.51	148.59	172.37	228.19	
S&P Midcap 400		137.38	173.98	170.96	201.53	269.04	
Old Peer Group	100.00	218.00	227.06	253.93	343.57	453.68	
New Peer Group	\$100.00	\$220.05	\$232.81	\$259.36	\$353.05	\$484.88	

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 in thousands, 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						
	2013(a)	2012	2011	2010	2009		
Statement of Income Data:							
Net Sales	\$3,665,308	\$2,843,877	\$2,620,111	\$2,435,606	\$2,147,589		
Net Income	436,283	163,820	158,027	205,435	265,895		
Net income per common share:							
— basic	4.52	1.70	1.59	2.02	2.62		
— diluted	4.47	1.68	1.57	2.00	2.60		
Weighted average common shares outstanding:							
— basic	96,579	96,384	99,281	101,678	101,577		
— diluted	97,547	97,497	100,376	102,608	102,358		
Earnings, before interest, taxes, depreciation, and amortization (EBITDA)(b)	\$ 675,400	\$ 614,201	\$ 436,383	\$ 341,680	\$ 503,671		
Cash dividends declared per common							
share	1.51	1.00	0.80	0.60	0.60		
Balance Sheet Data:							
Total assets	\$5,199,974	\$2,453,768	\$2,412,499	\$2,225,910	\$2,152,840		
Total debt obligations	2,572,749	819,498	830,280	680,601	680,878		
Stockholders' equity	1,313,015	969,461	928,910	1,009,001	898,845		

⁽a) On October 25, 2013, we acquired Boise Inc. (Boise). The 2013 consolidated earnings results include Boise for the period of October 25 through December 31, 2013.

⁽b) 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. The use of EBITDA instead of net income has limitations as an analytical tool, including the inability to determine profitability; the exclusion of interest expense, interest income, and associated significant cash requirements; and the exclusion of depreciation, amortization, and depletion, which represent significant and unavoidable operating costs, given the level of our indebtedness and the capital expenditures needed to maintain our businesses. Our measures of EBITDA are not necessarily comparable to other similarly titled captions of other companies due to potential inconsistencies in the methods of calculation. 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 this Item 7 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 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. These forward-looking statements are subject to numerous risks and uncertainties, including, but not limited to, the risks and uncertainties described in "Part I, Item 1A. Risk Factors" of this Form 10-K, as well as those factors listed in other documents we file with the Securities and Exchange Commission (SEC). We do not assume any obligation to update any forward-looking statements. Our actual results may differ materially from those contained in or implied by any of the forward-looking statements in this Form 10-K.

Acquisition of Boise Inc.

On October 25, 2013, we acquired Boise Inc. ("Acquisition," "Boise," or "Boise Acquisition"), a large manufacturer of packaging and paper products for \$2.1 billion. We paid \$12.55 per share to shareholders, or \$1.2 billion, net of \$121.7 million of cash acquired, and assumed the fair value of Boise's debt, or \$829.8 million. PCA entered into \$2.35 billion of new borrowings, including a \$1.65 billion senior unsecured credit agreement, which included a \$350.0 million undrawn revolver, and \$700.0 million of 4.5% ten-year notes, which in connection with cash on hand, was used to finance the acquisition of Boise, repay certain PCA indebtedness, and for general corporate purposes.

The acquisition expands our corrugated products geographic reach and offerings, provides additional containerboard capacity for continued growth in the packaging business, and provides meaningful opportunities in the white paper business. The acquisition of Boise increased PCA's containerboard capacity, at year-end 2013, to approximately 3.4 million tons from its prior level of 2.6 million tons. The results of Boise's operations are included in PCA's results for periods on and after October 25, 2013. Due to the size of the transaction, a significant part of our variances to 2012 are driven by the acquisition. We discuss this acquisition in more detail in Note 3, Acquisitions, and Note 8, Debt, of the Notes to Consolidated Financial Statements in "Part II, Item 8. Financial Statements and Supplementary Data" of this Form 10-K.

Prior to the acquisition of Boise on October 25, 2013, we manufactured and sold packaging products and reported our results in one reportable segment. With the acquisition, we report our financial information in three reportable segments: Packaging, Paper, and Corporate and Other. Our Packaging segment produces a wide variety of corrugated packaging products. The Paper segment manufactures and sells a range of white papers, including communication papers, pressure-sensitive papers, and market pulp. The Corporate and other segment includes support staff services and related assets and liabilities, transportation assets, and activity related to other ancillary support operations. In this Item 7, some amounts in prior periods' consolidated financial statements have been reclassified to conform with the current period segment presentation. For more information, see Note 19, Segment Information. In addition, we reclassified amounts previously included in "Corporate overhead" in the 2012 and 2011 Consolidated Statements of Income into "Selling, general, and administrative expenses" to conform with the current period presentation. None of the reclassifications affected our results of operations, financial position, or cash flows.

Overview

PCA, with the acquisition of Boise Inc., is the fourth largest producer of containerboard in the United States and the third largest producer of white papers in North America, based on production capacity. We operate eight mills and 98 corrugated products manufacturing plants. Our mills are comprised of five containerboard mills and three paper mills. 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 operate primarily in the United States and have some converting operations in Europe, Mexico, and Canada.

Executive Summary

In 2013, sales grew 28.9% to a record \$3,665.3 million. We reported \$436.3 million of net income, or \$4.47 per diluted share in 2013, compared with \$163.8 million, or \$1.68 per share in 2012. Excluding special items, we recorded \$320.2 million of net income, or a record \$3.28 per diluted share in 2013, compared with \$200.8 million and \$2.06 per diluted share in 2012. In 2013, income included \$87.4 million of income from special items including \$166.0 million from the reversal of previously established tax reserves, partially offset by \$67.8 million of pretax costs primarily related to the acquisition of Boise on October 25, 2013, and \$10.9 million of pension plan curtailment charges. Excluding these special items, the increase in earnings was driven by improvement in PCA's earnings and two months and five days of results from the acquisition of Boise operations. PCA's earnings improvement related primarily to increased pricing and higher demand, partially offset by higher costs for labor and benefits, energy, fiber, repairs, freight, and interest expense.

Voore Ended

Earnings per diluted share, excluding special items, in 2013 and 2012 were as follows:

	Years Decemb	
	2013	2012
Earnings per diluted share	\$ 4.47	\$ 1.68
Special items:		
Alternative energy tax credits(a)	(1.70)	0.24
Acquisition-related costs(b)	0.11	
Acquisition-related financing costs(b)	0.08	_
Acquisition inventory step-up(c)	0.14	_
Integration-related and other costs(d)	0.11	_
Pension curtailment charges(e)	0.07	_
Debt refinancing charges(f)	_	0.16
State income tax adjustments	_	(0.03)
Plant closure charges		0.01
Total special items	(1.19)	0.38
Earnings per diluted share, excluding special items	\$ 3.28	\$ 2.06

⁽a) 2013 includes \$1.70 of income per diluted share for 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 an IRS audit of PCA's Filer City mill's cellulosic biofuel tax credits and \$62.1 million is from the reversal of reserves for the taxability of the alternative fuel mixture credit acquired in the acquisition of Boise.

In first quarter 2012, PCA amended its 2009 tax return to reduce the gallons claimed as cellulosic biofuel producer credits previously recorded as a tax benefit, and increase the gallons claimed for alternative fuel mixture credits previously recorded as income. The increase in gallons claimed as alternative fuel mixture credits resulted in income of \$95.5 million, and the decrease in gallons claimed as cellulosic biofuel producer credits resulted in a decrease in tax benefits of \$118.5 million, or a net charge of \$23.0 million.

⁽b) Includes \$28.9 million of acquisition-related costs, primarily for professional fees related to transaction-advisory services and expenses related to financing the acquisition of Boise (\$18.3 million after-tax or \$0.19 per diluted share).

- (c) 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 (\$13.6 million after-tax or \$0.14 per diluted share).
- (d) Includes \$17.4 million of integration-related and other costs, primarily for professional services, employee, and other costs (\$11.0 million after-tax or \$0.11 per diluted share).
- (e) 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 (\$7.0 million after-tax or \$0.07 per diluted share).
- (f) Includes \$24.8 million of debt refinancing charges (\$16.0 million after-tax or \$0.16 per diluted share).

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.

Markets

The market for containerboard and corrugated products is generally subject to changes in the U.S. economy. The U. S. economy continued to slowly improve in 2013, with an annual basis real GDP increase of 1.9%, compared with a 2.8% increase in 2012 as reported by the U.S. Department of Commerce. Trade publications reported that industry-wide corrugated products shipments were unchanged in 2013 compared to 2012 and containerboard production was 1.2% higher than 2012. In 2013, PCA's corrugated products shipments increased 5.7%, excluding Boise shipments, and increased 10.7% including Boise shipments during the partial fourth quarter. PCA containerboard production for 2013 was 2,607,000 tons, excluding Boise, compared to 2,600,000 tons in 2012. Including PCA's ownership of Boise during the partial quarter, PCA's containerboard production was 2,749,000 tons in 2013.

The market for communication papers competes heavily with electronic data transmission and document storage alternatives. Increasing shifts to these alternatives have had an adverse effect on traditional print media and usage of communication papers. According to the American Forest & Paper Association (AF&PA), U.S. industry uncoated freesheet shipments declined 1.9% in 2013, compared to 2012.

Outlook

In the first quarter of 2014, we expect earnings to benefit, compared to the fourth quarter of 2013, from a full quarter of Boise's results, including synergies, and lower amortization of annual mill outage costs. Our largest containerboard mill in Counce, Tennessee will be down in March for its annual maintenance outage which will reduce production and increase operating costs. We also expect higher energy costs across the company with colder weather. In addition, our mills were impacted by extreme cold and significant snowfalls in January and February resulting in higher than normal cost increases for energy, wood, and transportation. Costs at our converting plants were also impacted and we did have some plant closures as a result of weather. Labor and benefit costs are expected to be higher in the first quarter, with annual wage increases and timing related benefit payments, and we expect a higher tax rate. Considering all of these items, we expect first quarter earnings, excluding special items, to be comparable to our fourth quarter 2013 earnings, excluding special items.

Results of Operations

Year Ended December 31, 2013, Compared to Year Ended December 31, 2012

The historical results of operations of PCA for the years ended December 31, 2013 and 2012 are set forth below (dollars in millions):

	Year l Decem		
	2013(a)	2012	Change
Packaging	\$3,431.7	\$2,843.9	\$ 587.8
Paper	216.9	_	216.9
Corporate and other and eliminations	16.7		16.7
Net sales	\$3,665.3	\$2,843.9	\$ 821.4
Packaging	\$ 545.9	\$ 389.7	\$ 156.2
Paper	13.5	_	13.5
Corporate and other and eliminations	(85.8)	53.7	(139.5)
Income from operations	\$ 473.6	\$ 443.4	\$ 30.2
Interest expense, net	(58.3)	(62.9)	4.6
Income before taxes	415.3	380.5	34.8
Income tax (expense) benefit	21.0	(216.7)	237.7
Net income	\$ 436.3	\$ 163.8	\$ 272.5
Net income excluding special items(b)	\$ 320.2	\$ 200.8	\$ 119.4
Earnings, before interest, taxes, depreciation, and amortization (EBITDA)	\$ 675.4	\$ 614.2	\$ 61.2
EBITDA excluding special items(b)	\$ 742.4	\$ 520.7	\$ 221.7

⁽a) 2013 included financial results for Boise for the period of October 25, 2013, through December 31, 2013.

Net Sales

Net sales increased \$821.4 million, or 28.9%, to a record \$3,665.3 million in 2013, compared with \$2,843.9 million in 2012. The increase in 2013 related to higher sales price and mix (\$205.5 million), higher sales volumes (\$176.8 million), and two months and five days of Boise operations (\$439.1 million).

Packaging. Sales increased \$587.8 million, or 20.7%, to \$3,431.7 million, compared with \$2,843.9 million in 2012. As discussed above, higher sales price and mix, higher sales volumes, and two months and five days of Boise operations increased sales in our Packaging segment. Corrugated products shipments per workday increased 11.1% in 2013, compared with the same period in 2012, on a shipments-per-workday basis. Excluding Boise's shipments, 2013 shipments increased 5.7% in total, and were up 6.1% per workday compared with 2012, all of which came from organic growth. Total corrugated products volume sold in 2013, including Boise, increased 10.7% over the same period last year. The year ended December 31, 2013, included 250 workdays, those days not falling on a weekend or holiday, compared to 251 workdays in 2012. Containerboard volume sold to outside domestic and export customers was essentially unchanged in 2013, compared with 2012, as the additional Boise outside containerboard sales in the partial fourth quarter were offset by decreased export sales. Containerboard mill production in 2013 was 2,749,000 tons, which included 141,000 tons from the acquired Boise mills, compared with 2,600,000 tons in 2012.

⁽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.

Paper. Our paper segment sales include the sales for the white paper mills we acquired from Boise. Sales for the two months and five days we owned Boise were \$216.9 million. During this period, sales volumes of white paper were 210,000 tons.

Gross Profit

Gross profit increased \$218.6 million, or 34.1%, in 2013, compared with 2012 due primarily to the sales price and volume increases described above. Gross profit as a percentage of net sales increased to 23.4% of net sales in 2013 compared with 22.5% in the same period in 2012. Reported 2013 gross profit was negatively affected by \$21.5 million of expense for the acquisition inventory step-up related to the acquisition of Boise, of which \$18.0 million was recorded in the Packaging segment and \$3.5 million was recorded in the Paper segment. Excluding the step-up expense, gross profit was 24.0% of 2013 net sales.

Selling, General, and Administrative Expenses

Selling, general, and administrative expenses increased \$45.8 million, or 16.3%, in 2013 compared to 2012. Excluding selling, general, and administrative expenses associated with the acquired Boise businesses of approximately \$25.2 million, selling, general, and administrative expenses increased \$20.6 million, primarily due to higher costs for salaries (\$6.9 million), incentive compensation (\$4.8 million), fringe benefits (\$1.8 million), legal expenses (\$3.0 million), travel and meeting costs (\$1.7 million), and broker commissions (\$1.5 million).

Other Expense, Net

Other expense, net, in 2013 was \$59.0 million, which primarily included acquisition-related costs (\$17.2 million), 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). In 2012, "Other expense, net" was \$11.8 million, which related primarily to asset disposal and write-offs charges (\$10.8 million).

Income from Operations

Income from operations increased \$30.2 million, or 6.8%, for the year ended December 31, 2013, compared to 2012. Our 2013 income from operations included \$67.1 million of expense from special items, consisting of \$56.1 million of costs primarily related to the acquisition of Boise on October 25, 2013, and \$10.9 million of pension plan curtailment charges. Income from operations in 2012 included \$95.5 million of income related to alternative energy tax credits, offset partially by \$2.0 million of plant closure charges. Excluding special items, income from operations increased \$190.7 million in 2013, compared with 2012. The increase was primarily due to increased sales price, improved mix, higher sales volume, and a partial quarter of Boise operations, partially offset by increased costs.

Packaging. Segment income from operations increased \$156.2 million, or 40.0%, to \$545.9 million, compared with \$389.7 million in 2012. Excluding \$30.3 million of special items related to acquisition inventory step-up, integration-related and other costs, and pension curtailment charges, segment income increased \$184.5 million to \$576.2 million, compared with \$391.7 million, excluding special items in 2012. The increase primarily related to increased sales price and improved mix (\$205.5 million), higher sales volume (\$25.2 million), and income from Boise's operations for two months and five days in the fourth quarter of 2013. These improvements were partially offset by increased costs for labor (\$16.8 million), energy (\$10.4 million), transportation (\$6.9 million), incentive compensation (\$5.5 million), wood fiber (\$5.8 million), and repairs (\$4.1 million).

Paper. Segment income from operations was \$13.5 million in 2013, which included \$3.5 million of acquisition inventory step-up included in cost of sales, partially offset by \$1.9 million of income for an insurance settlement related to Boise's St. Helens, Oregon, mill, net of other expenses. Excluding these special items, segment income for the white papers business was \$15.1 million.

Interest Expense, Net, and Income Taxes

Interest expense, net, was \$58.3 million in 2013, compared with \$62.9 million in 2012. Excluding \$10.5 million of expenses related to financing the acquisition of Boise in the fourth quarter of 2013, and \$1.1 million of expense for the write-off of deferred financing costs in connection with repaying the term loan due 2016 and the receivables credit facility due 2014, interest expense was \$46.7 million, compared with \$38.1 million in 2012, excluding \$24.8 million of debt refinancing charges. The 2013 increase in interest expense, excluding special items, primarily related to two months of increased interest expense on the higher average outstanding borrowings used to fund the acquisition of Boise.

In 2013, we recorded a \$21.0 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 the fourth quarter. Excluding the alternative energy tax credits, the 2013 effective tax rate was 34.9%, compared with 57.0% in 2012, as reported, or 34.5%, excluding the impact from amending our 2009 tax return in 2012 related to alternative energy tax credits. The credits are described in Note 6, 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 varies from the U.S. federal statutory tax rate of 35.0% principally due to the impact of the alternative energy tax credits, state and local income taxes and the domestic manufacturers' deduction.

2013 Compared to 2012 Balance Sheet Changes

The changes in our balance sheet, compared with December 31, 2012, relate primarily to the Acquisition and liabilities incurred to fund the Acquisition. We increased our assets approximately \$2.9 billion and our liabilities approximately \$1.6 billion in total for the Acquisition based on the fair values on the acquisition date. In addition, we incurred \$2.0 billion of new borrowings which was used 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. For more information about the acquisition of Boise, see Note 3, Acquisitions, and Note 8, Debt, of the Notes to Consolidated Financial Statements in "Part II, Item 8. Financial Statements and Supplementary Data" of this Form 10-K.

Year Ended December 31, 2012, Compared to Year Ended December 31, 2011

The historical results of operations of PCA for the years ended December 31, 2012 and 2011 are set forth below (dollars in millions):

	Year I Decem		
	2012	2011	Change
Net sales	\$2,843.9	\$2,620.1	\$ 223.8
Income from operations	443.4	272.7	170.7
Interest expense, net	(62.9)	(29.2)	(33.7)
Income before taxes	380.5	243.5	137.0
Provision for income taxes	(216.7)	(85.5)	(131.2)
Net income	\$ 163.8	\$ 158.0	\$ 5.8
Net income excluding special items(a)	\$ 200.8	\$ 161.8	\$ 39.0
EBITDA	\$ 614.2	\$ 436.3	\$ 177.9
EBITDA excluding special items(a)	\$ 520.7	\$ 442.1	\$ 78.6

(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 increased \$223.8 million, or 8.5%, for the year ended December 31, 2012, from the year ended December 31, 2011. Net sales increased primarily as a result of increased sales volumes (\$214.8 million) and higher sales prices of corrugated products and containerboard (\$9.0 million).

Total corrugated products volume sold increased 6.6% to 34.7 billion square feet in 2012 compared to 32.5 billion square feet in 2011. On a comparable shipment-per-workday basis, corrugated products sales volume also increased 6.6% in 2012 versus 2011. Shipments-per-workday is calculated by dividing our total corrugated products volume during the year by the number of workdays within the year. Both 2012 and 2011 contained 251 workdays, those days not falling on a weekend or holiday. Containerboard sales volume to external domestic and export customers decreased 6.0%, to 482,000 tons for the year ended December 31, 2012, from 513,000 tons in 2011.

Income from Operations

Income from operations increased \$170.7 million, or 62.6%, for the year ended December 31, 2012, compared to 2011. As noted in Note 6, 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, PCA amended its 2009 federal income tax return to reallocate gallons from the cellulosic biofuel producer credits to the alternative fuel mixture credits. As a result, income from operations was increased by \$95.5 million in 2012 with an offsetting amount recorded in tax expense of \$118.5 million. Excluding special items (as detailed below under "Reconciliations of Non-GAAP Financial Measures to Reported Amounts"), income from operations increased \$71.4 million for full year 2012. This increase was primarily attributable to increased sales volumes (\$50.7 million), higher sales prices (\$9.0 million) and lower costs for energy (\$26.5 million), recycled fiber (\$18.6 million), and chemicals (\$7.5 million). These improvements were partially offset by increased costs for fringe benefits (\$11.9 million), depreciation (\$11.5 million), labor (\$11.2 million), and transportation (\$7.3 million).

Gross profit increased \$97.7 million, or 18.0%, for the year ended December 31, 2012, from the year ended December 31, 2011. Gross profit as a percentage of net sales increased from 20.7% of net sales in the year ended December 31, 2011, to 22.5% of net sales in the year ended December 31, 2012, primarily due to increased volume and prices and reduced costs described above.

Selling, general, and administrative expenses increased \$22.3 million, or 8.6%, for the year ended December 31, 2012, from the year ended December 31, 2011, primarily as a result of increased costs for salaries (\$11.4 million), fringe benefits (\$3.8 million), incentive compensation (\$3.4 million), and depreciation (\$2.8 million).

Other expense, net, increased \$1.1 million, or 9.9% for the year ended December 31, 2012, compared with the year ended December 31, 2011. The increase was primarily due to plant closure costs (\$0.8 million).

Interest Expense, Net and Income Taxes

Net interest expense increased \$33.7 million, or 115.4%, for the year ended December 31, 2012, compared with the year ended December 31, 2011. The higher interest expense included a \$21.3 million premium paid as part of the July 2012 redemption of the Company's 5.75% notes due in 2013 and a \$3.4 million charge from settling the Company's 2011 treasury lock prior to its maturity. The remaining \$9.0 million increase in interest

expense was primarily a result of lower capitalized interest (\$6.3 million) related primarily to the Counce, Tennessee linerboard mill and Valdosta, Georgia linerboard mill major energy projects and additional interest expense (\$2.1 million) related to PCA's term loan of \$150.0 million borrowed in October 2011.

PCA's effective tax rate was 57.0% for the year ended December 31, 2012, which included a 22.5% higher rate from amending our 2009 tax return in 2012 related to alternative energy tax credits as described in Note 6, 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. Excluding the amendment, the 2012 effective tax rate would have been 34.5% for the year ended December 31, 2012, compared to 35.1% for the year ended December 31, 2011. The effective tax rate varies from the U.S. federal statutory tax rate of 35.0% principally due to the impact of the alternative energy tax credits in 2012, state and local income taxes and the domestic manufacturers' deduction. PCA had no material changes to its reserve for unrecognized tax benefits under ASC 740, "Income Taxes," during 2012.

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 \$191.0 million of cash and \$331.0 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), and declared common stock dividends, which we expect to be able to fund from these sources.

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				
	2013		2012	2011	
Net cash provided by (used for):					
Operating activities	\$	608.2	\$ 404.2	\$ 345.5	
Investing activities	(1,411.4)	(107.5)	(350.1)	
Financing activities	_	786.8	(245.6)	(35.6)	
Net increase (decrease) in cash and cash equivalents	\$	(16.4)	\$ 51.1	\$ (40.2)	

Our foreign operations are not material to our financial position or results of operations. At December 31, 2013, we had \$7.1 million of cash and short-term investments held in operations outside of the United States. We indefinitely reinvest our earnings in operations outside the United States; however, if foreign earnings were repatriated at a future date, we would need to accrue and pay taxes. It is not practicable to determine the amount of unrecognized deferred tax liability on these undistributed earnings because the actual tax liability, if any, is dependent on circumstances existing when the repatriation occurs.

Operating Activities

2013

In 2013, net cash provided by operating activities was \$608.2 million, compared with \$404.2 million in 2012, an increase of \$204.0 million. Approximately 61%, or \$123.6 million of the increase in cash provided by operating activities before changes in operating assets and liabilities, relate to the increase in income from our operations in 2013, which we discuss above under "Operating Results," and two months and five days of income included in 2013 from the newly acquired Boise operations. In addition, we used an additional \$7.2 million of alternative energy tax credits to reduce federal income tax payments during 2013, compared with 2012. Cash used for operating assets and liabilities, excluding acquisitions, totaled \$0.4 million in 2013, compared with \$80.8 million in 2012. The lower requirements for operating assets and liabilities, excluding acquisitions, in 2013 were driven primarily by higher accounts payable and lower inventory levels, partially offset by lower accrued liabilities at December 31, 2013, compared with December 31, 2012. 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.

2012

Net cash provided by operating activities for the year ended December 31, 2012, was \$404.2 million compared with \$345.5 million for the year ended December 31, 2011, an increase of \$58.7 million, or 17.0%. Cash provided by operating activities before changes in operating assets and liabilities was \$485.0 million for 2012, compared with \$366.1 million in 2011, an increase of \$118.9 million that was driven by the higher operating income in 2012 as previously discussed above under "Operating Results" and an additional \$29.5 million of alternative energy tax credits used to reduce federal income tax payments during 2012, compared with 2011. Cash used for operating assets and liabilities totaled \$80.8 million in 2012 compared with \$20.5 million in 2011, an increase of \$60.3 million. The additional requirements for operating assets and liabilities in 2012 were driven by reduced accounts payable levels in 2012 and higher levels of accounts receivable from higher sales volumes in 2012.

Investing Activities

2013

Net cash used for investing activities in 2013 increased \$1.3 billion, to \$1.4 billion, compared with \$107.5 million in 2012. In 2013, we paid \$1.2 billion for the acquisition of Boise, net of \$121.7 million of cash acquired, while in 2012 we spent \$35.4 million on the acquisition of a business. We spent \$234.4 million for capital investments in 2013, compared with \$128.5 million in 2012. In 2012, we received \$57.4 million in grant proceeds from the U.S. Treasury.

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

	December 31, 2013
Packaging	\$222.2
Paper	10.0
Corporate and Other	2.2
	\$234.4

We expect capital investments in 2014 to be between \$380.0 million and \$400.0 million, including capital required for synergies, Boiler MACT spending, and the DeRidder conversion project, but excluding acquisitions, if any. 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 2014 of up to \$31 million and we expect other environmental capital expenditures of about \$4 million in 2014. 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, 2013, PCA had commitments for capital expenditures of \$151.4 million. PCA believes that cash-on-hand combined with cash flow from operations will be sufficient to fund these commitments.

2012

Net cash used for investing activities for the year ended December 31, 2012, decreased \$242.7 million, or 69.3%, to \$107.5 million, compared with the year ended December 31, 2011. The decrease was related to lower capital investments of \$151.7 million as our major energy projects were completed in 2011, the receipt of \$57.4 million in grant proceeds from the U.S. Treasury in 2012, and lower cost of acquisitions of \$21.9 million and lower additions to long term assets of \$12.0 million during 2012 compared with 2011.

Financing Activities

2013

In 2013, financing activities provided \$786.8 million, while we used \$245.6 million for financing activities in 2012. The change was due primarily to activities related to financing the acquisition of Boise. In October 2013, we entered into \$2.35 billion of new borrowings, including a \$350.0 million revolver which remains undrawn. We used the proceeds from these borrowings 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 \$109.0 million that was outstanding under our receivables credit facility that we terminated and repaid in December 2013. In 2013, we also paid \$19.4 million of financing costs. We also paid \$109.1 million of dividends and we repurchased \$7.8 million of common stock in 2013, compared with \$117.9 million of dividends paid and \$45.2 million of common stock repurchases in 2012. The higher dividends paid in 2012 resulted from accelerating the dividends that would have been paid in January 2013 to December 2012. Beginning in 2013, we began withholding shares from vesting equity awards to cover employee tax liabilities, which amounted to \$11.0 million. In 2012, we also paid \$65.5 million to settle treasury locks.

For more information about our debt, commitments, and treasury lock derivative instruments, see Note 8, Debt, Note 20, Commitments, Guarantees, Indemnifications, and Legal Proceedings, and Note 11, 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.

2012

Net cash used for financing activities totaled \$245.6 million in 2012, compared with \$35.6 million in 2011, an increase of \$210.0 million. Payments on long-term debt, net of proceeds received, were a use of cash of \$40.1 million in 2012 compared with a source of cash of \$149.3 million in 2011, or a difference of \$189.4 million. Additionally, PCA paid an additional \$75.4 million to settle treasury locks in 2012 compared with 2011. Also in 2012, the Company paid higher dividends of \$41.8 million, including the \$24.5 million of dividends that would have been paid in January of 2013 but were accelerated to December of 2012. This was partially offset by lower repurchases of PCA common stock of \$79.9 million and higher proceeds received from stock option exercises of \$15.7 million during 2012 compared with 2011.

On June 26, 2012, PCA issued \$400.0 million of 3.90% senior notes due June 15, 2022, through a registered public offering. PCA used the proceeds from the offering, together with cash on hand, to redeem its \$400.0 million of 5.75% senior notes due August 1, 2013, on July 26, 2012. In connection with the redemption, PCA paid a redemption premium of \$21.3 million and \$11.2 million of accrued and unpaid interest.

Commitments

Contractual Obligations

The table below sets forth our enforceable and legally binding obligations as of December 31, 2013, 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		
Five-Year Term loan, due October 2018	\$ 650.0	\$ 32.5	\$130.0	\$487.5	\$ —		
Seven-Year Term loan, due October 2020	650.0	6.5	13.0	13.0	617.5		
4.50% Senior notes, due November 2023	700.0	_	_	_	700.0		
6.50% Senior Notes, due March 2018	150.0	_	_	150.0	_		
3.90% Senior Notes, due June 2022	400.0				400.0		
Total short-term and long-term debt(a)	2,550.0	39.0	143.0	650.5	1,717.5		
Interest(b)	600.9	78.9	155.1	140.9	226.0		
Capital lease obligations	39.1	2.6	5.3	5.3	25.9		
Operating leases(c)	249.2	56.5	80.2	40.9	71.6		
Capital commitments	151.4	151.4	_	_	_		
Purchase obligations:							
Raw materials and finished goods inventory(d)	131.1	79.0	52.1	_	_		
Utilities(e)	46.5	35.1	11.1	0.3	_		
Other(f)	30.1	7.0	6.4	5.2	11.5		
Other long-term liabilities reflected on our Consolidated Balance Sheet(g):							
Compensation and benefits(h)	195.6	7.9	78.9	36.5	72.3		
Other(i)(j)	60.3	4.7	8.8	5.6	41.2		
	\$4,054.2	\$462.1	\$540.9	\$885.2	\$2,166.0		

⁽a) The table assumes our long-term debt is held to maturity and includes the current portion of long-term debt. See Note 8, 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 \$2.2 million at December 31, 2013.

⁽b) Amounts represent estimated future interest payments as of December 31, 2013, assuming our long-term debt is held to maturity and using interest rates in effect at December 31, 2013. 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 \$100.0 million of wood fiber. Purchase prices under most of these agreements are set quarterly or semiannually based on regional market prices, and the estimate is based on contract terms or first quarter 2014 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. Under most of these log and fiber supply agreements, we have the right to cancel or reduce our commitments in the event of a mill curtailment or shutdown. Our log and fiber 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, 2013, or upon contract language, if available.
- (f) Consists primarily of wood chip processing service agreements.
- (g) Long-term deferred income taxes of \$434.8 million and unrecognized tax benefits of \$5.7 million, including interest and penalties, are excluded from this table, because the timing of their future cash outflows are uncertain.
- (h) Amounts primarily consist of pension and postretirement obligations, including current portion of \$2.1 million and 2014 required minimum contributions of approximately \$5.0 million. Actuarially determined liabilities related to pension benefits are recorded based on estimates and assumptions. Key factors used in developing estimates of these liabilities include assumptions related to discount rates, retirement and mortality rates, expected contributions, and other factors. Changes in estimates and assumptions related to the measurement of funded status could have a material impact on the amount reported. In the table above, we allocated our pension obligations by year based on the future required minimum pension contributions, as determined by our actuaries. See Note 10, 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.
- (i) Includes current liabilities of \$3.6 million related primarily to the current portion of workers' compensation liability.
- (j) We have excluded \$2.9 million of noncurrent deferred lease costs and unfavorable lease liabilities from the other long-term liabilities in the table above. These amounts have been excluded because deferred lease costs relate to operating leases which are already reflected in the operating lease category in the table, and unfavorable lease liabilities do not represent a contractual obligation which will be settled in cash.

Off-Balance-Sheet Arrangements

The Company does not have any off-balance sheet arrangements as of December 31, 2013.

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 wastes. 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 wastes. 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, 2013, 2012, and 2011, we spent \$41.1 million, \$25.8 million and \$26.0 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, OfficeMax 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. States are authorized to extend the deadline an additional year if they so elect. PCA is currently assessing the impact of these regulations, which are expected to require modifications to or replacement of certain of PCA's boilers. PCA currently estimates that compliance with the final rule will require capital expenditures between \$38 million and \$42 million over the next three years. Due to the complexity of these regulations, and the potential for additional future regulatory or judicial modification to these regulations, this estimate is subject to further revisions. We currently estimate capital expenditures to comply with Boiler MACT regulations in 2014 of up to \$31 million and expect other environmental capital expenditures of about \$4 million in 2014. Total capital expenditures for environmental matters were \$9.9 million for 2013 as if Boise had been combined with us on January 1, 2013, and \$1.8 million and \$2.8 million for 2012 and 2011, respectively.

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 1994 through 2013, remediation costs at PCA's mills and corrugated plants totaled approximately \$3.2 million and the acquired Boise locations have not incurred any significant remediation costs since their inception in 2008. As of December 31, 2013, we maintained an environmental reserve of \$34.1 million relating to on-site landfills and surface impoundments as well as ongoing and anticipated remedial projects. As of this filing, the Company believes that it is not reasonably possible that future environmental expenses above the \$34.1 million accrued at December 31, 2013, 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:

Business Combinations

From time to time, we may enter into material business combinations. We allocate the total purchase price of a business combination to the assets acquired and the liabilities assumed based on their estimated fair values at the acquisition date, with the excess purchase price recorded as goodwill. The acquisition method of accounting requires us to make significant estimates and assumptions regarding the fair values of the elements of a business combination as of the date of acquisition, including the fair values (fair value is determined using the income approach, cost approach and or market approach) of inventory, property, plant, and equipment, identifiable intangible assets, deferred tax asset valuation allowances, and liabilities related to uncertain tax positions, among others. This method also requires us to refine these estimates over a measurement period not to exceed one year to reflect new information obtained about facts and circumstances that existed as of the acquisition date that, if known, would have affected the measurement of the amounts recognized as of that date. If we are required to retroactively adjust provisional amounts that we have recorded for the fair values of assets and liabilities in connection with acquisitions, these adjustments could have a material impact on our financial condition and results of operations. Additionally, we expense any acquisition-related costs as incurred in connection with each business combination.

Significant estimates and assumptions in estimating the fair value of customer relationships and other identifiable intangible assets include future cash flows that we expect to generate from the acquired assets. If the subsequent actual results and updated projections of the underlying business activity change compared with the

assumptions and projections used to develop these values, we could record impairment charges. In addition, we have estimated the economic lives of certain acquired assets and these lives are used to calculate depreciation and amortization expense. If our estimates of the economic lives change, depreciation or amortization expenses could be increased or decreased.

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, 2013, we had \$526.8 million of goodwill, of which we recorded \$458.6 million in connection with the acquisition of Boise in fourth quarter 2013. At December 31, 2013, we had \$472.9 million and \$53.9 million of goodwill recorded in our Packaging and Paper segments, respectively. All of our intangible assets are amortized over their estimated useful lives.

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. Recoverability of goodwill is determined by comparing the fair value of the reporting unit with its carrying value, including goodwill. If the carrying amount of the reporting unit exceeds the fair value, the implied fair value of the reporting unit's goodwill is compared to the carrying amount of its goodwill to determine if a write-down to fair value is necessary. Based on the results of the goodwill impairment test, we concluded that no goodwill impairment existed.

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.

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, retirement rates, mortality rates, expected contributions, and other factors. The pension assumptions used to measure pension expense and liabilities are discussed in Note 10, 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, 2013, we had approximately \$36.3 million recorded in "Accumulated other comprehensive loss, net of tax" 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,	Year Ended I	December 31
	2014	2013	2012
Pension expense	\$25.4	\$46.4	\$36.0
Assumptions			
Discount rate	5.00%	4.57%	4.75%
Expected rate of return on plan assets	6.69%	6.53%	6.15%

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 2013 and 2014 pension expense (dollars in millions):

		Increase (Decrease) in Pensi Expense(a)					
	Base Expense	0.25% Increase	0.25% Decrease				
2013 Expense(b)							
Discount rate	\$46.4	\$(2.2)	\$2.3				
Expected rate of return on plan assets	46.4	(0.8)	0.8				
2014 Expense							
Discount rate	\$25.4	\$(0.6)	\$1.7				
Expected rate of return on plan assets	25.4	(1.9)	1.9				

⁽a) The sensitivities shown above are specific to 2013 and 2014. The sensitivities may not be additive, so the impact of changing multiple factors simultaneously cannot be calculated by combining the individual sensitivities shown.

For more information related to our pensions benefits, including the general nature of the plans, deferred gains and losses, funding obligations, and cash flows, see Note 10, 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.

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.

⁽b) 2013 expense includes \$10.9 million of non-cash pretax pension curtailment charges in which certain hourly corrugated and containerboard mill employees will transition from an hourly defined benefit pension plan to a defined contribution 401K plan.

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, 2013, 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.

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.

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, 2013, 2012, and 2011, follow (in millions, except per share amounts):

	Year Ended December 31						
	2013	(a)	201	2	201	1	
	Income from Operations	Net Income	Income from Operations	Net Income	Income from Operations	Net Income	
As reported in accordance with GAAP	\$473.6	\$ 436.3	\$443.4	\$163.8	\$272.7	\$158.0	
Special items:							
Alternative energy tax credits(b)	_	(166.0)	(95.5)	23.0	_	_	
Acquisition-related costs(c)	17.2	10.9	_	_	_	_	
Acquisition-related financing costs(c)	_	7.4	_	_	_	_	
Integration-related and other costs(d)	17.4	11.0	_	_	_	_	
Acquisition inventory step-up(e)	21.5	13.6	_	_	_	_	
Pension curtailment charges(f)	10.9	7.0	_	_	_	_	
Debt refinancing charges(g)	_	_	_	16.0	_	_	
State income tax adjustments	_	_	_	(3.4)	_	_	
Plant closure charges(h)	_	_	2.0	1.4	7.4	4.8	
Medical benefits reserve adjustment					(1.6)	(1.0)	
Total special items	67.1	(116.1)	(93.5)	37.0	5.8	3.8	
Excluding special items	\$540.6	\$ 320.2	\$349.9	\$200.8	\$278.6	\$161.8	

⁽a) On October 25, 2013, we acquired Boise Inc. (Boise). The 2013 consolidated earnings results include Boise for the period of October 25 through December 31, 2013.

⁽b) 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 fuel mixture credit acquired in the acquisition of Boise.

In first quarter 2012, PCA amended its 2009 tax return to reduce the gallons claimed as cellulosic biofuel producer credits previously recorded as a tax benefit, and increase the gallons claimed for alternative fuel mixture credits previously recorded as income. The increase in gallons claimed as alternative fuel mixture credits resulted in income of \$95.5 million, and the decrease in gallons claimed as cellulosic biofuel producer credits resulted in a decrease in tax benefits of \$118.5 million, or a net charge of \$23.0 million.

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

- (d) Includes integration-related and other costs, primarily for professional services, employee, and other costs.
- (e) Generally accepted accounting principles required us to value the inventory from the acquisition of Boise at fair value. 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 expense as the acquired inventory was sold and charged to cost of sales.
- (f) Includes 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.
- (g) Consists of charges related to the Company's refinancing of debt completed in 2012, including the redemption premium, the charge to settle the treasury lock prior to its maturity, and other items.
- (h) Consists of plant closure charges in 2012 and energy project related disposals in 2011.

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

	2013	2012	2011	2010	2009
Net income (loss)	\$436.3	\$163.8	\$158.0	\$205.4	\$ 265.9
Interest expense, net	58.3	62.9	29.2	32.3	35.5
Income tax provision	(21.0)	216.7	85.5	(52.3)	51.1
Depreciation, amortization, and depletion	201.8	170.8	163.6	156.3	151.2
EBITDA(a)	\$675.4	\$614.2	\$436.3	\$341.7	\$ 503.7
Special items:					
Acquisition-related costs	\$ 17.2	\$ —	\$ —	\$ —	\$ —
Acquisition inventory step-up	21.5	_	_	_	_
Integration-related and other costs	17.4	_	_	_	_
Pension curtailment charges	10.9	_	_	_	_
Plant closure charges	_	2.0	7.4	13.2	2.0
Alternative energy tax credits	_	(95.5)) —	86.8	(168.4)
Medical benefits reserve adjustment			(1.6)		
EBITDA excluding special items(a)	<u>\$742.4</u>	\$520.7	\$442.1	\$441.7	\$ 337.2

⁽a) EBITDA and EBITDA, excluding special items, are non-GAAP financial measures. We present these measures because they provide a means to evaluate the performance of our segments and our company on an ongoing basis using the same measures that are used by our management and because these measures are frequently used by investors and other interested parties in the evaluation of companies and the performance of their segments. For each non-GAAP financial measure, we provide a reconciliation to the most directly comparable financial measure presented in accordance with GAAP. These measures may differ from similarly captioned measures of other companies. 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.

Item 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

PCA is exposed to the impact of interest rate changes and changes in the market value of its financial instruments. PCA periodically enters into derivatives in order to minimize these risks, but not for trading purposes. For a discussion of derivatives and hedging activities, see Note 11, Derivative Instruments and Hedging Activities, of the Notes to Consolidated Financial Statements in "Part II, Item 8. Financial Statements and Supplementary Data" of this Form 10-K.

The interest rates on approximately 49% of PCA's debt are fixed. A one percent increase in interest rates related to variable rate debt would have resulted in an increase in interest expense and a corresponding decrease in income before taxes of \$13.0 million annually.

Item 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Packaging Corporation of America Board of Directors and Stockholders

We have audited the accompanying consolidated balance sheets of Packaging Corporation of America (the "Company") as of December 31, 2013 and 2012, and the related consolidated statements of income and comprehensive income, changes in stockholders' equity, and cash flows for each of the three years in the period ended December 31, 2013. Our audits also included the financial statement schedule listed in the index at Item 15(a). These financial statements and schedule are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements and schedule based on our audits. We did not audit the consolidated financial statements of Boise Inc., a wholly-owned subsidiary, which statements reflect total assets constituting 52% in 2013 and total revenues and net income constituting 12% and 14%, respectively in 2013 of the related consolidated totals. Those statements were audited by other auditors whose report has been furnished to us, and our opinion, insofar as it relates to the amounts included for Boise Inc., is based solely on the report of the other auditors.

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

In our opinion, based on our audits and the report of other auditors, the financial statements referred to above present fairly, in all material respects, the consolidated financial position of Packaging Corporation of America at December 31, 2013 and 2012, and the consolidated results of its operations and its cash flows for the years then ended in conformity with U.S. generally accepted accounting principles. Also, in our opinion, the related financial statement schedule, when considered in relation to the basic financial statements taken as a whole, presents fairly, in all material respects, the information set forth therein.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), Packaging Corporation of America's internal control over financial reporting as of December 31, 2013, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (1992 framework), and our report dated February 28, 2014 expressed an unqualified opinion thereon.

/s/ Ernst & Young LLP

Chicago, Illinois February 28, 2014

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM ON INTERNAL CONTROL OVER FINANCIAL REPORTING

Packaging Corporation of America Board of Directors and Stockholders

We have audited Packaging Corporation of America's internal control over financial reporting as of December 31, 2013, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (1992 framework) (the COSO criteria). Packaging Corporation of America's management is responsible for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting included in Management's Report on Internal Control Over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

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

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

As indicated in the accompanying Management's Report on Internal Control over Financial Reporting, management's assessment of and conclusion on the effectiveness of internal control over financial reporting did not include the internal controls of Boise Inc., a wholly-owned subsidiary, which is included in the 2013 consolidated financial statements of Packaging Corporation of America and constituted 52% of total assets as of December 31, 2013 and 12% and 14% of revenues and net income, respectively for the year then ended. Our audit of internal control over financial reporting also did not include an evaluation of the internal control over financial reporting of Boise Inc.

In our opinion, Packaging Corporation of America maintained, in all material respects, effective internal control over financial reporting as of December 31, 2013, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated balance sheets of Packaging Corporation of America as of December 31, 2013 and 2012, and the related consolidated statements of income and comprehensive income, changes in stockholders' equity, and cash flows for each of the three years in the period ended December 31, 2013, and our report dated February 28, 2014 expressed an unqualified opinion thereon.

/s/ Ernst & Young LLP

Chicago, Illinois February 28, 2014

Consolidated Statements of Income and Comprehensive Income (dollars in thousands, except per-share data)

	Year Ended December 31					
		2013		2012		2011
Statements of Income: Net sales Cost of sales		3,665,308 2,806,121)		2,843,877 2,203,286)		2,620,111 2,078,088)
Gross profit Selling, general, and administrative expenses Alternative energy tax credits Other expense, net		859,187 (326,602) — (58,978)		640,591 (280,843) 95,500 (11,789)		542,023 (258,551) — (10,723)
Income from operations Interest expense, net		473,607 (58,275)		443,459 (62,900)		272,749 (29,245)
Income before taxes		415,332 20,951	_	380,559 (216,739)	_	243,504 (85,477)
Net income	\$	436,283	\$	163,820	\$	158,027
Weighted average common shares outstanding Basic Diluted		96,579 97,547		96,384 97,497		99,281 100,376
Net income per common share Basic	\$	4.52	\$	1.70	\$	1.59
Diluted	\$	4.47	\$	1.68	\$	1.57
Dividends declared per common share	\$	1.51	\$	1.00	\$	0.80
Statements of Comprehensive Income: Net Income Other comprehensive income (loss), net of tax:	\$	436,283	\$	163,820	\$	158,027
Foreign currency translation adjustment		(136)		_		_
respectively		_		(10,183)		(24,134)
for 2013, 2012, and 2011, respectively		3,481		1,842		(1,125)
million for 2013, 2012, and 2011, respectively		13,409		6,689		3,806
2011, respectively		32,264	_	(14,612)	_	(31,944)
Other comprehensive income (loss)	_	49,018	_	(16,264)	_	(53,397)
Comprehensive income	\$	485,301	\$	147,556	\$	104,630

See notes to consolidated financial statements.

Consolidated Balance Sheets (dollars and shares in thousands, except per-share data)

	Decem	ber 31
	2013	2012
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 190,960	\$ 207,393
Accounts receivable, net of allowance for doubtful accounts and customer		
deductions of \$10,567 and \$5,353 as of December 31, 2013 and 2012,		
respectively	643,083	352,142
Inventories	522,523	268,767
Prepaid expenses and other current assets	32,101	20,915
Federal and state income taxes receivable	22,958	65,488
Deferred income taxes	75,579	22,328
Total current assets	1,487,204	937,033
Property, plant, and equipment, net	2,805,704	1,366,069
Goodwill	526,789	67,160
Intangible assets, net	310,539	38,283
Other long-term assets	69,738	45,223
Total assets	\$5,199,974	\$2,453,768
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:	Φ 20.000	Φ 15.000
Current maturities of long-term debt	\$ 39,000	\$ 15,000
Capital lease obligations	1,030	964
Accounts payable	357,432	117,510
Dividends payable	39,297 214,058	122,696
Accrued interest	9,722	3,676
Total current liabilities	660,539	259,846
Long-term liabilities:	2 500 045	770 (20
Long-term debt	2,508,845	778,630
Capital lease obligations Deferred income taxes	23,874 434,835	24,904 125,109
Compensation and benefits	193,548	164,538
Alternative energy tax credits reserve	173,546	102,051
Other long-term liabilities	65,318	29,229
Total long-term liabilities	3,226,420	1,224,461
Commitments and contingent liabilities		
Stockholders' equity: Common stock, par value \$0.01 per share, 300,000 shares authorized, 08,172 and		
Common stock, par value \$0.01 per share, 300,000 shares authorized, 98,172 and 98,143 shares issued as of December 31, 2013 and 2012, respectively	982	981
Additional paid in capital	401,761	378,794
Retained earnings	975,296	703,728
Accumulated other comprehensive loss	(65,024)	(114,042)
Total stockholders' equity	1,313,015	969,461
Total liabilities and stockholders' equity	\$5,199,974	\$2,453,768

See notes to consolidated financial statements.

Consolidated Statements of Cash Flows (dollars in thousands)

	Year Ended December 31			
-	2013	2012	2011	
Cash Flows from Operating Activities:				
Net income\$	436,283	\$ 163,820	\$ 158,027	
Adjustments to reconcile net income to net cash provided by operating				
activities:				
Depreciation, depletion, and amortization	217,918	175,384	162,839	
Share-based compensation expense	14,761	11,687	9,736	
Deferred income tax provision (benefit)	(163,550)	183,202	27,347	
Alternative energy tax credits	76,281	(76,281)	7 127	
Loss on disposals of property, plant, and equipment	9,377	7,298	7,137	
Loss on early extinguishment of debt Pension and post retirement benefits expense, net of contributions	18,525	21,296 1,687	5,726	
Other, net	(1,008)	(3,090)	(4,761)	
Changes in operating assets and liabilities, net of acquisitions:	(1,000)	(3,070)	(4,701)	
Decrease (increase) in assets—				
Accounts receivable	(31,191)	(24,995)	(16,946)	
Inventories	33,304	(12,212)	(8,333)	
Prepaid expenses and other current assets	(1,914)	(835)	(616)	
Increase (decrease) in liabilities—				
Accounts payable	54,222	(40,448)	(694)	
Accrued liabilities	(54,807)	(2,308)	6,052	
Net cash provided by operating activities	608,201	404,205	345,514	
Cash Flows from Investing Activities:				
Additions to property, plant, and equipment	(234,422)	(128,524)	(280,213)	
	(1,174,506)	(35,393)	(57,340)	
Treasury grant proceeds	_	57,399		
Additions to other long term assets	(3,134)	(1,070)	(13,055)	
Other	654	78	443	
Net cash used for investing activities	(1,411,408)	(107,510)	(350,165)	
Cash Flows from Financing Activities:				
Proceeds from issuance of debt	1,998,145	397,044	150,000	
Repayments of debt	(1,074,774)	(437,184)	(670)	
Financing costs paid	(19,419)	(876)	(2,041)	
Settlement of treasury lock		(65,500)	9,910	
Common stock dividends paid	(109,145)	(117,851)	(76,012)	
Repurchases of common stock	(7,799)	(45,162)	(125,027)	
Proceeds from exercise of stock options	2,848	19,898	7,016	
Excess tax benefits from stock-based awards	7,802 (10,955)	4,016	1,232	
Other	(10,933)	_	_	
Net cash provided by (used for) financing activities	786,774	(245,615)	(35,592)	
Net (decrease) increase in cash and cash equivalents	(16,433)	51,080	(40,243)	
Cash and cash equivalents, beginning of year	207,393	156,313	196,556	
Cash and cash equivalents, end of year		\$ 207,393	\$ 156,313	

See notes to consolidated financial statements.

Consolidated Statements of Changes in Stockholders' Equity (dollars and shares in thousands)

	Commo	n Stock	Treasu	ry Stock	Additional Paid in	Retained	Accumulated Other Comprehensive	Total Stockholders'
	Shares	Amount	Shares	Amount		Earnings	Loss	Equity
Balance at January 1, 2011	102,308	\$1,023	_	\$ —	\$362,248	\$ 690,111	\$ (44,381)	\$1,009,001
retirements	(4,897)	(49)	(2)	(59)	(29,098)	(93,871)	_	(123,077)
Common stock dividends declared	_	_	_	_		(80,307)	_	(80,307)
Restricted stock grants and cancellations	570	6	_	_	506	_	_	512
Exercise of stock options	344	3	_	_	7,733	_	_	7,736
Share-based compensation expense	_	_	_	_	9,736	_	_	9,736
Other	_	_	_	_	679	_	_	679
Comprehensive income			=			158,027	(53,397)	104,630
Balance at December 31, 2011	98,325	\$ 983	(2)	\$(59)	\$351,804	\$ 673,960	\$ (97,778)	\$ 928,910
retirements	(1,510)	(15)	2	59	(9,282)	(35,924)	_	(45,162)
Common stock dividends declared	_	_	_	_	_	(98,128)	_	(98,128)
Restricted stock grants and cancellations	383	4	_	_	1,611	_	_	1,615
Exercise of stock options	945	9	_	_	22,288	_	_	22,297
Share-based compensation expense	_	_	_	_	11,687	_	_	11,687
Other		_	_	_	686	_	_	686
Comprehensive income			=			163,820	(16,264)	147,556
Balance at December 31, 2012	98,143	\$ 981	_	\$ —	\$378,794	\$ 703,728	\$(114,042)	\$ 969,461
retirements	(171)	(1)	_	_	(1,078)	(6,720)	_	(7,799)
taxes on vested stock awards	(224)	(2)	_	_	(1,362)	(9,591)	_	(10,955)
Common stock dividends declared			_	_		(148,404)	_	(148,404)
Restricted stock grants and cancellations	297	3	_	_	6,923	` _	_	6,926
Exercise of stock options	127	1	_	_	3,723	_	_	3,724
Share-based compensation expense	_		_	_	14,761	_	_	14,761
Comprehensive income	_	_	_	_		436,283	49,018	485,301
Balance at December 31, 2013	98,172	\$ 982	=	<u>\$ —</u>	\$401,761	\$ 975,296	\$ (65,024)	\$1,313,015

Notes to Consolidated Financial Statements

1. Nature of Operations and Basis of Presentation

Packaging Corporation of America ("we", "us", "our", PCA" or the "Company") was incorporated on January 25, 1999. In April 1999, PCA acquired the containerboard and corrugated packaging products business of Pactiv Corporation ("Pactiv"), formerly known as Tenneco Packaging, Inc., a wholly owned subsidiary of Tenneco Inc. On October 25, 2013, PCA acquired Boise Inc. ("Boise"). For more information, see Note 3, Acquisitions. After the acquisition of Boise, we became a large diverse manufacturer of both packaging and paper products. We are headquartered in Lake Forest, Illinois, and we operate largely in the United States but also have operations in Europe, Mexico, and Canada. We have approximately 13,600 employees.

After the acquisition of Boise, we began reporting our business in three reportable segments: Packaging, Paper, and Corporate and Other. Our Packaging segment produces a wide variety of corrugated packaging products. The Paper segment manufactures and sells a range of papers, including communication-based papers, and pressure sensitive papers (collectively, white papers), and market pulp. Corporate and other includes support staff services and related assets and liabilities, transportation assets, and activity related to other ancillary support operations. For more information about our segments, see Note 19, Segment Information.

In these consolidated financial statements, certain amounts in prior periods' consolidated financial statements have been reclassified to conform with the current period presentation. In accordance with Accounting Standards Codification ("ASC") 280, "Segment Reporting," we recast 2012 and 2011 segment information to conform with the current year presentation. For more information see Note 19, Segment Information. In addition, we reclassified amounts previously disclosed in "Corporate overhead" in the 2012 and 2011 Consolidated Statements of Income into "Selling, general, and administrative expenses" given that Corporate and Other is now disclosed separately in our segment information as discussed above. None of the reclassifications affected our results of operations, financial position, or cash flows.

The consolidated financial statements include the accounts of PCA and its majority-owned subsidiaries after elimination of intercompany balances and transactions. Boise's results are included in our results for the period of October 25, 2013, through December 31, 2013.

2. Summary of Significant Accounting Policies

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions about future events. These estimates and the underlying assumptions affect the amounts of assets and liabilities reported, disclosures about contingent assets and liabilities, and reported amounts of revenues and expenses. These estimates and assumptions are based on management's best estimates and judgment. Management evaluates its estimates and assumptions on an ongoing basis using historical experience and other factors, including the current economic environment. We adjust such estimates and assumptions when facts and circumstances dictate. As future events and their effects cannot be determined with precision, actual results could differ significantly from these estimates. Changes in these estimates will be reflected in the consolidated financial statements in future periods.

Revenue Recognition

We recognize revenue when the following criteria are met: persuasive evidence of an agreement exists, delivery has occurred or services have been rendered, our price to the buyer is fixed or determinable, and collectability is reasonably assured. Shipping and handling billings to a customer are included in net sales. Shipping and handling costs are included in cost of sales. We present taxes collected from customers and remitted to governmental authorities on a net basis in our Consolidated Statements of Income.

Planned Major Maintenance Costs

The Company accounts for its planned major maintenance activities in accordance with ASC 360, "Property, Plant, and Equipment," using the deferral method. All maintenance costs incurred during the year are expensed in the year in which the maintenance activity occurs.

Share-Based Compensation

We recognize compensation expense for awards granted under the PCA long-term equity incentive plans based on the fair value on the grant date. We recognize the cost of the equity awards over the period the awards vest. See Note 9, Share-Based Compensation, for more information.

Research and Development

Research and development costs are expensed as incurred. The amount charged to expense was \$11.5 million, \$11.3 million, and \$12.5 million for the years ended December 31, 2013, 2012, and 2011, respectively.

Foreign Currency

Local currencies are the functional currencies for our operations outside the United States. Assets and liabilities are remeasured into U.S. dollars using the exchange rates as of the Consolidated Balance Sheet date. Revenue and expense items are remeasured into U.S. dollars using an average exchange rate prevailing during the period. Any resulting translation adjustments are recorded in the Consolidated Statements of Comprehensive Income. The foreign exchange gain (loss) resulting from remeasuring transactions into the functional currencies is reported in the Consolidated Statements of Income.

Cash and Cash Equivalents

Cash and cash equivalents include all cash balances and highly liquid investments with a maturity, when acquired, of three months or less. Cash equivalents are stated at cost, which approximates market. Cash and cash equivalents totaled \$191.0 million and \$207.4 million at December 31, 2013 and 2012, respectively, which included cash equivalents of \$156.6 million and \$203.5 million, respectively. Also included in cash and cash equivalents on December 31, 2013, was \$7.1 million of cash at our operations outside the United States.

Trade Accounts Receivable, Allowance for Doubtful Accounts, and Customer Deductions

Trade accounts receivable are stated at the amount we expect to collect. The collectability of our accounts receivable is based upon a combination of factors. In circumstances where a specific customer is unable to meet its financial obligations to PCA (e.g., bankruptcy filings, substantial downgrading of credit sources), a specific reserve for bad debts is recorded against amounts due to the Company to reduce the net recorded receivable to the amount the Company reasonably believes will be collected. For all other customers, reserves for bad debts are recognized based on historical collection experience. If collection experience deteriorates (i.e., higher than expected defaults or an unexpected material adverse change in a major customer's ability to meet its financial obligations to the Company), the estimate of the recoverability of amounts due could be reduced by a material amount. We periodically review our allowance for doubtful accounts and adjustments to the valuation allowance are charged to income. Trade accounts receivable balances that remain outstanding after we have used reasonable collection efforts are written off through a charge to the valuation allowance and a credit to accounts receivable. At December 31, 2013 and 2012, the allowance for doubtful accounts was \$3.9 million and \$1.9 million, respectively.

The customer deductions reserve represents the estimated amount required for customer returns, allowances and earned discounts. Based on the Company's experience, customer returns, allowances and earned discounts

have averaged approximately 1% of gross selling price. Accordingly, PCA reserves 1% of its open customer accounts receivable balance for these items. The reserve for customer deductions of \$6.7 million and \$3.4 million at December 31, 2013 and 2012, respectively, are also included as a reduction of the accounts receivable balance.

Derivative Instruments and Hedging Activities

The Company records its derivatives, if any, in accordance with ASC 815, "Derivatives and Hedging." The guidance requires the Company to recognize derivative instruments as either assets or liabilities on the balance sheet at fair value. The accounting for changes in the fair value of a derivative depends on the intended use and designation of the derivative instrument. For a derivative designated as a fair value hedge, the gain or loss on the derivative is recognized in earnings in the period of change in fair value together with the offsetting gain or loss on the hedged item. For a derivative instrument designated as a cash flow hedge, the effective portion of the derivative's gain or loss is initially reported as a component of accumulated other comprehensive income (loss) ("AOCI") and is subsequently recognized in earnings when the hedged exposure affects earnings. The ineffective portion of the gain or loss is recognized in earnings. We were not party to any derivative-based arrangements at December 31, 2013 and 2012.

Fair Value Measurements

PCA measures the fair value of its financial instruments in accordance with ASC 820, "Fair Value Measurements and Disclosures." The guidance defines fair value as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants. It is determined based on assumptions that market participants would use in pricing an asset or liability. As a basis for considering such assumptions, ASC 820 establishes the following hierarchy that prioritizes the inputs to valuation methodologies used to measure fair value:

Level 1 — Valuations based on quoted prices for identical assets and liabilities in active markets.

Level 2 — Valuations based on observable inputs other than quoted prices included in Level 1, such as quoted prices for similar assets and liabilities in active markets, quoted prices for identical or similar assets and liabilities in markets that are not active, or other inputs that are observable or can be corroborated by observable market data.

Level 3 — Valuations based on unobservable inputs in which there is little or no market data, which require the reporting entity to develop its own assumptions.

Financial instruments measured at fair value on a recurring basis include the fair value of our pension and postretirement benefit assets and liabilities. See Note 10, Employee Benefit Plans and Other Postretirement Benefits for more information. Other assets and liabilities measured and recognized at fair value on a nonrecurring basis include assets acquired and liabilities assumed in acquisitions and our asset retirement obligations. Given the nature of these assets and liabilities, evaluating their fair value from the perspective of a market participant is inherently complex. Assumptions and estimates about future values can be affected by a variety of internal and external factors. Changes in these factors may require us to revise our estimates and could require us to retroactively adjust provisional amounts that we recorded for the fair values of assets acquired and liabilities assumed in connection with business combinations. These adjustments could have a material effect on our financial condition and results of operations. See Note 3, Acquisitions, and Note 14, Asset Retirement Obligations, for more information.

Inventory Valuation

With the exception of inventories at corrugated products and paper plants acquired since 2004, raw materials, work in process and finished goods are valued using the last-in, first-out ("LIFO") cost method. Inventories at the acquired locations are valued at the first-in, first-out ("FIFO") or average cost methods.

Supplies and materials are valued using average cost. All inventories are stated at the lower of cost or market and include all costs directly associated with manufacturing products: materials, labor, and manufacturing overhead. Inventories valued using the LIFO method totaled \$200.8 million and \$194.0 million, respectively, as of December 31, 2013 and 2012, compared to total inventory values (before the LIFO inventory reserve) of \$594.3 million and \$332.3 million for the same respective periods.

The components of inventories are as follows (dollars in thousands):

	Decem	ber 31
	2013	2012
Raw materials	\$212,027	\$125,909
Work in process	13,898	8,287
Finished goods	209,972	78,788
Supplies and materials	158,394	119,284
Inventories at FIFO or average cost	594,291	332,268
Excess of FIFO or average cost over LIFO cost	(71,768)	(63,501)
Inventories	\$522,523	\$268,767

Property, Plant, and Equipment

Property, plant, and equipment are recorded at cost. Cost includes expenditures for major improvements and replacements and the amount of interest cost associated with significant capital additions. Repairs and maintenance costs are expensed as incurred. When property and equipment are retired, sold, or otherwise disposed of, the asset's carrying amount and related accumulated depreciation are removed from the accounts and any gain or loss is included in "Net income" in our Consolidated Statements of Income.

Property, plant, and equipment consist of the following (dollars in thousands):

	December 31			31
		2013		2012
Land and land improvements	\$	140,592	\$	107,250
Buildings		628,948		390,363
Machinery and equipment	4	1,263,505		3,048,932
Construction in progress		168,808		67,051
Other		30,847		27,196
Property, plant and equipment, at cost	4	5,232,700		3,640,792
Less accumulated depreciation	_(2	2,426,996)	_(:	2,274,723)
Property, plant, and equipment, net	\$ 2	2,805,704	\$	1,366,069

The amount of interest capitalized from construction in progress was \$1.7 million, \$0.8 million and \$7.1 million for the years ended December 31, 2013, 2012, and 2011, respectively.

Depreciation is computed on the straight-line basis over the estimated useful lives of the related assets. Assets under capital leases are depreciated on the straight-line method over the term of the lease or the useful life, if shorter. The following lives are used for the various categories of assets:

Buildings and land improvements	5 to 40 years
Machinery and equipment	3 to 25 years
Trucks and automobiles	3 to 10 years
Furniture and fixtures	3 to 20 years
Computers and hardware	3 to 10 years
Leasehold improvements	Period of the lease or
	useful life, if shorter

The amount of depreciation expense was \$191.2 million, \$166.0 million and \$161.5 million for the years ended December 31, 2013, 2012, and 2011, respectively.

Pursuant to the terms of an industrial revenue bond, title to certain property, plant, and equipment was transferred to a municipal development authority in 2009 in order to receive a property tax abatement. The title of these assets will revert back to PCA upon retirement or cancellation of the bond. The assets are included in the consolidated balance sheet under the caption "Property, plant and equipment, net" as all risks and rewards remain with the Company.

Leases

We assess lease classification as either capital or operating at lease inception or upon modification. We lease some of our locations, as well as other property and equipment, under operating leases. For purposes of determining straight-line rent expense, the lease term is calculated from the date of possession of the facility, including any periods of free rent and any renewal option periods that are reasonably assured of being exercised.

Long-Lived Asset Impairment

Long-lived assets other than goodwill and other intangibles are reviewed for impairment in accordance with provisions of ASC 360, "Property, Plant and Equipment." In the event that facts and circumstances indicate that the carrying amount of any long-lived assets may be impaired, an evaluation of recoverability is performed. If an evaluation is required, the estimated future undiscounted cash flows associated with the asset (or group of assets) is compared to the asset's (or group of assets') carrying amount to determine if a write-down to fair value is required.

Goodwill and Intangible Assets

The Company has capitalized certain intangible assets, primarily goodwill, customer relationships, and trademarks and trade names, based on their estimated fair value at the date of acquisition. Amortization is provided for customer relationships on a straight-line basis over periods ranging from six to 40 years, and trademarks and trade names over periods ranging from three to 20 years.

Goodwill, which amounted to \$526.8 million and \$67.2 million for the years ended December 31, 2013 and 2012, respectively, is not amortized but is subject to an annual impairment test in accordance with ASC 350, "Intangibles — Goodwill and Other." 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. Additionally, we evaluate the remaining useful lives of our finite-lived purchased intangible assets to determine whether any adjustments to the useful lives are necessary. The Company concluded that none of the goodwill or intangible assets were impaired in the 2013, 2012, and 2011 annual impairment tests. See Note 7, Goodwill and Intangible Assets for additional information.

Pension and Postretirement Benefits

Several estimates and assumptions are required to record pension costs and liabilities, including discount rate, return on assets, and longevity and service lives of employees. We review and update these assumptions annually unless a plan curtailment or other event occurs, requiring we update the estimates on an interim basis. While we believe the assumptions used to measure our pension and postretirement benefit obligations are reasonable, differences in actual experience or changes in assumptions may materially affect our pension and postretirement benefit obligations and future expense. See Note 10, Employee Benefit Plans and Other Postretirement Benefits, for additional information.

For postretirement health care plan accounting, the Company reviews external data and its own historical trends for health care costs to determine the health care cost trend rate assumption.

Environmental Matters

Environmental expenditures that extend the life of the related property or mitigate or prevent future environmental contamination are capitalized. Liabilities are recorded for environmental contingencies when such costs are probable and reasonably estimable. These liabilities are adjusted as further information develops or circumstances change. Environmental expenditures related to existing conditions resulting from past or current operations from which no current or future benefit is discernible are expensed as incurred.

Asset Retirement Obligations

The Company accounts for its retirement obligations related predominantly to landfill closure, wastewater treatment pond dredging, closed-site monitoring costs, and certain leasehold improvements under ASC 410, "Asset Retirement and Environmental Obligations," which requires recognition of legal obligations associated with the retirement of long-lived assets whether these assets are owned or leased. These legal obligations are to be recognized at fair value at the time that the obligations are incurred. When we record the liability, we capitalize the cost by increasing the carrying amount of the related long-lived asset which is amortized to expense over the useful life of the asset. See Note 14, Asset Retirement Obligations, for additional information.

Deferred Financing Costs

PCA has capitalized certain costs related to obtaining its financing. These costs are amortized to interest expense using the effective interest rate method over the terms of the related financing, which range from five to ten years. Unamortized deferred financing costs of \$14.1 million and \$5.0 million as of December 31, 2013 and 2012, respectively, were recorded in "Other long-term assets" on our Consolidated Balance Sheets.

Cutting Rights and Fiber Farms

We lease the cutting rights to approximately 88,000 acres of timberland and we lease 9,000 acres of land where we operate fiber farms as a source of future fiber supply. For our cutting rights, we capitalize the annual lease payments and reforestation costs associated with these leases. For fiber farms, costs for activities related to the establishment of a new crop of trees, including planting, thinning, fertilization, pest control, herbicide application, irrigation, and land lease costs, are capitalized. Costs are recorded as depletion when the timber or fiber is harvested and used in operations or sold to customers. Capitalized long-term lease costs for our cutting rights recorded in "Other long-term assets" on our Consolidated Balance Sheet were \$27.6 million and \$27.4 million as of December 31, 2013, and 2012, respectively. Capitalized fiber farm costs recorded in "Other long-term assets" on our Consolidated Balance Sheet were \$9.4 million as of December 31, 2013. The amount of depletion expense was \$2.5 million, \$0.7 million and \$0.04 million for the years ended December 31, 2013, 2012, and 2011, respectively.

Deferred Software Costs

PCA capitalizes costs related to the purchase and development of software which is used in its business operations. The costs attributable to these software systems are amortized over their estimated useful lives based on various factors such as the effects of obsolescence, technology and other economic factors. Net capitalized software costs recorded in "Other long-term assets" on our Consolidated Balance Sheets were \$5.7 million and \$1.1 million for the years ended December 31, 2013, and 2012, respectively. Software amortization expense was \$1.1 million, \$0.9 million, and \$0.6 million for the years ended December 31, 2013, 2012, and 2011, respectively.

Income Taxes

PCA utilizes the liability method of accounting for income taxes whereby it recognizes deferred tax assets and liabilities for the future tax consequences of temporary differences between the tax basis of assets and liabilities and their reported amounts in the financial statements. Deferred tax assets will be reduced by a valuation allowance if, based upon management's estimates, it is more likely than not that a portion of the deferred tax assets will not be realized in a future period. The estimates utilized in the recognition of deferred tax assets are subject to revision in future periods based on new facts or circumstances. PCA's practice is to recognize interest and penalties related to unrecognized tax benefits in income tax expense.

Trade Agreements

PCA regularly trades containerboard with other manufacturers primarily to reduce shipping costs. These agreements are entered into with other producers on an annual basis, pursuant to which both parties agree to ship an identical number of tons of containerboard to each other within the agreement period. These agreements lower transportation costs by allowing each party's containerboard mills to ship containerboard to the other party's closest corrugated products plant. PCA tracks each shipment to ensure that the other party's shipments to PCA match PCA's shipments to the other party during the agreement period. Such transfers are possible because containerboard is a commodity product with no distinguishing product characteristics. These transactions are accounted for at carrying value, and revenue is not recorded as the transactions do not represent the culmination of an earnings process. The transactions are recorded into inventory accounts, and no income is recorded until such inventory is converted to a finished product and sold to an end-use customer.

New and Recently Adopted Accounting Standards

In July 2013, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") 2013-11, Income Taxes (Topic 740): *Presentation of an Unrecognized Tax Benefit When a Net Operating Loss Carryforward, a Similar Tax Loss, or a Tax Credit Carryforward Exists.* This ASU requires that liabilities related to unrecognized tax benefits offset deferred tax assets for net operating loss carryforwards, a similar tax loss, or a tax credit carryforward if such settlement is required or expected in the event the uncertain tax position is disallowed. In situations in which carryforwards cannot be used or the deferred tax asset is not intended to be used for such purpose, the unrecognized tax benefit should be recorded as a liability and should not offset deferred tax assets. We adopted the provisions of this guidance on December 31, 2013, and it did not have a significant effect on our financial position or results of operations. See Note 5, Income Taxes, for additional information.

In February 2013, the FASB issued ASU 2013-02, Comprehensive Income (Topic 220): Reporting of Amounts Reclassified Out of Accumulated Other Comprehensive Income. This ASU requires entities to disclose additional information about changes in and significant items reclassified out of AOCI. In addition, an entity is required to present, either on the face of the statement where net income is presented or in the notes, significant amounts reclassified out of AOCI by the respective line items of net income but only if the amount reclassified is required under U.S. generally accepted accounting principles ("GAAP") to be reclassified to net income in its entirety in the same reporting period. For other amounts not required under U.S. GAAP to be reclassified in their

entirety to net income, an entity is required to cross-reference to other disclosures that provide additional detail about those amounts. We adopted the provisions of this guidance on January 1, 2013, and it had no effect on our financial position and results of operations. See Note 12, Stockholders' Equity, for additional information.

In February 2013, the FASB issued ASU 2013-04, "Liabilities (Topic 405): *Obligations Resulting from Joint and Several Liability Arrangements for Which the Total Amount of the Obligation is Fixed at the Reporting Date.*" This ASU requires an entity to measure obligations resulting from joint and several liability arrangements for which the total amount of the obligation within the scope of this guidance is fixed at the reporting date, as the sum of (a) the amount the reporting entity agreed to pay on the basis of its arrangement among its co-obligors and (b) any additional amount the reporting entity expects to pay on behalf of its co-obligors. This ASU also requires an entity to disclose the nature and amount of the obligation as well as other information about those obligations. The amendments in this ASU are effective for fiscal years, and interim periods within those years, beginning after December 15, 2013, and should be applied retrospectively to all prior periods presented. To the extent the Company has any joint and several liability arrangements, we do not believe this ASU will have a material effect on our financial position and results of operations.

In July 2012, the FASB issued ASU 2012-02, Intangibles — Goodwill and Other (Topic 350): *Testing Indefinite-Lived Intangible Assets for Impairment*. This ASU gives entities testing indefinite-lived intangible assets for impairment the option first to assess qualitative factors to determine whether the existence of events and circumstances indicates that it is more likely than not that the indefinite-lived intangible asset is impaired. If, after assessing the totality of events and circumstances, an entity concludes that it is not more likely than not that the indefinite-lived intangible asset is impaired, the entity is not required to take further action. However, if an entity concludes otherwise, a quantitative impairment test is required. We adopted the guidance January 1, 2013, and it did not have a material effect on our financial position and results of operations.

There were no other accounting standards recently issued that had or are expected to have a material impact on our financial position or results of operations.

3. Acquisitions

Boise Acquisition

On October 25, 2013, we acquired 100% of the outstanding stock and voting equity interests of Boise, a large manufacturer of packaging and white paper products for \$2.1 billion including the assumption of debt. We paid \$12.55 per share to shareholders, or \$1.2 billion, net of \$121.7 million of cash acquired, and assumed the fair value of Boise's debt, of \$829.8 million. The acquisition expands our corrugated products geographic reach and offerings, provides low-cost, lightweight containerboard capacity for continued growth in the packaging business, and provides meaningful opportunities in the white paper business. We incurred \$17.2 million of acquisition-related costs recorded in "Other expense, net" and \$11.6 million of acquisition-related debt financing costs recorded in "Interest expense". Our consolidated income statement for the year ended December 31, 2013, included Boise net sales revenue of \$448.0 million and Boise income from operations of \$3.5 million. Boise's income from operations included \$21.5 million of expense related to the step-up in inventory value at the acquisition date, \$14.6 million of integration-related and other costs, and \$0.4 million of acquisition-related costs. Boise's financial results are included in our Packaging, Paper, and Corporate and Other segments from the date of acquisition. For more information, see Note 19, Segment Information.

The purchase price allocation is preliminary. Our estimates and assumptions are subject to change as more information becomes available. The primary areas of the purchase price allocation that are not yet finalized relate to the valuation of fixed assets, income taxes, and residual goodwill. The following table summarizes the allocation of the purchase price to the assets acquired and liabilities assumed, based on our current estimates of the fair value at the date of the acquisition (dollars in thousands):

Current assets:	
Cash and cash equivalents	\$ 121,658
Accounts receivable	270,364
Inventories	286,277
Deferred income taxes	9,144
Prepaid expenses and other current assets	8,624
Total current assets	696,067
Property, plant, and equipment(a)	1,401,183
Intangible assets(b):	
Customer relationships	256,400
Trademarks and trade names	20,600
Goodwill(c)	458,579
Other long-term assets	21,786
Assets acquired	2,854,615
Current liabilities	322,230
Long-term debt	829,750
Deferred tax liabilities	281,463
Other long-term liabilities	131,276
Liabilities assumed	1,564,719
Net assets acquired	\$1,289,896

⁽a) Property and equipment acquired are being depreciated on a straight-line basis over their estimated remaining lives, which range from one to 30 years.

(b) We are amortizing the intangible assets on a straight-line basis over the following (in years):

Customer relationships	15 - 20
Trademarks and trade names	5 - 20

(c) Goodwill is the excess of purchase price over the fair value of tangible and identifiable intangible assets acquired and liabilities assumed. Goodwill generated from the acquisition is primarily attributable to expected synergies and the assembled workforce. Goodwill recognized in the transaction is not deductible for income tax purposes; however, we assumed \$1.9 million of goodwill that Boise had been amortizing in connection with previous acquisitions, which we will continue to amortize and deduct for income tax purposes.

Pro Forma Financial Information (Unaudited)

The following pro forma financial information presents the combined results of operations as if Boise had been combined with us on January 1, 2012. The pro forma results are intended for information purposes only and do not purport to represent what the combined companies' results of operations would actually have been had the transactions in fact occurred on January 1, 2012. They also do not reflect any cost savings, operating synergies, or revenue enhancements that we may achieve or the costs necessary to achieve those cost savings, operating synergies, revenue enhancements, or integration efforts (dollars in millions, except per-share amounts).

	Pro Forma (Unaudited) Year Ended December 31	
	2013	2012
Sales	\$5,696.2	\$5,355.9
Net income(a)	\$ 492.4	\$ 226.0
Net income per share — diluted	\$ 5.05	\$ 2.32

(a) The 2013 and 2012 unaudited pro forma financial information presented in the table above has been adjusted to give effect to adjustments that are directly related to the acquisition, factually supportable, and expected to have a continuing impact. These adjustments include, but are not limited to, the application of our accounting policies; elimination of related party transactions; depreciation and amortization related to fair value adjustments to property, plant and equipment and intangible assets; and interest expense on acquisition-related debt.

The 2013 unaudited pro forma net income was also adjusted to exclude \$21.5 million of acquisition inventory step-up expense, \$17.2 million of acquisition-related costs, which primarily consist of advisory, legal, accounting, valuation and other professional or consulting fees, and \$11.6 million of acquisition-related debt financing costs. Included in 2013 pro forma net income is \$166.0 million of income from the reversal of tax reserves related to alternative fuel mixture credits, \$17.4 million of integration-related and other costs, which primarily consist of severance and other employee costs and professional services.

Other Acquisitions

In November 2013, we acquired Damage Prevention Company for \$6.3 million and recorded \$1.1 million of goodwill in the Packaging segment. During the first quarter of 2012, PCA acquired a corrugated products manufacturer located in Pennsylvania for \$35.4 million. Sales and total assets of both acquisitions were not material to the Company's overall sales and total assets. The operating results of both acquisitions subsequent to the purchase dates are included in the Packaging segment. The Company allocated the purchase price to the assets acquired and liabilities assumed.

4. Earnings Per Share

The following table sets forth the computation of basic and diluted income per common share for the periods presented (dollars in thousands, except per share data).

	Year Ended December 31		
	2013	2012	2011
Numerator:			
Net income	\$436,283	\$163,820	\$158,027
Denominator:			
Weighted average basic common shares outstanding	96,579	96,384	99,281
Effect of dilutive securities:			
Stock options, unvested restricted stock, and performance			
units	968	1,113	1,095
Diluted common shares outstanding	97,547	97,497	100,376
Basic income per common share	\$ 4.52	\$ 1.70	\$ 1.59
Diluted income per common share	\$ 4.47	\$ 1.68	\$ 1.57

All outstanding options to purchase shares at December 31, 2013, 2012, and 2011, were included in the computation of diluted common shares outstanding.

5. Income Taxes

The following is an analysis of the components of the consolidated income tax provision (dollars in thousands):

	2013	2012	2011
Current income tax provision (benefit) —			
U.S. Federal	\$ 129,633	\$ 27,100	\$41,452
State and local	12,649	6,437	16,678
Foreign	317		
Total current provision for taxes	142,599	33,537	58,130
Deferred —			
U.S. Federal	(163,187)	180,997	29,895
State and local	(251)	2,205	(2,548)
Foreign	(112)		
Total deferred provision for taxes	(163,550)	183,202	27,347
Total provision (benefit) for taxes	\$ (20,951)	\$216,739	\$85,477

The effective tax rate varies from the U.S. Federal statutory tax rate principally due to the following (dollars in thousands):

	2013	2012	2011
Provision computed at U.S. Federal statutory rate of 35%	\$ 145,366	\$133,196	\$85,226
Alternative fuel mixture and cellulosic biofuel producer			
credits	(166,006)	81,695	_
State and local taxes, net of federal benefit	13,237	9,135	7,504
Domestic manufacturers deduction	(11,712)	(7,155)	(7,670)
Other	(1,836)	(132)	417
Total	\$ (20,951)	\$216,739	\$85,477

Tax benefits in 2013 included \$166.0 million for the release of ASC 740 uncertain tax positions related to the taxability of the alternative fuel mixture tax credits acquired in the acquisition of Boise and the completion of the IRS audit of PCA's 2008 and 2009 Federal income tax returns including the Filer City mill's cellulosic biofuel tax credits. Tax expense in 2012 included \$81.7 million for the reallocation of gallons from the cellulosic biofuel producer credit to the alternative fuel mixture credit claimed in the 2009 amended federal and state income tax returns filed in 2012. For further discussion regarding these credits, see Note 6.

The following details the scheduled expiration dates of our tax effected net operating loss (NOL) and other tax carryforwards at December 31, 2013 (dollars in thousands):

	2014 Through 2023	2024 Through 2033	Indefinite	Total
U.S. federal and non-U.S. NOLs	\$1,633	\$110,086	\$ —	\$111,719
State taxing jurisdiction NOLs	1,199	13,878	_	15,077
U.S. federal, non-U.S., and state tax credit				
carryforwards	203	748	613	1,564
U.S. federal capital loss carryforwards	1,088			1,088
Total	\$4,123	\$124,712	\$613	\$129,448

Deferred income taxes reflect the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts for income tax purposes. Deferred income tax assets and liabilities at December 31 are summarized as follows (dollars in thousands):

	December 31		
	2013	2012	
Deferred tax assets:			
Accrued liabilities	\$ 19,521	\$ 7,332	
Employee benefits and compensation	27,252	16,002	
Net operating loss carryforwards	126,796	_	
Stock options and restricted stock	8,875	8,389	
Pension and postretirement benefits	75,518	65,520	
Derivatives	18,221	20,381	
Capital loss, general business, foreign, and AMT credit carryforwards	2,652		
Gross deferred tax assets	\$ 278,835	\$ 117,624	
Valuation allowance(a)	(2,715)		
Net deferred tax assets	\$ 276,120	\$ 117,624	
Deferred tax liabilities:			
Property, plant, and equipment	\$(519,718)	\$(210,486)	
Goodwill and intangible assets	(111,865)	(7,267)	
Inventories	(559)	(1,533)	
Investment in joint venture	(1,026)	(1,119)	
Other	(2,208)		
Total deferred tax liabilities	\$(635,376)	\$(220,405)	
Net deferred tax assets (liabilities)(b)	<u>\$(359,256)</u>	<u>\$(102,781)</u>	

⁽a) Deferred tax assets are reduced by a valuation allowance when it is more likely than not that some portion of the deferred tax assets will not be realized. Of the \$2.7 million valuation allowance, \$1.6 million relates to foreign net operating loss carryforwards and credits and \$1.1 million relates to capital losses. We do not expect to generate capital gains before the capital losses expire. If or when recognized, the tax benefits relating to the reversal of any of or all of the valuation allowance would be recognized as a benefit to income tax expense.

(b) As of December 31, 2013, we did not recognize U.S. deferred income taxes on our cumulative total of undistributed foreign earnings for our non-U.S. subsidiaries. We indefinitely reinvest our earnings in operations outside the United States. It is not practicable to determine the amount of unrecognized deferred tax liability on these undistributed earnings because the actual tax liability, if any, is dependent on circumstances existing when the repatriation occurs.

Cash payments for federal, state, and foreign income taxes were \$90.7 million, \$9.7 million and \$52.7 million for the years ended December 31, 2013, 2012, and 2011, respectively.

The following table summarizes the changes related to PCA's gross unrecognized tax benefits excluding interest and penalties (dollars in thousands):

	2013	2012
Balance as of January 1	\$(111,303)	\$(111,013)
Increase related to acquisition of Boise Inc.(a)	(65,158)	_
Increases related to prior years' tax positions	(49)	(128)
Increases related to current year tax positions	(1,538)	(1,267)
Decreases related to prior years' tax positions(b)	64,774	_
Settlements with taxing authorities(c)	106,187	_
Expiration of the statute of limitations(d)	1,667	1,105
Balance at December 31	\$ (5,420)	\$(111,303)

- (a) PCA acquired \$65.2 million of gross unrecognized tax benefits from Boise Inc. that relate primarily to the taxability of the alternative fuel mixture credits.
- (b) Includes a \$64.3 million gross decrease related to the taxability of the alternative fuel mixture tax credits claimed in 2009 excise tax returns by Boise Inc. For further discussion regarding these credits, see Note 6, Alternative Energy Tax Credits.
- (c) Includes a \$104.7 million gross decrease related to the conclusion of the Internal Revenue Service audit of PCA's alternative energy tax credits. For further discussion regarding these credits, see Note 6, Alternative Energy Tax Credits.
- (d) In the third and fourth quarters of 2013, various state statutes of limitations expired. As a result, the reserve for unrecognized tax benefits decreased by \$1.7 million gross.

At December 31, 2013, PCA had recorded a \$5.4 million gross reserve for unrecognized tax benefits, excluding interest and penalties. Of the total, \$4.0 million (net of the federal benefit for state taxes) would impact the effective tax rate if recognized.

PCA recognizes interest accrued related to unrecognized tax benefits and penalties as income tax expense. Related to the unrecognized tax benefits noted above, PCA accrued interest of \$3.3 million gross and accrued penalties of less than \$0.1 million gross during 2013 and in total, as of December 31, 2013, and after the decreases and settlements noted in the table above, has recognized a liability for interest of \$0.4 million gross and penalties of less than \$0.1 million gross. During 2012, PCA accrued interest of \$0.3 million gross and penalties of less than \$0.1 million gross and in total, as of December 31, 2012, had recognized a liability for interest of \$2.5 million gross and penalties of less than \$0.1 million gross. PCA does not expect the unrecognized tax benefits to change significantly over the next 12 months.

PCA is subject to taxation in the United States and various state and foreign jurisdicitions. A federal examination of the tax years 2008 and 2009 was concluded in November 2013. The tax years 2010 - 2013 remain open to federal examination. The tax years 2009 — 2013 remain open to state examinations. Some foreign tax jurisdictions are open to examination for the 2008 tax year forward. Through the Boise acquisition, PCA recorded net operating losses and credit carryforwards from 2008 through 2011 and 2013 that are subject to examinations and adjustments for at least three years following the year in which utilized.

6. Alternative Energy Tax Credits

The Company generates black liquor as a by-product of its pulp manufacturing process, which entitled it to certain federal income tax credits. When black liquor is mixed with diesel, it is considered an alternative fuel that was eligible for a \$0.50 per gallon refundable alternative fuel mixture credit for gallons produced before December 31, 2009. Black liquor is also eligible for a \$1.01 per gallon taxable cellulosic biofuel producer credit for gallons of black liquor produced and used in 2009. The Company first recorded income relating to these credits in its income statement for the year ended December 31, 2009.

During 2010, the Internal Revenue Service (IRS) released guidance related to the alternative energy credits which resulted in: (1) the Company releasing a reserve that was established in 2009 for ambiguity in the calculation of the alternative fuel mixture credit; (2) reallocation of gallons of black liquor from the alternative fuel mixture credit to the cellulosic biofuel credit; and (3) the determination that the Company's proprietary biofuel process at its Filer City, Michigan mill would likely qualify for the cellulosic biofuel producer credit. The Company amended its 2009 federal income tax return in December 2010 to claim the additional Filer City gallons. As a result of these changes, the Company recorded a charge of \$(86.3) million in "Alternative fuel mixture credits" and a \$135.5 million benefit in the "(Provision) benefit for income taxes." Additional expenses of \$1.6 million related to the alternative energy tax credits were also recorded, resulting in total income of \$47.7 million recorded in 2010. In addition, the Company recorded in 2010 a reserve for unrecognized tax benefits under ASC 740, "Income Taxes," of \$102.0 million (net of the federal benefit for state taxes) because the IRS guidelines do not specifically address the unique and proprietary nature of the Filer City mill process and uncertainty exists.

On February 3, 2012, PCA again amended its 2009 federal tax return to reallocate claimed gallons from cellulosic biofuel producer credits to alternative fuel mixture credits. As a result of this change, the Company recorded a charge of \$(118.5) million in "(Provision) benefit for income taxes" and income of \$95.5 million in "Alternative fuel mixture credits," together resulting in a first quarter 2012 non-cash, after-tax charge of \$23.0 million. In the fourth quarter of 2012, PCA recorded after-tax income of \$3.4 million for the amendment of the 2009 state income tax returns related to the federal amendment filed in February 2012. The net impact of these changes resulted in a non-cash, after-tax charge of \$19.6 million for the year ended December 31, 2012.

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 also 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 the fourth quarter.

In November 2013, an IRS Chief Counsel Memorandum was published that provided guidance concerning the taxability of the alternative fuel mixture credits. Based on this new fact, PCA reversed a \$62.1 million (net of the federal benefit for state taxes) reserve for unrecognized tax benefits acquired from Boise for the taxability of the 2009 alternative fuel mixture credits that Boise had claimed through excise tax refunds as a benefit to income taxes in the fourth quarter. This resulted in a reduction in "Other long-term liabilities" of \$13.1 million and the recording of a deferred tax asset to increase the net operating loss carryforwards recorded in deferred taxes by \$49.0 million.

7. Goodwill and Intangible Assets

Goodwill

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, 2013, we had \$472.9 million of goodwill recorded in our Packaging segment and \$53.9 million in our Paper segment on our Consolidated Balance Sheet.

Changes in the carrying amount of our goodwill are as follows (dollars in thousands):

	Goodwill
Balance at January 1, 2012	\$ 58,214
Acquisitions	14,098
Adjustments related to purchase accounting	(5,152)
Balance at December 31, 2012	67,160
Acquisitions(a)	459,629
Balance at December 31, 2013	<u>\$526,789</u>

⁽a) In 2013, in addition to acquiring Boise and recording \$458.6 million of goodwill, we acquired Damage Prevention Company for \$6.3 million and recorded \$1.1 million of goodwill in the Packaging segment.

Intangible Assets

Intangible assets are comprised of customer relationships and trademarks and trade names.

The weighted average useful life, gross carrying amount, and accumulated amortization of our intangible assets were as follows (dollars in thousands):

	As of December 31, 2013			As of December 31, 2012		
	Weighted Average Remaining Useful Life (in Years)	Gross Carrying Amount	Accumulated Amortization	Weighted Average Remaining Useful Life (in Years)	Gross Carrying Amount	Accumulated Amortization
Customer relationships	15.4	\$306,361	\$16,509	16.7	\$48,261	\$10,663
Trademarks and trade names	14.7	21,370	794	2.6	770	248
Other	3.0	220	109	3.7	220	57
Total intangible assets (excluding goodwill)	15.4	\$327,951	\$17,412	16.5	\$49,251	\$10,968

Amortization expense was \$6.4 million, \$3.1 million, and \$1.4 million for the years ended December 31, 2013, 2012, and 2011, respectively. Estimated amortization expense of intangible assets over the next five years is expected to approximate \$22.1 million (2014), \$22.0 million (2015), \$21.9 million (2016), \$21.9 million (2017) and \$21.7 million (2018).

Impairment Testing

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. Additionally, when we experience changes to our business or operating environment, we evaluate the remaining useful lives of our finite-lived purchased intangible assets to determine whether any adjustments to the useful lives are necessary. We completed our test in fourth quarter, and there is no indication of goodwill or intangible asset impairment.

8. Debt

At December 31, 2013 and 2012, our long-term debt and interest rates on that debt were as follows (dollars in thousands):

	December 31, 2013		Decemb	er 31, 2012
	Amount	Interest Rate	Amount	Interest Rate
Revolving Credit Facility, due October 2018	\$ —	%	\$ —	%
Five-Year Term Loan, due October 2018	650,000	1.54	_	_
Seven-Year Term Loan, due October 2020	650,000	1.79	_	_
4.50% Senior Notes, net of discount of \$1,827 as of December 31, 2013, due November 2023	698,173	4.50	_	_
6.50% Senior Notes, net of discounts of \$26 and \$32 as of December 31, 2013 and 2012, respectively, due March 2018	149,974	6.50	149,968	6.50
3.90% Senior Notes, net of discounts of \$302 and \$338 as of December 31, 2013 and 2012, respectively, due June 2022	399,698	3.90	399,662	3.90
Receivables Credit Facility, due October 2014		_	109,000	1.06
Senior Credit Facility, Term Loan, due October 2016		_	135,000	1.71
Total Less current portion	2,547,845 39,000	3.08 1.59	793,630 15,000	3.63 1.71
Total long-term debt	\$2,508,845	3.10%	\$778,630	3.67%

In October 2013, we entered into \$2.35 billion of new borrowings and credit facility, including a \$1.65 billion senior unsecured credit agreement, which includes a \$350.0 million undrawn revolver, and \$700.0 million of 4.50% ten-year notes, which in connection with cash on hand, was used 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. The details of the new borrowings are as follows:

- Senior Unsecured Credit Agreement. On October, 18, 2013, we replaced our senior credit facility that was scheduled to terminate in October 2016, with a new \$1.65 billion senior unsecured credit facility. Loans bear interest at LIBOR plus a margin that is determined based upon our credit ratings. The financing consisted of:
 - Revolving Credit Facility: A \$350.0 million unsecured revolving credit facility with variable interest (LIBOR plus a margin) due October 2018. During 2013, we did not borrow under the Revolving Credit Facility. At December 31, 2013, we had \$19.0 million of outstanding letters of credit that were considered a draw on the revolving credit facility, resulting in \$331.0 million of unused borrowing capacity. The outstanding letters of credit were primarily for workers compensation. We are required to pay commitment fees on the unused portions of the credit facility.
 - *Five-Year Term Loan*: A \$650.0 million unsecured term loan with variable interest (LIBOR plus 1.375%), payable quarterly, due October 2018.
 - Seven-Year Term Loan: A \$650.0 million unsecured term loan with variable interest (LIBOR plus 1.625%), payable quarterly, due October 2020.
- 4.50% Senior Notes. On October 22, 2013, we issued \$700.0 million of 4.50% senior notes due November 1, 2023, through a registered public offering.

On December 23, 2013, we repaid in full the \$109.0 million that was outstanding under, and terminated, the receivables credit facility that was scheduled to terminate on October 11, 2014.

On June 26, 2012, we issued \$400.0 million of 3.90% senior notes due June 15, 2022, through a registered public offering and notified the holders of our \$400.0 million of 5.75% senior notes due August 1, 2013, that we would redeem those notes on July 26, 2012. On July 26, 2012, we completed the redemption of the old 5.75% notes for \$432.5 million, which included a redemption premium of \$21.3 million and \$11.2 million of accrued and unpaid interest. We used the proceeds of the offering of the new 3.90% notes and cash on hand to fund the redemption.

The instruments governing our indebtedness contain financial and other covenants that limit the ability of PCA and its subsidiaries to enter into sale and leaseback transactions, incur liens, incur indebtedness at the subsidiary level, enter into certain transactions with affiliates, merge or consolidate with any other person or sell or otherwise dispose of all or substantially all of our assets. Our credit facility also requires us to comply with certain financial covenants, including maintaining a minimum interest coverage ratio and a maximum leverage ratio. A failure to comply with these restrictions could lead to an event of default, which could result in an acceleration of any outstanding indebtedness and/or prohibit us from drawing on the revolving credit facility. Such an acceleration may also constitute an event of default under the senior notes indenture. At December 31, 2013, we were in compliance with these covenants.

Additional information regarding our variable rate debt is shown below:

	Reference Interest Rate		Applicable Margi	
	2013	2012	2013	2012
Five-Year Term Loan, due October 2018	0.17%	n/a	1.375%	n/a
Seven-Year Term Loan, due October 2020	0.17%	n/a	1.625%	n/a
Receivables Credit Facility	n/a	0.21%	n/a	0.85%
Senior Credit Facility, Term Loan, due October 2016	n/a	0.21%	n/a	1.50%

As of December 31, 2013, annual principal maturities for debt, excluding unamortized debt discount, are: \$39.0 million for 2014; \$71.5 million for 2015; \$71.5 million for 2016; \$104.0 million for 2017; \$546.5 million for 2018; and \$1.7 billion for 2019 and thereafter.

Interest payments and redemption premium payments paid in connection with the Company's debt obligations for the years ended December 31, 2013, 2012, and 2011, were \$105.7 million (including a \$54.8 million redemption premium related to the acquired Boise Inc. debt), \$66.3 million (including a \$21.3 million redemption premium), and \$35.2 million, respectively.

Included in interest expense, net, are amortization of financing costs and amortization of treasury lock settlements. For the years ended December 31, 2013, 2012, and 2011, amortization of treasury lock settlements was a \$5.7 million net loss, a \$3.0 million net loss, and a \$1.8 million net gain, respectively. Amortization of financing costs for the years ended December 31, 2013, 2012, and 2011, was \$10.3 million (including \$8.2 million for acquisition-related financing fees), \$1.1 million, and \$0.7 million, respectively.

With the exception of the senior notes, our debt is variable-rate debt. At December 31, 2013, the book value of our fixed-rate debt was \$1,247.8 million, and the fair value was estimated to be \$1,258.3 million. The difference between the book value and fair value is due to the difference between the period-end market interest rate and the stated rate of our fixed-rate debt. We estimated the fair value of our fixed-rate debt using quoted market prices (Level 1 inputs), discussed further in Note 2, Summary of Significant Accounting Policies.

9. Share-Based Compensation

The Company has a long-term equity incentive plan, which allows for grants of stock options, stock appreciation rights, restricted stock, and performance awards to directors, officers and employees, as well as others who engage in services for PCA. The plan, as amended, terminates May 1, 2023, and authorizes

10.6 million shares of common stock for grant over the life of the plan. As of December 31, 2013, 2.1 million shares remained available for future issuance under the plan. Forfeitures are added back to the pool of shares of common stock available to be granted at a future date.

Restricted Stock

Restricted stock awards granted to officers and employees generally vest at the end of a four-year period, and restricted stock awards granted to directors vest immediately. The fair value of restricted stock is determined based on the closing price of the Company's stock on the grant date. A summary of the Company's restricted stock activity follows:

		2013	2012			2011
	Shares	Weighted Average Grant-Date Fair Value	Shares	Weighted Average Grant-Date Fair Value	Shares	Weighted Average Grant-Date Fair Value
Restricted stock at January 1	1,771,664	\$23.44	1,817,745	\$22.37	1,478,000	\$20.70
Granted	331,053	51.99	394,928	27.46	575,694	27.80
Vested(a)	(605,458)	19.54	(429,034)	22.66	(229,979)	25.29
Forfeitures	(33,565)	24.76	(11,975)	21.46	(5,970)	22.45
Restricted stock at						
December 31	1,463,694	<u>\$31.48</u>	1,771,664	<u>\$23.44</u>	1,817,745	\$22.37

⁽a) The total fair value of awards upon vesting for the years ended December 31, 2013, 2012, and 2011, was \$29.5 million, \$12.4 million, and \$6.1 million, respectively.

Performance Units

The Company granted 70,600 performance award units to certain key employees on June 24, 2013, with a weighted-average grant-date fair value of \$47.83 per unit. The number of units that vest at the end of a four-year period are based on the Company's performance compared to a peer group. The performance units are paid out entirely in shares of the Company's common stock. The award is valued at the closing price of the Company's stock on the grant date and is expensed over the requisite service period based on the most probable number of awards expected to vest.

Compensation Expense

Our share-based compensation expense is recorded in "Selling, general, and administrative expenses." Compensation expense for share-based awards recognized in the Consolidated Statements of Income, net of forfeitures was as follows (dollars in thousands):

	Year Ended December 31			
	2013	2012	2011	
Restricted stock	\$14,238	\$11,687	\$ 9,736	
Performance units	523			
Impact on income before income taxes	14,761	11,687	9,736	
Income tax benefit	(5,728)	(4,543)	(3,784)	
Impact on net income	\$ 9,033	\$ 7,144	\$ 5,952	

The fair value of restricted stock and performance units is determined based on the closing price of the Company's common stock on the grant date. As PCA's Board of Directors has the ability to accelerate vesting of share-based awards upon an employee's retirement, the Company accelerates the recognition of compensation expense for certain employees approaching normal retirement age.

The unrecognized compensation expense for all share-based awards follows (dollars in thousands):

	As of Dece	ember 31, 2013
	Unrecognized Compensation Expense	Remaining Weighted Average Recognition Period (in years)
Restricted stock	\$24,500	2.7
Performance units	2,941	3.5
Total unrecognized share-based compensation expense	\$27,441	2.8

We evaluate share-based compensation expense on a quarterly basis based on our estimate of expected forfeitures, review of recent forfeiture activity, and expected future turnover. We recognize the effect of adjusting the forfeiture rate for all expense amortization in the period that we change the forfeiture estimate. The effect of forfeiture adjustments was insignificant in all periods presented.

10. Employee Benefit Plans and Other Postretirement Benefits

Including plans acquired in the acquisition of Boise Inc., PCA has defined pension benefit plans for both salaried and hourly employees. The plans covering salaried employees are closed to new entrants with only certain current active participants still accruing benefits. The plans covering certain hourly employees are closed to new participants. We also have a Supplemental Executive Retirement Plan (SERP) and other nonqualified defined benefit pension plans that provide unfunded supplemental retirement benefits to certain of our executives and former executives. The SERP provides for incremental pension benefits in excess of those offered in our principal pension plans.

In connection with the acquisition of Boise Inc., we recorded a \$67.8 million liability equal to the net underfunded status of the acquired defined benefit plans. The majority of the Boise pension benefit plans acquired are frozen; with only about 300 hourly employees continuing to accrue benefits. When frozen, the pension benefit for salaried employees was based primarily on the employees' years of service and highest five-year average compensation. The benefit for hourly employees is generally based on a fixed amount per year of service.

Other Postretirement Benefits

PCA provides postretirement medical benefits for salaried employees and postretirement medical and life insurance benefits for certain hourly employees. For salaried employees, the plan covers employees retiring from PCA on or after attaining age 58 who have had at least 10 years of full-time service with PCA after attaining age 48. For hourly employees, the postretirement medical and life insurance coverage, where applicable, is available according to the eligibility provisions contained in the applicable collective bargaining agreement in effect at the employee's work location.

Obligations and Funded Status of Defined Benefit Pension and Other Postretirement Benefits Plans

The funded status of PCA's plans change from year to year based on the plan asset investment return, contributions, benefit payments, and the discount rate used to measure the liability. The following table, which includes only company-sponsored defined benefit and other postretirement benefit plans, reconciles the beginning and ending balances of the projected benefit obligation and the fair value of plan assets. We recognize the unfunded status of these plans on the Consolidated Balance Sheets, and we recognize changes in funded status in the year changes occur through the Consolidated Statements of Comprehensive Income (dollars in thousands):

	Pension Plans		Postretirement Plans		
	Year Ended	December 31	Year Ended	December 31	
	2013	2012	2013	2012	
Change in Benefit Obligation					
Benefit obligation at beginning of period	\$ 378,714	\$ 314,155	\$ 31,806	\$ 25,937	
Service cost	24,460	22,424	2,061	1,856	
Interest cost	21,488	14,800	1,248	1,241	
Plan amendments(a)	13,785	2,271		2,266	
Actuarial (gain) loss(b)	(53,451)	29,338	(7,797)	1,698	
Acquisitions	553,969	_	226	_	
Participant contributions	_	_	1,239	1,055	
Benefits paid	(9,149)	(4,274)	(2,528)	(2,247)	
Benefit obligation at plan year end	\$ 929,816	\$ 378,714	\$ 26,255	\$ 31,806	
Accumulated benefit obligation portion of above	\$ 884,016	\$ 341,729			
Change in Fair Value of Plan Assets					
Plan assets at fair value at beginning of period	\$ 238,359	\$ 185,122	\$ —	\$ —	
Acquisitions	486,171	_	_	_	
Actual return on plan assets	26,555	21,527	_	_	
Company contributions	30,146	35,984	1,289	1,192	
Participant contributions	_	_	1,239	1,055	
Benefits paid	(9,149)	(4,274)	(2,528)	(2,247)	
Fair value of plan assets at plan year end	\$ 772,082	\$ 238,359	<u> </u>	<u> </u>	
Underfunded status	\$(157,734)	\$(140,355)	<u>\$(26,255)</u>	\$(31,806)	
Amounts Recognized in Statement of Financial Position					
Current liabilities	\$ (832)	\$ (6,290)	\$ (1,231)	\$ (1,333)	
Noncurrent liabilities	(156,902)	(134,065)	(25,024)	(30,473)	
Accrued benefit recognized at December 31	\$(157,734)	\$(140,355)	\$(26,255)	\$(31,806)	
Amounts Recognized in Accumulated Other Comprehensive (Income) Loss (Pre-Tax)					
Prior service cost	\$ 31,577	\$ 34,921	\$ 72	\$ (353)	
Actuarial loss	26,742	90,057	1,472	9,759	
Total	\$ 58,319	\$ 124,978	\$ 1,544	\$ 9,406	

⁽a) In 2013, the United Steel Workers (USW) ratified a master labor agreement with PCA under which certain USW-represented employees will have their pension accruals frozen under PCA's hourly pension plan, resulting in most of the \$13.8 million increase in benefit obligations.

⁽b) The actuarial gain in 2013 is due primarily to an increase in the weighted average discount rate, while the discount rate decreased in 2012.

Components of Net Periodic Benefit Cost and Other Comprehensive (Income) Loss

The components of net periodic benefit cost and other comprehensive (income) loss (pretax) are as follows (dollars in thousands):

	Pension Plans Year Ended December 31			Postretirement Plans			
				Year En	ded Decem	ber 31	
	2013	2012	2011	2013	2012	2011	
Service cost	\$ 24,460	\$ 22,424	\$ 19,808	\$ 2,061	\$1,856	\$1,599	
Interest cost	21,488	14,800	13,473	1,248	1,241	1,189	
Expected return on plan assets	(21,345)	(12,108)	(13,544)	_	_	_	
Net amortization of unrecognized amounts							
Prior service cost	6,222	5,993	5,782	(426)	(419)	(416)	
Actuarial loss	4,662	4,916	411	490	452	449	
Curtailment loss(a)	10,908						
Net periodic benefit cost	\$ 46,395	\$ 36,025	\$ 25,930	\$ 3,373	\$3,130	\$2,821	
Changes in plan assets and benefit obligations recognized in other comprehensive (income) loss							
Actuarial net (gain) loss	\$(58,652)	\$ 19,919	\$ 49,675	\$(7,798)	\$1,698	\$ 754	
Prior service credit	13,785	2,270	1,827	_	17	_	
Amortization of actuarial loss	(4,662)	(4,916)	(411)	(490)	(452)	(449)	
Amortization of prior service cost	(17,130)	(5,993)	(5,782)	426	419	416	
Total recognized in other comprehensive (income) loss(b)	(66,659)	11,280	45,309	(7,862)	1,682	721	
Total recognized in net periodic benefit cost and other comprehensive (income) loss	\$(20,264)	<u>\$ 47,305</u>	\$ 71,239	<u>\$(4,489)</u>	\$4,812	\$3,542	

⁽a) PCA recognized curtailment losses in "Other expense, net" in the Consolidated Statements of Income for recent USW negotiations, resulting in the bifurcation of the active USW population between those grandfathered in the current formula (with continued accruals) and non-grandfathered in the current formula (frozen benefits at the contract date).

Some of our defined benefit plans have accumulated benefit obligations which are less than the fair value of plan assets. The accumulated benefit obligations for the plans with obligations in excess of plan assets, is \$798 million.

⁽b) 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. The estimated net loss and prior service cost that will be amortized from "Accumulated other comprehensive income (loss)" into pension expense in 2014 is \$7.1 million.

Assumptions

The following table presents the assumptions used in the measurement of our benefits obligations:

	Pension Plans		Postretirement Plans December 31			
	December 31					
	2013	2012	2011	2013	2012	2011
Weighted-Average Assumptions Used to Determine Benefit Obligations at December 31						
Discount rate	5.00%	4.25%	4.75%	4.85%	4.00%	4.50%
Rate of compensation increase	4.00%	4.00%	4.00%	N/A	N/A	N/A
Weighted-Average Assumptions Used to Determine Net Periodic Benefit Cost for the Years Ended December 31						
Discount rate	4.57%	4.75%	5.50%	4.00%	4.50%	5.25%
Expected return on plan assets	6.53%	6.15%	7.75%	N/A	N/A	N/A
Rate of compensation increase	4.00%	4.00%	4.00%	N/A	N/A	N/A

Discount Rate Assumption. The discount rate reflects the current rate at which the pension obligations could be settled on the measurement date: December 31. The discount rate assumption used to calculate the present value of pension and postretirement benefit obligations reflects the rates available on high-quality, fixed-income debt instruments on December 31. In all periods, the bonds included in the models reflect anticipated investments that would be made to match the expected monthly benefit payments over time. The plans' projected cash flows were duration-matched to these models to develop an appropriate discount rate. The discount rate PCA will use in 2014 to calculate the net periodic pension benefit and postretirement benefit cost is 5.00% and 4.85%, respectively.

Asset Return Assumption. The expected return on plan assets reflects the expected long-term rates of return for the categories of investments currently held in the plan as well as anticipated returns for additional contributions made in the future. The expected long-term rate of return is adjusted when there are fundamental changes in expected returns on the plan investments. The weighted-average expected return on plan assets we will use in our calculation of 2014 net periodic pension benefit cost is 6.69%.

Rate of Compensation Increase. The rate of compensation increase is determined by PCA based upon annual reviews. The compensation increase assumption is not applicable for all plans as many of our pension plans are frozen and not accruing benefits.

Health Care Cost Trend Rate Assumptions. PCA assumed health care cost trend rates for its postretirement benefits plans were as follows:

	2013	2012	2011
Health care cost trend rate assumed for next year	7.75%	8.00%	8.00%
Rate to which the cost trend rate is assumed to decline (the ultimate trend			
rate)	5.00%	5.00%	5.50%
Year that the rate reaches the ultimate trend rate	2020	2020	2016

Postretirement Health Care Plan Assumptions. For postretirement health care plan accounting, PCA reviews external data and its own historical trends for health care costs to determine the health care cost trend rate assumption.

A one-percentage point change in assumed health care cost trend rates would have the following effects on the 2013 postretirement benefit obligation and the 2013 net post retirement benefit cost (in thousands):

		1-Percentage Point Decrease
Effect on postretirement benefit obligation	\$540	\$(483)
Effect on net postretirement benefit cost	52	(45)

Investment Policies and Strategies

PCA has retained the services of professional advisors to oversee pension investments and provide recommendations regarding investment strategy. PCA's overall strategy and related apportionments between equity and debt securities may change from time to time based on market conditions, external economic factors, and the funded status of the plans. The general investment objective for all of our plan assets is to optimize growth of the pension plan trust assets, while minimizing the risk of significant losses to enable the plans to satisfy their benefit payment obligations over time. The objectives take into account the long-term nature of the benefit obligations, the liquidity needs of the plans, and the expected risk/return trade-offs of the asset classes in which the plans may choose to invest. Pension plans' assets were invested in the following classes of securities at December 31, 2013 and 2012:

	of Fair	
	2013	2012
Debt securities	52%	61%
International equity securities	25	20
U.S. equity securities	21	16
Real estate securities	1	3
Other	1%	%

At December 31, 2013, the targeted investment allocations differed between the acquired Boise plans and PCA's historical plans based on funded status. At December 31, 2013, PCA's historical plans, which comprised \$283.1 million of the fair value of plan assets, targeted 34% invested in equities, 62% invested in bonds, and 4% in other, whereas the Boise plans, which comprised \$489.0 million of the total fair value of plan assets, targeted 50% in equities and 50% in bonds. The pension assets we acquired with the acquisition of Boise are invested more heavily in equities than our plans have historically been invested, which increased the percentage of fair value invested in equities in 2013, compared with 2012.

Investment securities, in general, are exposed to various risks, such as interest rate, credit, and overall market volatility risk, all of which are subject to change. Due to the level of risk associated with some investment securities, it is reasonably possible that changes in the values of investment securities will occur in the near term, and such changes could materially affect the reported amounts.

Fair Value Measurements of Plan Assets

The following tables set forth, by level within the fair value hierarchy, discussed in Note 2, Summary of Significant Accounting Policies, the pension plan assets, by major asset category, at fair value at December 31, 2013 and 2012 (dollars in thousands):

	Fair Value Measurements at December 31, 2013				
Asset Category	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Total	
Short-term investments(a)	\$ —	\$ 1,858	\$ —	\$ 1,858	
Mutual funds(b):					
U.S. large value	19,453			19,453	
U.S. large growth	17,217	_	_	17,217	
U.S. mid-cap value	3,135	_	_	3,135	
U.S. mid-cap growth	6,781	_	_	6,781	
Foreign large blend	45,159	_	_	45,159	
Diversified emerging markets	8,005	_	_	8,005	
Real estate	7,469	_	_	7,469	
Fixed income	54,366	_	_	54,366	
Common/collective trust funds(a):					
U.S. large-cap equity blend	_	87,862	_	87,862	
U.S. small and mid-cap equity blend	_	19,577	_	19,577	
Foreign large blend	_	126,653	_	126,653	
Diversified emerging markets	_	9,211	_	9,211	
Government bonds	_	35,603	_	35,603	
Corporate bonds	_	77,256	_	77,256	
U.S. small blend	_	6,777	_	6,777	
Fixed income	_	234,445	_	234,445	
Private equity securities(c)			9,904	9,904	
Total securities at fair value	<u>\$161,585</u>	\$599,242	\$9,904	\$770,731	
Receivables and accrued expenses				1,351	
Total fair value of plan assets				\$772,082	

Fair Value	Measurements	at December	31.	2012
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Asset Category	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Total
Short-term investments(a)	\$ —	\$ 394	\$	\$ 394
Mutual funds(b):				
U.S. large value	15,021	_	_	15,021
U.S. large growth	12,029	_	_	12,029
U.S. mid-cap value	2,481	_	_	2,481
U.S. mid-cap growth	4,734	_	_	4,734
Foreign large blend	39,204	_	_	39,204
Diversified emerging markets	7,722	_	_	7,722
Real estate	6,881	_	_	6,881
Fixed income	48,699	_	_	48,699
Common/collective trust funds(a):				
Government bonds	_	29,644	_	29,644
Corporate bonds	_	66,517	_	66,517
U.S. small blend	_	5,033	_	5,033
Total fair value of plan assets	\$136,771	\$101,588	<u>\$—</u>	\$238,359

⁽a) Investments in common/collective trust funds valued using NAV provided by the administrator of the funds. We use NAV as a practical expedient to fair value. The NAV is based on the value of the underlying assets owned by the fund, minus its liabilities, and then divided by the number of units outstanding. While the underlying assets are actively traded on an exchange, the funds are not. There are currently no redemption restrictions on these investments. There are certain funds with one-day redeemable notice.

⁽b) Investments in mutual funds valued at quoted market values on the last business day of the fiscal year.

⁽c) Investments in this category are invested in the Pantheon Global Secondary Fund IV, LP. The fund specializes in investments in the private equity secondary market and occasionally directly in private companies to maximize capital growth. Fund investments are carried at fair value as determined quarterly using the market approach to estimate the fair value of private investments. The market approach utilizes prices and other relevant information generated by market transactions, type of security, size of the position, degree of liquidity, restrictions on the disposition, latest round of financing data, current financial position, and operating results, among other factors. In circumstances where fair values are not provided with respect to any of the company's fund investments, the investment advisor will seek to determine the fair value of such investments based on information provided by the general partners or managers of such funds or from other sources. Audited financial statements are provided by fund management annually. Notwithstanding the above, the variety of valuation bases adopted and quality of management data of the ultimate underlying investee companies means that there are inherent difficulties in determining the value of the investments. Amounts realized on the sale of these investments may differ from the calculated values. Boise had originally committed to a \$15.0 million investment, with \$6.2 million of the commitment unfunded at December 31, 2013.

The following table sets forth a summary of changes in the fair value of the pension plans' Level 3 assets for the year ended December 31, 2013 (dollars in thousands):

	2013
Balance, beginning of year	\$ —
Acquisitions	8,479
Purchases	
Sales	_
Unrealized gain	450
Balance, end of year	\$9,904

Funding and Cash Flows

PCA makes pension plan contributions that are sufficient to fund its actuarially determined costs, generally equal to the minimum amounts required by the Employee Retirement Income Security Act (ERISA). From time to time, PCA may make discretionary contributions based on the funded status of the plans, tax deductibility, income from operations, and other factors. In 2013, we contributed \$30.1 million to our plans, which exceeded our 2013 minimum pension contribution requirements. We expect to contribute at least the required minimum currently estimated to be approximately \$5.0 million in 2014.

The following are estimated benefit payments to be paid to current plan participants by year (dollars in thousands). Qualified pension benefit payments are paid from plan assets, while nonqualified pension benefit payments are paid by the Company.

	Pension Plans	Postretirement Plans
2014	\$ 30,551	\$ 1,231
2015	34,304	1,287
2016	38,027	1,369
2017	42,020	1,523
2018	45,759	1,665
2019 — 2023	281,889	10,150

Defined Contribution Plans

Some of our employees participate in contributory defined contribution savings plans, available to most of our salaried and hourly employees. The defined contribution plans permit participants to make contributions by salary reduction pursuant to Section 401(k) of the Code. PCA made employer-matching contributions of \$15.0 million, \$10.8 million, and \$10.4 million in 2013, 2012, and 2011. The increase in contributions in 2013, compared with the prior periods, relates primarily to the additional participants added in the Boise acquisition. Company matching contributions to full-time salaried employees are made in company stock, through our Employee Stock Ownership Plan (ESOP). All other matching contributions are in cash. We expense employer matching contributions and charge dividends on shares held by the ESOP to retained earnings. Shares of company stock held by the ESOP are included in basic shares for earnings-per-share computations. At both December 31, 2013 and 2012, the ESOP held 2.1 million shares of company stock.

Salaried and certain hourly employees that are not participating in a PCA sponsored defined benefit pension plan receive a service-related company retirement contribution to their defined contribution plan account in addition to any employer matching contribution. This contribution increases with years of service and ranges from 3% to 5% of base pay. We expensed \$5.3 million, \$4.3 million, and \$3.9 million for this retirement contribution during the years ended December 31, 2013, 2012, and 2011, respectively.

Deferred Compensation Plans

Key managers can elect to participate in a deferred compensation plan. The deferred compensation plan is unfunded; therefore, benefits are paid from our general assets. At December 31, 2013 and 2012, we had \$12.0 million and \$3.4 million, respectively, of liabilities attributable to participation in our deferred compensation plan on our Consolidated Balance Sheets. The \$8.6 million increase in liabilities relates primarily to the \$7.9 million of deferred compensation liabilities assumed in the Boise Acquisition.

11. Derivative Instruments and Hedging Activities

Hedging Strategy

PCA is exposed to certain risks relating to its ongoing operations. When appropriate, the Company uses derivatives as a risk management tool to mitigate the potential impact of certain market risks. The primary risks managed by using derivative financial instruments are interest rate and foreign currency exchange rate risks. PCA does not enter into derivative financial instruments for trading or speculative purposes.

Interest Rate Risk

The Company has used treasury lock derivative instruments to manage interest costs and the risk associated with changing interest rates. In connection with contemplated issuances of ten-year debt securities, PCA entered into interest rate protection agreements with counterparties in 2003, 2008, 2010, and 2011 to protect against increases in the ten-year U.S. Treasury Note rate. These treasury rates served as references in determining the interest rates applicable to the debt securities the Company issued in July 2003, March 2008, February 2011, and June 2012. As a result of changes in the interest rates on those treasury securities between the time PCA entered into the derivative agreements and the time PCA priced and issued the debt securities, the Company: (1) received a payment of \$22.8 million from the counterparty upon settlement of the 2003 interest rate protection agreement on July 21, 2003; (2) made a payment of \$4.4 million to the counterparty upon settlement of the 2008 interest rate protection agreement on March 25, 2008; (3) received a payment of \$9.9 million from the counterparties upon settlement of the 2010 interest rate protection agreements on February 4, 2011; and (4) made a payment of \$65.5 million to the counterparty upon settlement of the 2011 interest rate protection agreement on June 26, 2012. The Company recorded the effective portion of the settlements in AOCI, and these amounts are being amortized over the terms of the respective notes.

During the second quarter of 2012, the Company recorded a charge of \$3.4 million in interest expense as hedge ineffectiveness due to settling the 2011 interest rate protection agreement prior to its maturity of December 31, 2012. The Company calculated the ineffective portion of the hedge utilizing the hypothetical derivative method. Additionally, during the third quarter of 2012, the Company recorded a \$2.2 million settlement gain in interest expense from the 2003 interest rate protection agreement that was written off due to the redemption of the 5.75% notes on July 26, 2012.

Foreign Currency Exchange Rate Risk

In connection with the energy optimization projects at its Valdosta, Georgia mill and Counce, Tennessee mill, the Company entered into foreign currency forward contracts in 2009 and 2010 to hedge its exposure to forecasted purchases of machinery and equipment denominated in foreign currencies. The foreign currency forward contracts were properly documented and designated as cash flow hedges at inception. By the end of 2011, all contracts had been settled for a loss of \$0.7 million. The loss was recorded in accumulated OCI and is being amortized into cost of sales over the lives of the respective machinery and equipment.

Derivative Instruments

The impact of derivative instruments on the consolidated statements of income and accumulated OCI is as follows (dollars in thousands):

	A	Net Gain (Loss) Recognized in Accumulated OCI Effective Portion) December 31 2013 2012		
	20			
Treasury locks, net of tax	\$(28	3,191)	\$(31,651)	
Foreign currency exchange contracts, net of tax		(371)	(392)	
Total	\$(28	3,562)	\$(32,043)	
	from Acci Income (Loss) Reclumulated Effective Ided Dece	OCI into Portion)	
Location	2013	2012	2011	
Amortization of treasury locks (included in interest expense, net)	\$(5,655)	\$435	\$1,846	
Amortization of foreign currency forward contracts (included in cost of sales)	(34)	(34)	(7)	

The net amount of settlement gains or losses on derivative instruments included in accumulated OCI to be amortized over the next 12 months is a net loss of \$5.7 million (\$3.5 million after tax).

12. Stockholders' Equity

Share Repurchase Program

In 2013, 2012, and 2011, we repurchased the following shares of common stock. In all years, all of the shares purchased were retired. At December 31, 2013, \$98.1 million of the \$150.0 million authorization by the Board of Directors, remained available for repurchase of the Company's common stock (in thousands, except share and per share amounts).

	Shares	Weighted Average Price Per Share	Total
2011	4,824,021	\$25.51	\$123,077
2012	1,507,659	29.96	45,162
2013	171,263	45.54	7,799

Accumulated Other Comprehensive Income (Loss)

Changes in AOCI by component follows (dollars in thousands). Amounts in parentheses indicate losses.

	Foreign Currency Translation Adjustments	Unrealized Loss On Treasury Locks, Net	Unrealized Loss on Foreign Exchange Contracts	Unfunded Employee Benefit Obligations	Total
Balance at December 31, 2012	\$ —	\$(31,651)	\$(392)	\$(81,999)	\$(114,042)
reclassifications, net of tax	(136)	_	_	32,264	32,128
Amounts reclassified from AOCI, net of tax		3,460	21	13,409	16,890
Net current-period other comprehensive income	(136)	3,460	21	45,673	49,018
Balance at December 31, 2013	\$(136)	\$(28,191)	\$(371)	\$(36,326)	\$ (65,024)

The following table presents information about reclassifications out of AOCI (dollars in thousands). Amounts in parentheses indicate expenses in the Consolidated Statement of Income.

	Amounts Reclass Year Ended				
Details about AOCI Components	2013	2012	Affected Line Item in the Statement Where Net Income is Presented		
Unrealized loss on treasury locks, net	\$ (5,655)	\$ (2,988)	See (a) below		
	2,195	1,167	Tax benefit		
	\$ (3,460)	\$ (1,821)	Net of tax		
Unrealized loss on foreign exchange contracts	\$ (34)	\$ (34)	See (b) below		
	13	13	Tax benefit		
	\$ (21)	\$ (21)	Net of tax		
Unfunded employee benefit obligations Amortization of prior service costs	\$(16,704)	\$ (5,575)	See (c) below		
	(5,197)	(5,368)	See (c) below		
	(21,901)	(10,943)	Total before tax		
	8,492	4,254	Tax benefit		
	\$(13,409)	\$ (6,689)	Net of tax		

⁽a) This AOCI component is included in interest expense, net. See Note 11, Derivative Instruments and Hedging Activities, for additional information.

13. Concentrations of Risk

Our Paper segment has had a long-standing commercial and contractual relationship with OfficeMax Incorporated (OfficeMax), and OfficeMax is our largest customer in the paper business. Following a merger in late 2013, OfficeMax is now a wholly-owned subsidiary of Office Depot. Although we expect our long-term business and contractual relationship with OfficeMax to continue post-merger, the relationship exposes us to a significant concentration of business and financial risk. For the period of October 25, 2013, through December 31, 2013, our sales to Office Depot (including OfficeMax) represented 2% of our total company sales revenue and 38% of our Paper segment sales revenue. At December 31, 2013, we had \$39.2 million of accounts receivable due from Office Depot (including OfficeMax), which represents 6% of our total company receivables.

⁽b) This AOCI component is included as depreciation in cost of sales.

⁽c) These AOCI components are included in the computation of net pension and postretirement benefit costs. See Note 10, Employee Benefit Plans and Other Postretirement Benefits, for additional information.

We cannot predict how the merger between OfficeMax and Office Depot will affect our business. Significant increases in paper purchases would intensify the concentration of risk. Significant reductions in paper purchases would cause our paper business to expand its customer base and could potentially decrease its profitability if new customer sales required either a decrease in pricing and/or an increase in cost of sales. Any significant deterioration in the financial condition of the post-merger entity affecting the ability to pay or causing a significant change in the willingness to continue to purchase our products could harm our business and results of operations.

Labor

At December 31, 2013, we had approximately 13,600 employees and approximately 50% of these employees worked pursuant to collective bargaining agreements. Approximately 75% 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 agreements at our Jackson, Alabama, paper mill, which expire August 31, 2014. During 2013, we experienced no work stoppages and believe we have satisfactory labor relations with our employees. Approximately 20% of our employees work pursuant to collective bargaining agreements that will expire within the next twelve months.

14. Asset Retirement Obligations

Our asset retirement obligations relate predominantly to landfill closure, wastewater treatment pond dredging, closed-site monitoring costs, and certain leasehold improvements. In accordance with ASC 410, "Asset Retirement and Environmental Obligations," we recognize the fair value of these liabilities as an asset retirement obligation and capitalize that cost as part of the cost basis of the related asset in the period in which they are incurred if sufficient information is available to reasonably estimate the fair value of the obligation. Fair value estimates are determined using Level 3 inputs in the fair value hierarchy. The fair value of our asset retirement obligations is measured using expected future cash outflows discounted using the company's credit-adjusted riskfree interest rate. When we record the liability, we capitalize the cost by increasing the carrying amount of the related long-lived asset. Over time, the liability is accreted to its settlement value, and the capitalized cost is depreciated over the useful life of the related asset. These liabilities are based on the best estimate of costs and are updated periodically to reflect current technology, laws and regulations, inflation, and other economic factors. Occasionally, we become aware of events or circumstances that require us to revise our future estimated cash flows. When revisions become necessary, we recalculate our obligation and adjust our asset and liability accounts utilizing appropriate discount rates. No assets are legally restricted for purposes of settling asset retirement obligations. Upon settlement of the liability, we will recognize a gain or loss for any difference between the settlement amount and the liability recorded.

The following table describes changes to the asset retirement obligation liability (dollars in thousands):

	Year Ended December 31	
	2013	2012
Asset retirement obligation at beginning of period	\$ 5,145	\$5,095
Acquisition	23,841	_
Liabilities incurred	3,164	_
Accretion expense	275	50
Revisions in estimated cash flows	(378)	
Asset retirement obligation at end of period	\$32,047	\$5,145

We have additional asset retirement obligations with indeterminate settlement dates. The fair value of these asset retirement obligations cannot be estimated due to the lack of sufficient information to estimate the

settlement dates of the obligations. These asset retirement obligations include, for example, (i) removal and disposal of potentially hazardous materials related to equipment and/or an operating facility if the equipment and/or facilities were to undergo major maintenance, renovation, or demolition and (ii) storage sites or owned facilities for which removal and/or disposal of chemicals and other related materials are required if the operating facility is closed. We will recognize a liability in the period in which sufficient information becomes available to reasonably estimate the fair value of these obligations.

15. Transactions With Related Parties

Louisiana Timber Procurement Company, L.L.C. (LTP) is a variable-interest entity that is 50% owned by PCA, after the acquisition of Boise, and 50% owned by Boise Cascade Company (Boise Cascade). LTP procures sawtimber, pulpwood, residual chips, and other residual wood fiber to meet the wood and fiber requirements of PCA and Boise Cascade in Louisiana. PCA is the primary beneficiary of LTP, and has the power to direct the activities that most significantly affect the economic performance of LTP. Therefore, we consolidate 100% of LTP in our financial statements in our Corporate and Other segment. The carrying amounts of LTP's assets and liabilities (which relate primarily to noninventory working capital items) on our Consolidated Balance Sheet were both \$5.0 million at December 31, 2013. During the period of October 25, 2013, to December 31, 2013, we recorded \$10.3 million of LTP sales to Boise Cascade in "Net Sales" in the Consolidated Statements of Income and approximately the same amount of expenses in "Cost of Sales." The sales were at prices designed to approximate market prices.

During the period of October 25, 2013, to December 31, 2013, fiber purchases from related parties was \$3.7 million. Most of these purchases related to chip and log purchases by LTP from Boise Cascade's wood products business. These purchases are recorded in "Cost of Sales" in the Consolidated Statements of Income.

16. Accrued Liabilities

The components of accrued liabilities are as follows (in thousands):

	December 31,	
	2013	2012
Compensation and benefits	\$130,455	\$ 71,246
Medical insurance and workers' compensation	26,399	18,448
Customer volume discounts and rebates	11,436	13,365
Franchise, property, sales and use taxes	20,232	9,337
Asset retirement obligations	4,002	_
Severance	8,172	_
Other	13,362	10,300
Total	\$214,058	\$122,696

17. Other Expense, Net

The components of other (income) expense are as follows (in thousands):

	Year Ended December 31			
	2013	2012	2011	
Integration-related and other costs	\$17,430	\$ —	\$ —	
Acquisition-related costs	17,240	_	_	
Pension curtailment charges	10,908	_	_	
Asset disposals and write-offs	13,192	10,821	12,726	
Other	208	968	(2,003)	
Total	\$58,978	\$11,789	\$10,723	

18. U.S. Treasury Grant

On April 5, 2012, PCA's application for a U.S. Treasury Section 1603 Grant for Specified Energy property was approved for the Valdosta energy project. The Company received the grant proceeds of \$57.4 million on April 11, 2012 and recorded the proceeds as a reduction to the cost of the related property, plant, and equipment. These proceeds will be amortized ratably over the estimated useful lives of the related equipment, which amounts to \$3.2 million each year.

19. Segment Information

Prior to the acquisition of Boise on October 25, 2013, we manufactured and sold packaging products and reported our results in one reportable segment. In connection with the acquisition, we expanded our packaging business and entered the paper business as the third largest producer of white papers in North America in terms of production capacity. As a result, we began managing our business in three reportable segments: Packaging, Paper, and Corporate and Other. These segments represent distinct businesses that are managed separately because of differing products and services. Each of these businesses requires distinct operating and marketing strategies. The segments follow the accounting principles described in Note 2, Summary of Significant Accounting Policies.

Packaging. We manufacture and sell 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. We are also a low-volume producer of newsprint.

Paper. We manufacture and sell a range of white papers, including communication papers, and pressure sensitive papers, and market pulp. Our white papers can be manufactured as either commodity papers or specialty papers with specialized or custom features, such as colors, coatings, high brightness, or recycled content. We ship to customers both directly from our mills and through distribution centers. For the period of October 25 through December 31, 2013, our sales to Office Depot (including OfficeMax), our largest paper segment customer, represented 38% of our Paper segment sales revenue.

Corporate and Other. Our Corporate and Other segment includes corporate support services, 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 our products from our manufacturing sites and assets related to a 50% owned variable interest entity, Louisiana Timber Procurement Company, L.L.C. (LTP), that we acquired in the Boise Acquisition. See Note 15, Transactions With Related Parties, for more information related to LTP. Sales in this segment relate primarily to LTP and our rail and truck business. We provide transportation services not only to our own facilities but also, on a limited basis, to third parties when geographic proximity and logistics are favorable. Rail cars and trucks are generally leased.

Each segments' profits and losses are measured on operating profits before interest expense and interest income. After the acquisition of Boise, expenses that were historically included in "Corporate overhead" on our Consolidated Statements of Income, were reclassified to "Selling, general, and administrative expenses" to conform with the current year presentation. In addition, after increasing our product offerings to include both packaging and paper products after the Boise Acquisition, we began allocating the amounts associated with running those businesses, previously included in "Corporate overhead", to our segments. For many of these allocated expenses, the related assets and liabilities remain in the Corporate and Other segment.

Segment sales to external customers by product line are as follows (dollars in millions):

	Year Ended December 31			
	2013	2012	2011	
Packaging sales	\$3,431.7	\$2,843.9	\$2,620.1	
Paper sales				
White papers	207.0	_	_	
Market pulp	9.9			
	216.9			
Corporate and Other	16.7			
	\$3,665.3	\$2,843.9	\$2,620.1	

Sales to foreign unaffiliated customers, which are primarily recorded in our Packaging segment, during the year ended December 31, 2013, were \$162.4 million. At December 31, 2013, the net carrying value of long-lived assets held by foreign operations, all of which were in our Packaging segment, was \$14.0 million.

An analysis of operations by reportable segment is as follows (dollars in millions):

		Sales, net		Operating	Depreciation,		
Year Ended December 31, 2013(a)	Trade	Inter- segment	Total	Income (Loss)	Amortization, and Depletion	Capital Expenditures(k)	Assets
Packaging	\$3,431.3	\$ 0.4	\$3,431.7	\$545.9(b)	\$190.2	\$222.2	\$3,916.7
Paper	216.9	_	216.9	13.5(c)	9.1	10.0	938.4
Corporate and Other	17.1	28.0	45.1	(85.8)(d)	2.5	2.2	344.9
Intersegment eliminations		(28.4)	(28.4)				
	\$3,665.3	<u>\$</u>	\$3,665.3	473.6	\$201.8	\$234.4	\$5,200.0
Interest expense, net				(58.3)(e))		
Income before taxes				\$415.3			
		Sales, net		Operating	Depreciation,		
Year Ended December 31, 2012	Trade	Inter- segment	Total	Income (Loss)	Amortization, and Depletion	Capital Expenditures(k)	Assets
Packaging	\$2,843.9	\$	\$2,843.9	\$389.7(f)	\$169.4	\$127.8	\$2,131.1
Paper		_	_	_	_	_	_
Corporate and Other	_	_	_	53.7(g)	1.4	0.7	322.7
Intersegment eliminations							
	\$2,843.9	<u>\$—</u>	\$2,843.9	443.4	\$170.8	\$128.5	\$2,453.8
Interest expense, net				(62.9)(h))		
Income before taxes				\$380.6			

	Sales, net		Operating	Depreciation,			
Year Ended December 31, 2011	Trade	Inter- segment	Total	Income (Loss)	Amortization, and Depletion	Capital Expenditures(k)	Assets
Packaging	\$2,620.1	\$ —	\$2,620.1	\$309.9(i)	\$162.9	\$280.2	\$2,165.7
Paper	_	_	_	_	_	_	_
Corporate and Other	_	_	_	(37.2)(j)	0.7	_	246.8
Intersegment eliminations							
	<u>\$2,620.1</u>	<u>\$ </u>	\$2,620.1	272.7	\$163.6	\$280.2	\$2,412.5
Interest expense, net				(29.2)			
Income before taxes				\$243.5			

- (a) On October 25, 2013, we acquired Boise. The 2013 results include Boise for the period of October 25 through December 31, 2013.
- (b) Includes \$18.0 million of expense for the acquisition inventory step-up and \$1.4 million of integration-related and other costs incurred in connection with the acquisition of Boise in fourth quarter 2013.
- (c) Includes \$3.5 million of expense for acquisition inventory step-up and \$1.9 million of income for integration-related and other costs.
- (d) Includes \$17.2 million of acquisition-related costs and \$17.9 million of integration-related and other costs.
- (e) Includes \$10.5 million of expenses for financing the acquisition and \$1.1 million of expense for the write-off of deferred financing costs.
- (f) Includes \$2.0 million of plant closure charges.
- (g) Includes \$95.5 million of income related to the increase in gallons claimed as alternative fuel mixture credits on the Company's amended 2009 tax return. See Note 6, Alternative Energy Tax Credits, for more information.
- (h) Includes \$24.8 million of debt refinancing charges, including the \$21.3 million redemption premium, the \$3.4 million charge to settle the treasury lock prior to its maturity, and \$0.1 million of other items.
- (i) Includes \$7.4 million of charges related to energy project disposals.
- (j) Includes \$1.6 million of income from an adjustment to our medical benefits reserve.
- (k) Includes "Expenditures for property and equipment" and excludes cash used for "Acquisition of businesses and facilities, net of cash acquired" as reported on our Consolidated Statements of Cash Flows.

20. Commitments, Guarantees, Indemnifications, and Legal Proceedings

We have financial commitments and obligations that arise in the ordinary course of our business. These include long-term debt (discussed in Note 8, Debt), capital commitments, lease obligations, purchase commitments for goods and services, and legal proceedings (discussed below).

Capital Commitments

The Company had capital commitments of approximately \$151.4 million and \$27.0 million as of December 31, 2013 and 2012, respectively, in connection with the expansion and replacement of existing facilities and equipment.

Lease Obligations

PCA leases space for certain of its facilities, cutting rights to approximately 88,000 acres of timberland, land for a fiber farm, and equipment, primarily vehicles and rolling stock. Lease terms range from one to 15 years and may contain renewal options or escalation clauses. Substantially all lease agreements have fixed payment terms based on the passage of time. Some lease agreements provide us with the option to purchase the leased property. Additionally, some agreements contain renewal options averaging approximately five years. Some leases may require the Company to pay executory costs, which may include property taxes, maintenance and insurance. The minimum lease payments under non-cancelable operating leases with lease terms in excess of one year are as follows (dollars in thousands):

2014	\$ 56,492
2015	45,818
2016	34,392
2017	23,872
2018	17,034
Thereafter	73,647
Total	\$251,255

Total lease expense, including base rent on all leases and executory costs, such as insurance, taxes, and maintenance, for the years ended December 31, 2013, 2012, and 2011, was \$56.0 million, \$49.4 million and \$46.1 million, respectively. These costs are included in "Cost of sales" and "Selling, general, and administrative expenses" in our Consolidated Statements of Income. We had an insignificant amount of sublease rental income in the periods presented.

PCA was obligated under capital leases covering buildings and machinery and equipment in the amount of \$24.9 million and \$25.9 million at December 31, 2013 and 2012, respectively. Assets held under capital lease obligations are included in property, plant and equipment as follows (dollars in thousands):

	Year Ended December 31	
	2013	2012
Buildings	\$ 250	\$ 250
Machinery and equipment	28,526	28,526
Total	28,776	28,776
Less accumulated amortization	(8,676)	(6,845)
Total	\$20,100	\$21,931

Amortization of assets under capital lease obligations is included in depreciation expense.

The future minimum payments under capitalized leases at December 31, 2013 are as follows (dollars in thousands):

2014 2015 2016 2017 2018	\$ 2,654 2,654 2,654 2,654 2,654
Thereafter	25,874
Total minimum capital lease payments	39,144 (14,240)
Present value of net minimum capital lease payments	24,904 (1,030)
Total long-term capital lease obligations	\$ 23,874

Interest expense related to capital lease obligations was \$1.7 million during both the years ended December 31, 2013 and 2012, and \$1.5 million during the year ended December 31, 2011.

Purchase Commitments

In the table below, we set forth our enforceable and legally binding purchase obligations as of December 31, 2013. 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. These obligations relate to various purchase agreements for items such as minimum amounts of fiber and energy purchases over periods ranging from one to 15 years. Total purchase commitments are as follows (dollars in thousands):

2014	\$120,971
2015	54,757
2016	14,840
2017	3,017
2018	
Thereafter	11,536
Total	\$207,666

The Company purchased a total of \$61.7 million, \$27.7 million, and \$28.5 million during the years ended December 31, 2013, 2012, and 2011, respectively, under these purchase agreements. The increase in purchase commitments in 2014, compared with 2013, relates to the acquisition of Boise in fourth quarter 2013.

Environmental Liabilities

The potential costs for various environmental matters are uncertain due to such factors as the unknown magnitude of possible cleanup costs, the complexity and evolving nature of governmental laws and regulations and their interpretations, and the timing, varying costs and effectiveness of alternative cleanup technologies. From 1994 through 2013, remediation costs at the Company's mills and corrugated plants totaled approximately \$3.2 million. At December 31, 2013, the Company had \$34.1 million of environmental-related reserves recorded on its Consolidated Balance Sheet. Of the \$34.1 million, approximately \$26.5 million related to environmental-related asset retirement obligations discussed in Note 14, Asset Retirement Obligations, and \$7.6 million related to our estimate of other environmental contingencies. The Company recorded \$7.8 million in "Accrued liabilities" and \$26.3 million in "Other long-term liabilities" on the Consolidated Balance Sheet. Liabilities recorded for environmental contingencies are estimates of the probable costs based upon available information and assumptions. Because of these uncertainties, PCA's estimates may change. As of the date of this filing, the Company believes that it is not reasonably possible that future environmental expenditures for remediation costs and asset retirement obligations above the \$34.1 million accrued as of December 31, 2013, will have a material impact on its financial condition, results of operations, or cash flows.

Guarantees and Indemnifications

We provide guarantees, indemnifications, and other assurances to third parties in the normal course of our business. These include tort indemnifications, environmental assurances, and representations and warranties in commercial agreements. At December 31, 2013, we are not aware of any material liabilities arising from any guarantee, indemnification, or financial assurance we have provided. If we determined such a liability was probable and subject to reasonable determination, we would accrue for it at that time.

Legal proceedings

During 2010, PCA and eight other U.S. and Canadian containerboard producers were named as defendants in five purported class action lawsuits filed in the United States District Court for the Northern District of Illinois, alleging violations of the Sherman Act. The lawsuits have been consolidated in a single complaint under the caption *Kleen Products LLC v Packaging Corp. of America et al.* The consolidated complaint alleges that the defendants conspired to limit the supply of containerboard, and that the purpose and effect of the alleged conspiracy was to artificially increase prices of containerboard products during the period of August 2005 to October 2010 (the time of filing of the complaint). The complaint was filed as a class action suit on behalf of all purchasers of containerboard products during such period. The complaint seeks treble damages and costs, including attorney's fees. The defendants' motions to dismiss the complaint were denied by the court in April 2011. PCA believes the allegations are without merit and is defending the lawsuit vigorously. Due to discovery not being completed in the case and the final outcome being dependent on many complex variables, the amount of reasonably possible losses, if any, cannot be estimated at this time.

We are also a party to several other legal actions arising in the ordinary course of our business. These legal actions include commercial liability claims, premises liability claims, and employment-related claims, among others. As of the date of this filing, we believe it is not reasonably possible that any of the legal actions against us will, either individually or in the aggregate, have a material adverse effect on our financial condition, results of operations, or cash flows.

21. Quarterly Results of Operations (unaudited, dollars in thousands, except per-share and stock price information)

	Fiscal Quarter				
	First	Second(a)	Third(b)	Fourth(c)	Total
2013:					
Net sales	\$755,207	\$800,230	\$845,440	\$1,264,431	\$3,665,308
Gross profit	182,492	192,323	226,777	257,595	859,187
Income from operations	103,246	107,270	141,960	121,131	473,607
Net income	60,613	64,465	84,180	227,025	436,283
Basic earnings per share	0.63	0.67	0.87	2.35	4.52
Diluted earnings per share	0.62	0.66	0.86	2.33	4.47
Stock price — high	44.93	50.78	61.32	64.39	64.39
Stock price — low	37.86	42.36	48.45	55.66	37.86
			Fiscal Quart	er	
	First(d)	Second(e)	Third(e)	Fourth(f)	Total
2012:					
Net sales	\$671,357	\$712,468	\$723,473	\$736,579	\$2,843,877
Gross profit	145,135	158,015	163,102	174,339	640,591
Income from operations	169,110	83,858	92,072	98,419	443,459
Net income	17,844	45,154	39,791	61,031	163,820
Basic earnings per share	0.18	0.47	0.41	0.63	1.70
Diluted earnings per share	0.18	0.46	0.41	0.63	1.68
Stock price — high	30.62	29.80	36.68	38.67	38.67
Stock price — low	24.82	25.77	27.59	33.89	24.82

Note: The sum of the quarters may not equal the total of the respective year's earnings per share on either a basic or diluted basis due to changes in the weighted average shares outstanding throughout the year.

⁽a) Includes a \$7.8 million non-cash pension curtailment charge (\$5.0 million after tax or \$0.05 per diluted share).

- (b) Includes a \$3.1 million non-cash pension curtailment charge (\$2.0 million after tax or \$0.02 per diluted share), \$1.5 million of acquisition-related costs (\$1.0 million after tax or \$0.01 per diluted share), and \$2.7 million of acquisition-related financing costs (\$1.8 million after tax or \$0.02 per diluted share).
- (c) Includes Boise's results for the period of October 25, 2013, through December 31, 2013. The quarter also includes \$166.0 million of income tax benefits from the reversal of the reserves for unrecognized tax benefits from alternative energy tax credits (\$1.70 per diluted share), partially offset by \$21.5 million of expense for the acquisition inventory step-up (\$13.6 million after tax or \$0.14 per diluted share), \$15.8 million of acquisition-related costs (\$10.0 million after tax or \$0.10 per diluted share), \$8.9 million of acquisition-related financing costs (\$5.6 million after tax or \$0.06 per diluted share), and \$17.4 million of integration-related and other costs (\$11.0 million after tax or \$0.11 per diluted share).
- (d) During the first quarter of 2012, PCA amended its 2009 federal income tax return to reduce the gallons claimed as cellulosic biofuel producer credits previously recorded as a tax benefit and to increase those gallons claimed as alternative fuel mixture credits previously recorded as income. The increase in gallons claimed as alternative fuel mixture credits resulted in income of \$95.5 million. The decrease in gallons claimed as cellulosic biofuel producer credits resulted in a decrease in tax benefits of \$118.5 million, for a total decrease in net income of \$23.0 million (\$0.24 per diluted share).
- (e) The second and third quarters of 2012 include debt refinancing charges of \$3.7 million (\$2.5 million after tax or \$0.03 per diluted share) and \$21.1 million (\$13.5 million after tax or \$0.14 per diluted share), respectively.
- (f) Includes \$3.4 million of income from state income tax adjustments (\$0.03 per diluted share), partially offset by \$2.0 million of plant closure charges (\$1.4 million after tax or \$0.01 per diluted share).

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

Not applicable

Item 9A. CONTROLS AND PROCEDURES

Controls and Procedures

PCA maintains disclosure controls and procedures (as defined in Rule 13a-15(e) of the Securities Exchange Act of 1934) that are designed to provide reasonable assurance that information required to be disclosed in PCA's filings under the Securities Exchange Act is recorded, processed, summarized and reported within the periods specified in the rules and forms of the SEC and that such information is accumulated and communicated to PCA's management, including its Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure.

On October 25, 2013, PCA acquired Boise Inc. ("Boise"). PCA is in the process of integrating Boise into its operations. PCA is analyzing, evaluating, and where necessary, will implement changes in controls and procedures relating to the Boise business as such integration proceeds. As a result, this process may result in additions or changes to PCA's internal control over financial reporting. Except as it relates to the acquisition of Boise, there was no change in PCA's internal control over financial reporting during the most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect PCA's internal control over financial reporting.

Prior to filing this report, PCA completed an evaluation under the supervision and with the participation of PCA's management, including PCA's Chief Executive Officer and Chief Financial Officer, of the effectiveness of the design and operation of PCA's disclosure controls and procedures as of December 31, 2013. The evaluation of PCA's disclosure controls and procedures included a review of the controls' objectives and design, PCA's implementation of the controls and the effect of the controls on the information generated for use in this report, but excluded the operations acquired from Boise. Based on this evaluation, PCA's Chief Executive Officer and Chief Financial Officer concluded that PCA's disclosure controls and procedures were effective at the reasonable assurance level as of December 31, 2013.

Management's Report on Internal Control Over Financial Reporting

PCA's management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Exchange Act Rule 13a-15(f). Internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. Internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the Company's assets; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures are being made only with proper authorizations; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the Company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, PCA's internal control over financial reporting may not prevent or detect misstatements. A control system, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that objectives of the control system are met. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, have been detected. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls become inadequate because of changes in conditions, or that the degree of compliance with the policies and procedures may deteriorate.

PCA's management, under the supervision of and with the participation of the Chief Executive Officer and Chief Financial Officer, assessed the Company's internal control over financial reporting as of December 31, 2013, based on criteria established in *Internal Control — Integrated Framework (1992)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Based on this assessment and excluding the operations acquired from Boise, PCA's management concluded that its internal control over financial reporting was effective as of December 31, 2013, based on the specified criteria.

Ernst & Young LLP, the independent registered public accounting firm that audited PCA's financial statements included in this Form 10-K, has also audited the effectiveness of the Company's internal control over financial reporting. Their attestation report precedes PCA's audited financial statements included elsewhere in this report.

Changes in Internal Control Over Financial Reporting

Except as it relates to the acquisition of Boise on October 25, 2013, there have been no changes in our internal control over financial reporting during the quarter ended December 31, 2013, that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting. Due to the timing of the acquisition, we excluded Boise from our evaluation of the effectiveness of internal control over financial reporting. Boise's net sales, net income, and total assets represented approximately 12% of PCA's 2013 consolidated net sales, 14% of 2013 consolidated net income, and 52% of total consolidated assets at December 31, 2013, respectively.

Item 9B. OTHER INFORMATION

None.

PART III

Item 10. DIRECTORS, EXECUTIVE OFFICERS, AND CORPORATE GOVERNANCE

Information regarding PCA's executive officers required by this Item 10 is set forth in Item 1 of Part I of this report under the caption "Executive Officers of the Registrant."

The following information required by this Item 10 will be included in PCA's Proxy Statement for the 2013 Annual Meeting of Stockholders and is incorporated by reference herein:

- Information regarding PCA's directors included under the caption "Election of Directors"
- Information regarding PCA's Audit Committee and financial experts included under the caption "Election of Directors — Audit Committee"
- Information regarding PCA's code of ethics included under the caption "Election of Directors Code of Ethics"
- Information regarding PCA's stockholder nominating procedures included under the captions "Election
 of Directors Nominating and Governance Committee," "Other Information Recommendations
 for Board Nominated Director Nominees," and "Other Information Procedures for Nominating
 Directors or Bringing Business Before the 2014 Annual Meeting"
- Information regarding compliance with Section 16(a) of the Securities Exchange Act of 1934 included under the caption "Section 16(a) Beneficial Ownership Reporting Compliance"

Item 11. EXECUTIVE COMPENSATION

Information with respect to executive compensation required by this Item 11 will be included in PCA's Proxy Statement under the captions "Compensation Discussion and Analysis," "Executive Officer and Director Compensation" (including all subcaptions and tables thereunder) and "Board Committees — Compensation Committee" and is incorporated herein by reference.

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

Information with respect to security ownership of certain beneficial owners and management required by this Item 12 will be included in PCA's Proxy Statement under the caption "Ownership of Our Stock" and is incorporated herein by reference.

Authorization of Securities under Equity Compensation Plans — Securities authorized for issuance under our equity compensation plans at December 31, 2013 are as follows:

	Column		
	A	В	С
<u>Plan Category</u>	Number of Securities to Be Issued Upon Exercise of Outstanding Options, Warrants, and Rights(a)	Weighted Average Exercise Price of Outstanding Options, Warrants, and Rights	Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans (Excluding Securities Reflected in Column A)
Equity compensation plans approved by securityholders	151,945	\$24.61	2,140,954
Equity compensation plans not approved by securityholders	N/A	N/A	N/A
Total	151,945	<u>\$24.61</u>	2,140,954

⁽a) Does not include 1,534,294 shares of unvested restricted stock and performance units granted pursuant to our Amended and Restated 1999 Long-Term Equity Incentive Plan.

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

Information with respect to certain relationships and related transactions and director independence required by this Item 13 will be included in PCA's Proxy Statement under the captions "Transactions with Related Persons" and "Election of Directors — Determination of Director Independence," respectively, and is incorporated herein by reference.

Item 14. PRINCIPAL ACCOUNTING FEES AND SERVICES

Information with respect to fees and services of the principal accountant required by this Item 14 will be included in PCA's Proxy Statement under the caption "Ratification of Appointment of the Independent Registered Public Accounting Firm" under the subcaptions "— Fees to the Independent Registered Public Accounting Firm" and "— Audit Committee Preapproval Policy for Audit and Non-Audit Fees" and are incorporated herein by reference.

PART IV

Item 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES

- (a) The following documents are filed as a part of this report:
 - (1) The financial statements listed in the "Index to Financial Statements."
 - (2) Financial Statement Schedule.

The following consolidated financial statement schedule of PCA for the years ended December 31, 2013, 2012, and 2011 is included in this report.

Schedule II — Packaging Corporation of America — Valuation and Qualifying Accounts (dollars in thousands).

	Balance Beginning of		Charged to		Balance End of
Description	Year	Reserves	Expenses	Deductions	Year
Year ended December 31, 2013:					
Deducted from assets accounts:					
Allowance for doubtful accounts	\$1,909	\$ —	\$ 2,812	\$ (821)(a)	\$ 3,900
Reserve for customer deductions	3,444	3,369	39,510	(39,656)(b)	6,667
Deferred tax asset valuation allowance		2,715			2,715
Total	\$5,353	\$6,084	\$42,322	\$(40,477)	\$13,282
Year ended December 31, 2012:					
Deducted from assets accounts:					
Allowance for doubtful accounts	\$1,906	\$ —	\$ 1,043	\$ (1,040)(a)	\$ 1,909
Reserve for customer deductions	3,128		31,045	(30,729)(b)	3,444
Total	\$5,034	<u>\$</u>	\$32,088	\$(31,769)	\$ 5,353
Year ended December 31, 2011:					
Deducted from assets accounts:					
Allowance for doubtful accounts	\$2,493	\$ —	\$ 143	\$ (730)(a)	\$ 1,906
Reserve for customer deductions	2,920		30,009	(29,801)(b)	3,128
Total	\$5,413	<u>\$</u>	<u>\$30,152</u>	\$(30,531)	\$ 5,034

⁽a) Consists primarily of uncollectable accounts written off, net of recoveries, during the year.

All other schedules for which provision is made in the applicable accounting regulations of the Securities and Exchange Commission are not required under the related instructions, are inapplicable or not material, or the information called for thereby is otherwise included in the financial statements or the accompanying notes to the financial statements and therefore, have been omitted.

⁽b) Consists primarily of discounts taken by customers during the year.

(2) Exhibits

Exhibit Number Description

- 2.1 Contribution Agreement, dated as of January 25, 1999, among Pactiv Corporation (formerly known as Tenneco Packaging Inc.) ("Pactiv"), PCA Holdings LLC ("PCA Holdings") and Packaging Corporation of America ("PCA"). (Incorporated herein by reference to Exhibit 2.1 to PCA's registration Statement on Form S-4, Registration No. 333-79511).
- 2.2 Letter Agreement Amending the Contribution Agreement, dated as of April 12, 1999, among Pactiv, PCA Holdings and PCA. (Incorporated herein by reference to Exhibit 2.2 to PCA's Registration Statement on Form S-4, Registration No. 333-79511).
- 2.3 Agreement and Plan of Merger, dated September 16, 2013, between PCA, Bee Acquisition Corp. and Boise, Inc. (Incorporated herein by reference to Exhibit 2.1 to PCA's Current Report on Form 8-K filed September 17, 2013, File No. 1-15399). PCA will furnish supplementally a copy of any omitted schedule or exhibit to the SEC upon request; provided, however, that PCA may request confidential treatment pursuant to Rule 24b-2 of the Securities Exchange Act of 1934, as amended, for any schedule or exhibit so furnished.
- 3.1 Restated Certificate of Incorporation of PCA. (Incorporated herein by reference to Exhibit 3.1 to PCA's Registration Statement on Form S-4, Registration No. 333-79511).
- 3.2 Certificate of Amendment to Restated Certificate of Incorporation of PCA. (Incorporated herein by reference to Exhibit 3.2 to PCA's Registration Statement on Form S-4, Registration No. 333-109437.)
- 3.3 Amended and Restated By-laws of PCA. (Incorporated herein by reference to Exhibit 3.1 to PCA's Current Report on Form 8-K filed December 7, 2012, File No. 1-15399.)
- 4.1 Form of certificate representing shares of common stock. (Incorporated herein by reference to Exhibit 4.9 to PCA's Registration Statement on Form S-1, Registration No. 333-86963.)
- 4.2 Indenture, dated as of July 21, 2003, between PCA and U.S. Bank National Association. (Incorporated herein by reference to Exhibit 4.2 to PCA's Quarterly Report on Form 10-Q for the period ended June 30, 2003, File No. 1-15399.)
- 4.3 First Supplemental Indenture, dated as of July 21, 2003, between PCA and U.S. Bank National Association. (Incorporated herein by reference to Exhibit 4.3 to PCA's Quarterly Report on Form 10-Q for the period ended June 30, 2003, File No. 1-15399.)
- 4.4 Form of Rule 144A Global Note. (Incorporated herein by reference to Exhibit 4.5 to PCA's Quarterly Report on Form 10-Q for the period ended June 30, 2003, File No. 1-15399.)
- 4.5 Officers' Certificate, dated March 25, 2008, pursuant to Section 301 of the Indenture filed herewith as Exhibit 4.2 (Incorporated herein by reference to Exhibit 4.1 to PCA's Current Report on Form 8-K filed March 25, 2008, File No. 1-15399.)
- 4.6 6.50% Senior Notes due 2018. (Incorporated herein by reference to Exhibit 4.2 to PCA's Current Report on Form 8-K filed March 25, 2008, File No. 1-15399.)
- 4.7 Officers' Certificate and 3.90% Senior Notes due 2022. (Incorporated herein by reference to Exhibit 4.2 to PCA's Current Report on Form 8-K filed June 26, 2012, File No. 1-15399.)
- 4.8 Officers' Certificate, dated as of October 22, 2013, pursuant to Section 301 of the Indenture filed herewith as Exhibit 4.2. (Incorporated herein by reference to Exhibit 4.1 to PCA's Current Report on Form 8-K filed October 22, 2013, File No 1-15399.)
- 4.9 4.500% Senior Notes due 2023. (Incorporated herein by reference to Exhibit 4.2 to PCA's Current Report on Form 8-K filed October 22, 2013, File No 1-15399.)

Exhibit Number	Description
10.1	Credit Agreement, dated as of October 18, 2013, by and among PCA and the lenders and agents named therein. (Incorporated herein by reference to Exhibit 10.1 to PCA's Current Report on Form 8-K filed October 22, 2013, File No. 1-15399, which incorporates by reference Exhibit (b)(2) to Amendment No. 6 to PCA's Schedule filed October 21, 2013).
10.2	Packaging Corporation of America Thrift Plan for Hourly Employees and First Amendment of Packaging Corporation of America Thrift Plan for Hourly Employees, effective February 1, 2000. (Incorporated herein by reference to Exhibit 4.5 to PCA's Registration Statement on Form S-8, Registration No. 333-33176.)*
10.3	Packaging Corporation of America Retirement Savings Plan, effective February 1, 2000. (Incorporated herein by reference to Exhibit 4.6 to PCA's Registration Statement on Form S-8, Registration No. 333-33176.)*
10.4	Form of Stock Option Agreement for employees under the Amended and Restated 1999 Long-term Equity Incentive Plan. (Incorporated herein by reference to Exhibit 10.1 to PCA's Current Report on Form 8-K, dated March 14, 2006, File No. 1-15399.)*
10.5	Form of Restricted Stock Award Agreement for employees and non-employee directors under the Amended and Restated 1999 Long-term Equity Incentive Plan. (Incorporated herein by reference to Exhibit 10.3 to PCA's Current Report on Form 8-K, filed March 14, 2006, File No. 1-15399.)*
10.6	Packaging Corporation of America Supplemental Executive Retirement Plan, as Amended and Restated Effective as of January 1, 2005. (Incorporated herein by reference to Exhibit 10.31 to PCA's Annual Report on Form 10-K for the year ended December 31, 2006, File No. 1-15399.)*
10.7	Packaging Corporation of America Deferred Compensation Plan, effective as of January 1, 2009. (Incorporated herein by reference to Exhibit 10.15 to PCA's Annual Report on Form 10-K for the year ended December 31, 2008, File No. 1-15399.)*
10.8	Packaging Corporation of America Amended and Restated Executive Incentive Compensation Plan, effective as of February 28, 2007. (Incorporated herein by reference to Exhibit 10.32 to PCA's Annual Report on Form 10-K for the year ended December 31, 2006, File No. 1-15399.)*
10.9	First Amendment of Packaging Corporation of America Supplemental Executive Retirement Plan, effective as of January 1, 2008. (Incorporated herein by reference to Exhibit 10.17 to PCA's Annual Report on Form 10-K for the year ended December 31, 2008, file No. 1-15399.)*
10.10	Amended and Restated 1999 Long-Term Equity Incentive Plan, effective as of May 1, 2013. (Incorporated herein by reference to Appendix A to PCA's Definitive Proxy Statement on Schedule 14A, filed with the SEC on March 22, 2013, File No 1-15399.)*
10.11	PCA Performance Incentive Plan, effective as of May 11, 2010. (Incorporated herein by reference to Appendix A to PCA's Definitive Proxy Statement on Schedule 14A, filed with the SEC on March 30, 2010, File No. 1-15399.)*
10.12	Agreement, dated June 24, 2013, between Packaging Corporation of America and Paul T. Stecko. (Incorporated herein by reference to Exhibit 10.1 to PCA's Current Report on Form 8-K, filed June 27, 2013, File No. 1-15399.)*
10.13	Form of Restricted Stock Award Agreement for February 22, 2011 Retention Awards to Mark W. Kowlzan and Thomas A. Hassfurther. (Incorporated herein by reference to Exhibit 10.22 to PCA's Annual Report on Form 10-K for the year ended December 31, 2010, File No. 1-15399.)*
10.14	Second Amendment of Packaging Corporation of America Supplemental Executive Retirement Plan, effective as of February 28, 2013. (Incorporated herein by reference to Exhibit 10.22 to PCA's Annual Report on Form 10-K for the year ended December 31, 2012, File No. 1-15399.)*
10.15	Third Amendment of Packaging Corporation of America Supplemental Executive Retirement Plan, effective as of February 28, 2013. (Incorporated herein by reference to Exhibit 10.23 to PCA's Annual Report on Form 10-K for the year ended December 31, 2012, File No. 1-15399.) *

Exhibit Number	Description
10.16	Form of Restricted Stock Agreement for executive officer awards made in June 2013. (Incorporated by reference to Exhibit 10.1 to PCA's Quarterly Report on Form 10-Q for the period ended June 30, 2013, File No. 1-15399).*
10.17	Form of Performance Unit Agreement for executive officer awards made in June 2013. (Incorporated by reference to Exhibit 10.2 to PCA's Quarterly Report on Form 10-Q for the period ended June 30, 2013, File No. 1-15399).*
10.18	Performance Based Equity Award Pool for Executive Officers relating to awards made in June 2013. (Incorporated by reference to Exhibit 10.3 to PCA's Quarterly Report on Form 10-Q for the period ended June 30, 2013, File No. 1-15399).*
10.19	Paper Purchase Agreement, dated June 25, 2011 (the "Paper Purchase Agreement"), between Boise White Paper, L.L. C. and OfficeMax Incorporated (Incorporated by reference to Exhibit 10.1 to Boise, Inc.'s Quarterly Report on Form 10-Q for the period ended June 30, 2013, File No. 1-33541)
10.20	First Amendment to Paper Purchase Agreement, dated June 20, 2013, between Boise White Paper, L.L.C. and OfficeMax Incorporated (Incorporated by reference to Exhibit 10.2 to Boise, Inc.'s Quarterly Report on Form 10-Q for the period ended June 30, 2013, File No. 1-33541)
10.21	Form of Restricted Stock Award Agreement for December 16, 2013 awards to Mark W. Kowlzan, Thomas A. Hassfurther and Richard B. West. (Incorporated herein by reference to Exhibit 10.1 to PCA's Current Report on Form 8-K, filed December 17, 2013, File No. 1-15399).*
12.1	Statement Regarding Computation of Ratio of Earnings to Fixed Charges†
16	Letter from Ernst & Young LLP dated November 15, 2013. (Incorporated herein by reference to Exhibit 16 to PCA's Current Report on Form 8-K, filed November 15, 2013, File No. 1-15399).
21.1	Subsidiaries of the Registrant.†
23.1	Consent of Ernst & Young LLP.†
23.2	Consent of KPMG LLP.†
24.1	Powers of Attorney.†
31.1	Certification of Chief Executive Officer, As Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of $2002.\dagger$
31.2	Certification of Chief Financial Officer, As Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.†
32	Certification of Chief Executive Officer and Chief Financial Officer Pursuant to 18 U.S.C. §1350, As Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.†
99.1	Independent Auditors' Report of KPMG.†
101	The following financial information from Packaging Corporation of America's Annual Report on Form 10-K for the year ended December 31, 2013, formatted in XBRL (eXtensible Business Reporting Language): (i) Consolidated Balance Sheets at December 31, 2013 and 2012, (ii) Consolidated Statements of Income for the years ended December 31, 2013, 2012 and 2011, (iii) Consolidated Statements of Changes in Stockholders' Equity for the years ended December 31, 2013, 2012 and 2011, (iv) Consolidated Statements of Cash Flows for the years ended December 31, 2013, 2012 and 2011, (v) the Notes to Consolidated Financial Statements, and (vi) Financial Statement Schedule-Valuation and Qualifying Accounts.

^{*} Management contract or compensatory plan or arrangement. † Filed herewith.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrants have duly caused this report to be signed on their behalf by the undersigned, thereunto duly authorized on February 28, 2014.

Packaging Corporation of America

/s/ MARK W. KOWLZAN

Mark K. Kowlzan Chief Executive Officer

/s/ RICHARD B. WEST

Richard B. West

Senior Vice President and Chief Financial Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below on February 28, 2014, by the following persons on behalf of the registrants and in the capacities indicated.

Signature	<u>Capacity</u>			
/s/ Mark W. Kowlzan	Chief Executive Officer and Director			
Mark W. Kowlzan	(Principal Executive Officer)			
/s/ RICHARD B. WEST	Senior Vice President and Chief Financial Officer			
Richard B. West	(Prinicpal Financial and Accounting Officer)			
*	Chairman of the Board			
Paul T. Stecko				
*	Director			
Cheryl K. Beebe				
*	Director			
Hasan Jameel				
*	Director			
Robert C. Lyons				
*	Director			
Samuel M. Mencoff				
*	Director			
Roger B. Porter				
*	Director			
Thomas S. Souleles				
*	Director			
James D. Woodrum				
/s/ RICHARD B. WEST				
Richard B. West	_			
(Attorney-In-Fact)				

CEO CERTIFICATION PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Mark W. Kowlzan, certify that:

- (1) I have reviewed this annual report on Form 10-K of Packaging Corporation of America (PCA);
- (2) Based on my knowledge, this annual report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this annual report;
- (3) Based on my knowledge, the financial statements, and other financial information included in this annual report, fairly present in all material respects the financial condition, results of operations and cash flows of PCA as of, and for, the periods presented in this annual report;
- (4) PCA's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for PCA and have:
 - a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to PCA, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) evaluated the effectiveness of PCA's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) disclosed in this report any change in PCA's internal control over financial reporting that occurred during PCA's most recent fiscal quarter (PCA's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, PCA's internal control over financial reporting; and
- (5) PCA's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to PCA's auditors and the Audit Committee of PCA's Board of Directors (or persons performing the equivalent functions):
 - a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect PCA's ability to record, process, summarize and report financial information; and
 - b) any fraud, whether or not material, that involves management or other employees who have a significant role in PCA's internal control over financial reporting.

/s/ MARK W. KOWLZAN

Mark W. Kowlzan *Chief Executive Officer*

Date: February 28, 2014

CFO CERTIFICATION PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Richard B. West, certify that:

- (1) I have reviewed this annual report on Form 10-K of Packaging Corporation of America (PCA);
- (2) Based on my knowledge, this annual report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this annual report;
- (3) Based on my knowledge, the financial statements, and other financial information included in this annual report, fairly present in all material respects the financial condition, results of operations and cash flows of PCA as of, and for, the periods presented in this annual report;
- (4) PCA's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for PCA and have:
 - a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to PCA, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) evaluated the effectiveness of PCA's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) disclosed in this report any change in PCA's internal control over financial reporting that occurred during PCA's most recent fiscal quarter (PCA's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, PCA's internal control over financial reporting; and
- (5) PCA's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to PCA's auditors and the Audit Committee of PCA's Board of Directors (or persons performing the equivalent functions):
 - a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect PCA's ability to record, process, summarize and report financial information; and
 - b) any fraud, whether or not material, that involves management or other employees who have a significant role in PCA's internal control over financial reporting.

/s/ RICHARD B. WEST

Richard B. West Senior Vice President and Chief Financial Officer

Date: February 28, 2014

CERTIFICATIONS OF CHIEF EXECUTIVE OFFICER AND CHIEF FINANCIAL OFFICER PURSUANT TO 18 U.S.C. §1350, AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

We are providing this Certificate pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, 18 U.S.C., Section 1350. It accompanies the Annual Report on Form 10-K of Packaging Corporation of America for the year ended December 31, 2013.

- I, Mark W. Kowlzan, Chief Executive Officer of Packaging Corporation of America (the "Company"), certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:
- (1) The Annual Report of the Company on Form 10-K for the period ended December 31, 2013 fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in such Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ MARK W. KOWLZAN

Mark W. Kowlzan
Chief Executive Officer

- I, Richard B. West, Chief Financial Officer of Packaging Corporation of America (the "Company"), certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:
- (1) The Annual Report of the Company on Form 10-K for the period ended December 31, 2013 fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in such Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ RICHARD B. WEST

Richard B. West

Senior Vice President and Chief Financial Officer

Date: February 28, 2014

Independent Auditors' Report

The Board of Directors
Packaging Corporation of America:

We have audited the consolidated balance sheet of Boise Inc. and subsidiaries as of December 31, 2013, and the related consolidated statements of income and comprehensive income, changes in stockholder's equity, and cash flows for the period from October 25, 2013 through December 31, 2013 (not presented separately herein). These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audit.

We conducted our audit in accordance with the auditing standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. Our audit included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Boise Inc. and subsidiaries as of December 31, 2013, and the results of their operations and their cash flows for the period then ended in conformity with U.S. generally accepted accounting principles.

/s/ KPMG LLP

Boise, Idaho February 26, 2014

Board of Directors

Paul T. Stecko

Chairman of the Board,

Packaging Corporation of America

Cheryl K. Beebe

Retired Executive Vice President and Chief Financial Officer,

Ingredion Incorporated

Hasan Jameel

Ellis Signe Olsen Professor, North Carolina State University Mark W. Kowlzan

Chief Executive Officer,

Packaging Corporation of America

Robert C. Lyons

Senior Vice President and Chief Financial Officer, GATX Corporation

Samuel M. Mencoff

Co-Chief Executive Officer, Madison Dearborn Partners, LLC Roger B. Porter

IBM Professor of Business and

Government,

Harvard University

Thomas S. Souleles

Managing Director,

Madison Dearborn Partners, LLC

James D. Woodrum

Clinical Assistant Professor, Kellogg School of Business

Northwestern University

Executive Officers

Mark W. Kowlzan

Chief Executive Officer

Thomas A. Hassfurther

Executive Vice President, Corrugated Products

Richard B. West

Senior Vice President, Chief Financial Officer Charles J. Carter

Senior Vice President, Containerboard Mill Operations

Judith M. Lassa

Senior Vice President, Paper

Kent A. Pflederer

Senior Vice President, General Counsel and Secretary

Thomas W. H. Walton

Senior Vice President, Sales and Marketing, Corrugated Products

Officers

Pamela A. Barnes

Vice President, Treasurer

Charles G. Colby

Vice President,

Area General Manager

Bruce K. Ellsberry

Vice President,

Area General Manager

Donald R. Haag

Vice President,

Manufacturing Services

Jeffrey S. Kaser

Vice President,

Area General Manager

Dave C. Kunz

Vice President,

Area General Manager

Paul LeBlanc

Vice President,

Paper Sales and Marketing

Bernadette M. Madarieta

Vice President, Controller

Peter A. Martens

Vice President, Finance

James A. McKee

Vice President,

Area General Manager

Darla J. Olivier

Vice President, Tax

Heidi L. Patton

Vice President,

Containerboard Sales

Bruce A. Ridley

Vice President, EH&S

and Operations Services

Robert A. Schneider

Vice President,

Chief Information Officer

Donald R. Shirley

Vice President,

Corporate Process Technology

W. Brett Sweeney

Vice President,

Area General Manager

Shareholder Information

Annual Meeting

The annual meeting of shareholders will be held at 8:30 a.m., central time, on May 13, 2014, at the Company's office located at 1955 West Field Court, Lake Forest, IL 60045.

Shareholder Services

To transfer securities, change address or replace lost certificates, please contact:

Packaging Corporation of America Shareholder Services c/o Computershare Trust Company N.A., P.O. Box 30170, College Station, TX 77842-3170 Toll Free: (877) 282-1168 Outside North America: (781) 575-2723 Shareholder Website: www.computershare.com/investor

Stock Exchange Information

Packaging Corporation of America's common stock is listed on the New York Stock Exchange under the symbol PKG.

Certifications

On June 4, 2013, the Company filed with the New York Stock Exchange (the "NYSE") the Annual CEO Certification regarding the Company's compliance with the NYSE's Corporate Governance listing standards as required by Section 303A. 12(a) of the New York Stock Exchange Listed Company Manual. In addition, the Company has filed as exhibits to this Annual Report on Form 10-K for the year ended December 31, 2013, the applicable certifications of its Chief Executive Officer and its Chief Financial Officer required under Section 302 of the Sarbanes-Oxley Act of 2002, regarding the quality of the Company's public disclosures.

Website: www.packagingcorp.com

Corporate news releases, Forms 10-K and 10-Q, annual reports and a variety of additional information of potential interest to investors are available through the Company's website.

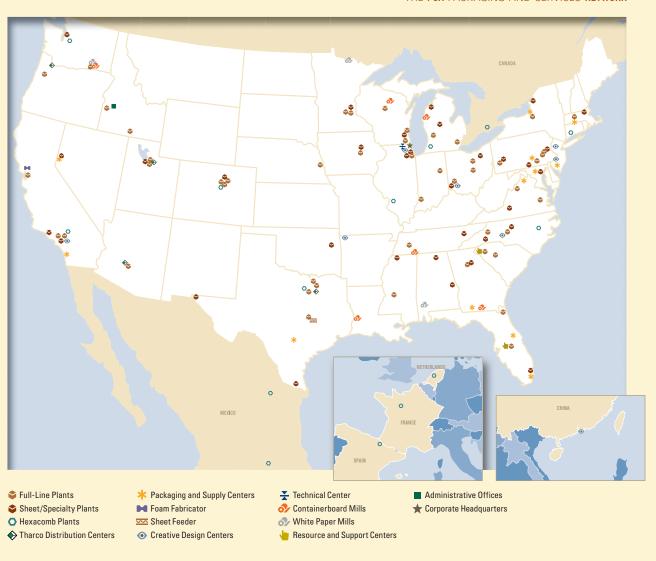
Requests for Information

Additional information is available without charge. For additional copies of annual reports, Forms 10-K and 10-Q or other financial information, please contact:

Investor Relations, Packaging Corporation of America, 1955 West Field Court, Lake Forest, IL 60045 Toll Free: (877) 454-2509

Packaging Corporation of America is a large company with a small-company feel. PCA's strategic positioning affords our customers wide-ranging resources and economies of scale, while our multiple locations put us in the right place at the right time to effectively meet customers' *local* needs.

THE PCA PACKAGING AND SERVICES NETWORK





When you choose Packaging Corporation of America, you work with people who do the right things for each other and for our customers. We believe in utilizing the power of strong collaborative relationships, bound by the trust we have earned, to deliver innovative packaging solutions and an outstanding service experience.



People • Customers • Trust

Packaging Corporation of America 1955 West Field Court Lake Forest, Illinois 60045 (800) 456-4725 www.packagingcorp.com