

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

FORM 8-K

CURRENT REPORT

**Pursuant to Section 13 OR 15(d)
of The Securities Exchange Act of 1934**

Date of Report (Date of earliest event reported): May 9, 2014



(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction
of incorporation)

1-15399
(Commission
File Number)

36-4277050
(IRS Employer
Identification No.)

1955 West Field Court, Lake Forest, Illinois 60045
(Address of Principal Executive Offices, including Zip Code)

(847) 482-3000
(Registrants' Telephone Number, Including Area Code)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrants under any of the following provisions:

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- Pre-commencement communications pursuant to Rule 14d-2 (b) under the Exchange Act (17 CFR 240.14d-2 (b))
- Pre-commencement communications pursuant to Rule 13e-4 (c) under the Exchange Act (17 CFR 240.13e-4 (c))

Item 8.01. Other Events

PCA (the "Company") is filing this Current Report on Form 8-K to disclose updates with respect to the financial information contained in our Annual Report on Form 10-K for the year ended December 31, 2013 ("2013 Form 10-K"), as a result of a change in our accounting method related to inventory valuation.

With the exception of inventories acquired since 2004, our raw materials, work in process, and finished goods inventories were valued using the last-in, first-out (LIFO) cost method. Supplies and materials are valued at the first-in, first out ("FIFO") or average cost methods. Effective January 1, 2014, the Company elected to change its method of accounting for inventories from lower of cost, as determined by the LIFO method, or market, to lower of cost, as determined by the average cost method, or market. We believe the change is preferable as the average cost method better reflects the current value of inventory on the consolidated balance sheets, more closely aligns with how we manage inventory, and the change conforms the inventory costing methods to be more consistent within the Company.

The Company has applied this change in method of inventory costing retrospectively to all periods presented in the financial statements filed as Exhibit 99.2 to this Current Report on Form 8-K in accordance with US generally accepted accounting principles relating to accounting changes.

This Form 8-K does not reflect any events occurring after we filed our 2013 Form 10-K and does not modify or update the disclosures therein in any way, other than to illustrate the accounting change as described above. For more current information, please refer to our Quarterly Report on Form 10-Q for the quarter ended March 31, 2014, and our other filings with the Securities and Exchange Commission made since the filing of the 2013 Form 10-K. This filing should be read in conjunction with such Quarterly Report on Form 10-Q and other filings. The Form 10-Q and other filings contain important information regarding events, developments, and updates to certain expectations of the Company that have occurred since the filing of the 2013 Form 10-K.

Item 9.01. Financial Statements and Exhibits

(D)	Exhibits
23.1	Consent of Independent Registered Public Accounting Firm (Ernst & Young)
99.1	Updates, where applicable, to Part II, Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations, from PCA's Annual Report on Form 10-K for the year ended December 31, 2013, as filed with the Securities and Exchange Commission on February 28, 2014
99.2	Updates, where applicable, to Part II, Item 8. Financial Statements and Supplementary Data, from PCA's Annual Report on Form 10-K for the year ended December 31, 2013 as filed with the Securities and Exchange Commission on February 28, 2014
99.3	Independent Auditors' Report (KPMG) (incorporated by reference to Exhibit 99.1 to PCA's annual report on Form 10-K for the year ended December 31, 2013)
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 and Comprehensive 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, and (v) the Notes to Consolidated Financial Statements

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrants have duly caused this report to be signed on their behalf by the undersigned hereunto duly authorized.

PACKAGING CORPORATION OF AMERICA

(Registrant)

By: /s/ MARK W. KOWLZAN

Chief Executive Officer

By: /s/ RICHARD B. WEST

Senior Vice President and Chief Financial Officer

Date: May 9, 2014

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the Registration Statements of Packaging Corporation of America (Form S-8 No. 333-179620 and Form S-8 No. 333-159576) of our reports dated February 28, 2014, except for Note 2, as to which the date is May 9, 2014 with respect to the consolidated financial statements and schedule of Packaging Corporation of America and the effectiveness of internal control over financial reporting of Packaging Corporation of America, included in this Current Report on Form 8-K of Packaging Corporation of America dated May 9, 2014.

/s/ Ernst & Young LLP

Chicago, Illinois
May 9, 2014

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

Note: The information contained in this Item includes updates related to our change from the LIFO method of inventory valuation as disclosed in the Notes to Financial Statements. This Item has not been updated for any other changes since the filing of the 2013 Annual Report on Form 10-K ("2013 Form 10-K"). For significant developments since the filing of the 2013 Form 10-K, refer to our Quarterly Report on Form 10-Q for the quarter ended March 31, 2014.

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 \$441.3 million of net income, or \$4.52 per diluted share in 2013, compared with \$160.2 million, or \$1.64 per share in 2012. Excluding special items, we recorded \$325.2 million of net income, or a record \$3.33 per diluted share in 2013, compared with \$197.2 million and \$2.02 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.

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

	Years Ended December 31,	
	2013	2012
Earnings per diluted share	\$ 4.52	\$ 1.64
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	\$ 3.33	\$ 2.02

- (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 Ended December 31		Change
	2013 (a)	2012	
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	\$ 554.2	\$ 383.9	\$ 170.3
Paper	13.5	—	13.5
Corporate and other and eliminations	(85.8)	53.7	(139.5)
Income from operations	\$ 481.9	\$ 437.6	\$ 44.3
Interest expense, net	(58.3)	(62.9)	4.6
Income before taxes	423.6	374.7	48.9
Income tax (expense) benefit	17.7	(214.5)	232.2
Net income	\$ 441.3	\$ 160.2	\$ 281.1
Net income excluding special items (b)	\$ 325.2	\$ 197.2	\$ 128.0
Earnings, before interest, taxes, depreciation, and amortization (EBITDA)	\$ 683.7	\$ 608.4	\$ 75.3
EBITDA excluding special items (b)	\$ 750.7	\$ 514.9	\$ 235.8

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

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

Net Sales

Net sales increased \$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.

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 \$232.7 million, or 36.7%, 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 23.7% of net sales in 2013 compared with 22.3% 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 24.3% 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 \$44.3 million, or 10.1%, 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 \$204.9 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 \$170.3 million, or 44.4%, to \$554.2 million, compared with \$383.9 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 \$198.6 million to \$584.5 million, compared with \$385.9 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 \$17.7 million income tax benefit, which included \$166.0 million of income tax benefits from the reversal of the reserve for unrecognized tax benefits from alternative energy tax credits. The IRS completed its audit of PCA's 2008 and 2009 Federal income tax returns and all claimed alternative energy tax credits were allowed. In November

2013, PCA received a confirmation letter from the Joint Committee on Taxation that their review was complete. As a result, a \$103.9 million (\$102.0 million of tax plus \$1.9 million of accrued interest) reserve for unrecognized tax benefits for the Filer City mill's cellulosic biofuel tax credit was fully reversed as a benefit to income taxes in the fourth quarter. Excluding the alternative energy tax credits, the 2013 effective tax rate was 35.0%, compared with 57.2% in 2012, as reported, or 34.4%, 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 Ended December 31		Change
	2012	2011	
Net sales	\$ 2,843.9	\$ 2,620.1	\$ 223.8
Income from operations	437.6	274.0	163.6
Interest expense, net	(62.9)	(29.2)	(33.7)
Income before taxes	374.7	244.8	129.9
Provision for income taxes	(214.5)	(86.0)	(128.5)
Net income	\$ 160.2	\$ 158.8	\$ 1.4
Net income excluding special items (a)	\$ 197.2	\$ 162.6	\$ 34.6
EBITDA	\$ 608.4	\$ 437.6	\$ 170.8
EBITDA excluding special items (a)	\$ 514.9	\$ 443.4	\$ 71.5

(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 \$163.6 million, or 59.7%, 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 \$91.4 million, or 16.8%, 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 22.3% 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 57.2% for the year ended December 31, 2012, which included a 22.8% 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 34.4% 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	<u>\$ (16.4)</u>	<u>\$ 51.1</u>	<u>\$ (40.2)</u>

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 67.5%, or \$137.7 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 \$8.7 million in 2013, compared with \$74.9 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 \$479.1 million for 2012, compared with \$367.3 million in 2011, an increase of \$111.8 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 \$74.9 million in 2012 compared with \$21.8 million in 2011, an increase of \$53.1 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).

	Year Ended December 31, 2013
Packaging	\$ 222.2
Paper	10.0
Corporate and Other	2.2
	<u>\$ 234.4</u>

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.

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
	<u>\$ 4,054.2</u>	<u>\$ 462.1</u>	<u>\$ 540.9</u>	<u>\$ 885.2</u>	<u>\$ 2,166.0</u>

(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, 2014	Year Ended December 31	
		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):

	Base Expense	Increase (Decrease) in Pension Expense (a)	
		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.
- (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.

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.

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)		2012		2011	
	Income from Operations	Net Income	Income from Operations	Net Income	Income from Operations	Net Income
As reported in accordance with GAAP	\$ 481.9	\$ 441.3	\$ 437.6	\$ 160.2	\$ 274.0	\$ 158.8
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	67.0	(116.1)	(93.5)	37.0	5.8	3.8
Excluding special items	\$ 548.9	\$ 325.2	\$ 344.1	\$ 197.2	\$ 279.8	\$ 162.6

(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):

	Year Ended December 31		
	2013	2012	2011
Net income (loss)	\$ 441.3	\$ 160.2	\$ 158.8
Interest expense, net	58.3	62.9	29.2
Income tax provision	(17.7)	214.5	86.0
Depreciation, amortization, and depletion	201.8	170.8	163.6
EBITDA (a)	\$ 683.7	\$ 608.4	\$ 437.6
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
Alternative energy tax credits	—	(95.5)	—
Medical benefits reserve adjustment	—	—	(1.6)
EBITDA excluding special items (a)	\$ 750.7	\$ 514.9	\$ 443.4

- (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 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

Note: The information contained in this Item includes updates related to our change from the LIFO method of inventory valuation. This Item has not been updated for any other changes since the filing of the 2013 Annual Report on Form 10-K (“2013 Form 10-K”). The resulting changes are reflected in the Consolidated Financial Statements and Notes to Financial Statements as follows:

Notes 2, 3, 4, 5, 19, 21- Accounting Policies / Acquisitions / Earnings Per Share / Income Taxes / Segment Information / Quarterly Results of Operations: With the exception of inventories acquired since 2004, our raw materials, work in process, and finished goods inventories were valued using the last-in, first-out (LIFO) cost method. Effective January 1, 2014, the Company elected to change its method of accounting for certain inventories from lower of cost, as determined by the LIFO method, or market, to lower of cost, as determined by the average cost method, or market. We believe the change is preferable as the average cost method better reflects the current value of inventory on the consolidated balance sheets, more closely aligns with how we manage inventory, and conforms the inventory costing methods to be more consistent within the Company. The Company has applied this change in method of inventory costing retrospectively to all prior periods presented in this Current Report on Form 8-K in accordance with U.S. generally accepted accounting principles relating to accounting changes.

For significant developments since the filing of the 2013 Form 10-K, refer to our Quarterly Report on Form 10-Q for the quarter ended March 31, 2014.

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.

As discussed in Note 2 to the consolidated financial statements, the Company changed the manner in which it accounts for inventory in 2014.

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 except for Note 2, as to which the date is May 9, 2014

Packaging Corporation of America
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	\$ 3,665,308	\$ 2,843,877	\$ 2,620,111
Cost of sales	(2,797,853)	(2,209,142)	(2,076,816)
Gross profit	867,455	634,735	543,295
Selling, general, and administrative expenses	(326,602)	(280,843)	(258,551)
Alternative energy tax credits	—	95,500	—
Other expense, net	(58,978)	(11,789)	(10,723)
Income from operations	481,875	437,603	274,021
Interest expense, net	(58,275)	(62,900)	(29,245)
Income before taxes	423,600	374,703	244,776
(Provision) benefit for income taxes	17,729	(214,463)	(85,971)
Net income	\$ 441,329	\$ 160,240	\$ 158,805
Weighted average common shares outstanding			
Basic	96,579	96,384	99,281
Diluted	97,547	97,497	100,376
Net income per common share			
Basic	\$ 4.57	\$ 1.66	\$ 1.60
Diluted	\$ 4.52	\$ 1.64	\$ 1.58
Dividends declared per common share	\$ 1.51	\$ 1.00	\$ 0.80
Statements of Comprehensive Income:			
Net Income	\$ 441,329	\$ 160,240	\$ 158,805
Other comprehensive income (loss), net of tax:			
Foreign currency translation adjustment	(136)	—	—
Fair value adjustments to cash flow hedges, net of tax of \$0.0 million, \$6.5 million, and \$15.3 million for 2013, 2012, and 2011, respectively	—	(10,183)	(24,134)
Reclassification adjustments to cash flow hedges included in net income, net of tax of \$2.2 million, \$1.2 million, and \$0.7 million for 2013, 2012, and 2011, respectively	3,481	1,842	(1,125)
Amortization of pension and postretirement plans actuarial loss and prior service cost, net of tax of \$8.5 million, \$4.3 million, and \$2.4 million for 2013, 2012, and 2011, respectively	13,409	6,689	3,806
Changes in unfunded employee benefit obligations, net of tax of \$20.4 million, \$9.3 million, and \$20.3 million for 2013, 2012, and 2011, respectively	32,264	(14,612)	(31,944)
Other comprehensive income (loss)	49,018	(16,264)	(53,397)
Comprehensive income	\$ 490,347	\$ 143,976	\$ 105,408

See notes to consolidated financial statements.

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

	December 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	594,291	332,268
Prepaid expenses and other current assets	32,101	20,915
Federal and state income taxes receivable	22,958	65,488
Deferred income taxes	47,616	—
Total current assets	1,531,009	978,206
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	\$ 5,243,779	\$ 2,494,941
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
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	—
Deferred income taxes	—	2,414
Accrued liabilities	214,058	122,696
Accrued interest	9,722	3,676
Total current liabilities	660,539	262,260
Long-term liabilities:		
Long-term debt	2,508,845	778,630
Capital lease obligations	23,874	24,904
Deferred income taxes	434,835	125,109
Compensation and benefits	193,548	164,538
Alternative energy tax credits reserve	—	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, 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	1,019,101	742,487
Accumulated other comprehensive loss	(65,024)	(114,042)
Total stockholders' equity	1,356,820	1,008,220
Total liabilities and stockholders' equity	\$ 5,243,779	\$ 2,494,941

See notes to consolidated financial statements.

Packaging Corporation of America
Consolidated Statements of Cash Flows
(dollars in thousands)

	Year Ended December 31		
	2013	2012	2011
Cash Flows from Operating Activities:			
Net income	\$ 441,329	\$ 160,240	\$ 158,805
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)	(160,328)	180,926	27,841
Alternative energy tax credits	76,281	(76,281)	—
Loss on disposals of property, plant, and equipment	9,377	7,298	7,137
Loss on early extinguishment of debt	—	21,296	—
Pension and post retirement benefits expense, net of contributions	18,525	1,687	5,726
Other, net	(1,008)	(3,090)	(4,761)
Changes in operating assets and liabilities, net of acquisitions:			
Decrease (increase) in assets —			
Accounts receivable	(31,191)	(24,995)	(16,946)
Inventories	25,036	(6,356)	(9,605)
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)
Acquisitions of businesses, net of cash acquired	(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	4,016	1,232
Shares withheld to cover employee restricted stock taxes	(10,955)	—	—
Other	71	—	—
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	\$ 190,960	\$ 207,393	\$ 156,313

See notes to consolidated financial statements.

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

	Common Stock		Treasury Stock		Additional Paid in Capital	Retained Earnings	Accumulated Other Comprehensive Loss	Total Stockholders' Equity
	Shares	Amount	Shares	Amount				
Balance at January 1, 2011	102,308	\$ 1,023	—	\$ —	\$ 362,248	\$ 731,672	\$ (44,381)	\$ 1,050,562
Common stock repurchases and 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	—	—	—	—	—	158,805	(53,397)	105,408
Balance at December 31, 2011	98,325	\$ 983	(2)	\$ (59)	\$ 351,804	\$ 716,299	\$ (97,778)	\$ 971,249
Common stock repurchases and 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	—	—	—	—	—	160,240	(16,264)	143,976
Balance at December 31, 2012	98,143	\$ 981	—	\$ —	\$ 378,794	\$ 742,487	\$ (114,042)	\$ 1,008,220
Common stock repurchases and retirements	(171)	(1)	—	—	(1,078)	(6,720)	—	(7,799)
Common stock withheld and retired to cover 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	—	—	—	—	—	441,329	49,018	490,347
Balance at December 31, 2013	98,172	\$ 982	—	\$ —	\$ 401,761	\$ 1,019,101	\$ (65,024)	\$ 1,356,820

See notes to consolidated financial statements.

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 acquired since 2004, our raw materials, work in process, and finished goods inventories were valued using the last-in, first-out (LIFO) cost method. Supplies and materials are valued at the first-in, first out ("FIFO") or average cost methods. Effective January 1, 2014, the Company elected to change its method of accounting for certain inventories from lower of cost, as determined by the LIFO method, or market, to lower of cost, as determined by the average cost method, or market. We believe the change is preferable as the average cost method better reflects the current value of inventory on the consolidated balance sheets, more closely aligns with how we manage inventory, and conforms the inventory costing methods to be more consistent within the Company.

The Company has applied this change in method of inventory costing retrospectively to all periods presented in accordance with US generally accepted accounting principles relating to accounting changes. As a result of the retrospective change in accounting principle, opening retained earnings as of January 1, 2011, increased \$41.6 million.

Certain components of our financial statements affected by the change in valuation methodology as originally reported under the LIFO method and as adjusted for the change to the average cost method are as follows (in thousands, except per share data):

Consolidated Statements of Income and Comprehensive Income	Year Ended December 31					
	2013		2012		2011	
	As Previously Reported	As Adjusted	As Previously Reported	As Adjusted	As Previously Reported	As Adjusted
Cost of sales	\$ (2,806,121)	\$ (2,797,853)	\$ (2,203,286)	\$ (2,209,142)	\$ (2,078,088)	\$ (2,076,816)
Gross profit	859,187	867,455	640,591	634,735	542,023	543,295
Income from operations	473,607	481,875	443,459	437,603	272,749	274,021
Income before taxes	415,332	423,600	380,559	374,703	243,504	244,776
(Provision) benefit for income taxes	20,951	17,729	(216,739)	(214,463)	(85,477)	(85,971)
Net income	436,283	441,329	163,820	160,240	158,027	158,805
Comprehensive income	485,301	490,347	147,556	143,976	104,630	105,408
Net income per common share						
Basic	4.52	4.57	1.70	1.66	1.59	1.60
Diluted	4.47	4.52	1.68	1.64	1.57	1.58

Consolidated Balance Sheets	December 31			
	2013		2012	
	As Previously Reported	As Adjusted	As Previously Reported	As Adjusted
Inventories	\$ 522,523	\$ 594,291	\$ 268,767	\$ 332,268
Current deferred tax asset	75,579	47,616	22,328	—
Current deferred tax liability	—	—	—	2,414
Retained earnings	975,296	1,019,101	703,728	742,487

Consolidated Statements of Cash Flows	Year Ended December 31					
	2013		2012		2011	
	As Previously Reported	As Adjusted	As Previously Reported	As Adjusted	As Previously Reported	As Adjusted
Net income	\$ 436,283	\$ 441,329	\$ 163,820	\$ 160,240	\$ 158,027	\$ 158,805
Adjustments to reconcile net income to net cash provided by operating activities:						
Deferred income tax provision (benefit)	(163,550)	(160,328)	183,202	180,926	27,347	27,841
Change in inventories	33,304	25,036	(12,212)	(6,356)	(8,333)	(9,605)

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

	December 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	<u>\$ 594,291</u>	<u>\$ 332,268</u>

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

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	
Long-term debt	322,230
Deferred tax liabilities	829,750
Other long-term liabilities	281,463
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)	\$ 497.4	\$ 222.4
Net income per share—diluted	\$ 5.10	\$ 2.28

- (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	\$ 441,329	\$ 160,240	\$ 158,805
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	\$ 4.57	\$ 1.66	\$ 1.60
Diluted income per common share	\$ 4.52	\$ 1.64	\$ 1.58

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	(160,469)	179,070	30,313
State and local	253	1,856	(2,472)
Foreign	(112)	—	—
Total deferred provision for taxes	(160,328)	180,926	27,841
Total provision (benefit) for taxes	\$ (17,729)	\$ 214,463	\$ 85,971

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%	\$ 148,260	\$ 131,147	\$ 85,671
Alternative fuel mixture and cellulosic biofuel producer credits	(166,006)	81,695	—
State and local taxes, net of federal benefit	13,565	8,908	7,553
Domestic manufacturers deduction	(11,712)	(7,155)	(7,670)
Other	(1,836)	(132)	417
Total	\$ (17,729)	\$ 214,463	\$ 85,971

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	(28,522)	(26,275)
Investment in joint venture	(1,026)	(1,119)
Other	(2,208)	—
Total deferred tax liabilities	\$ (663,339)	\$ (245,147)
Net deferred tax assets (liabilities) (b)	\$ (387,219)	\$ (127,523)

(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	<u>\$ (5,420)</u>	<u>\$ (111,303)</u>

- (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 jurisdictions. 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	\$ 526,789

(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		December 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	2,547,845	3.08	793,630	3.63
Less current portion	39,000	1.59	15,000	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 Margin	
	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	\$ 31.48	1,771,664	\$ 23.44	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 December 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	\$ —	\$ —
Underfunded status	\$ (157,734)	\$ (140,355)	\$ (26,255)	\$ (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			Postretirement Plans		
	Year Ended December 31			Year Ended December 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)	\$ 47,305	\$ 71,239	\$ (4,489)	\$ 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).
- (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.

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.

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 Increase	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:

	Percentage of Fair Value	
	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):

Asset Category	Fair Value Measurements at December 31, 2013			Total
	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	
Short-term investments (a)	\$ —	\$ 1,858	\$ —	\$ 1,858
<i>Mutual funds (b):</i>				
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
<i>Common/collective trust funds (a):</i>				
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	\$ 161,585	\$ 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

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
<i>Mutual funds (b):</i>				
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
<i>Common/collective trust funds (a):</i>				
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	\$ —	\$ 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	975
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):

	Net Gain (Loss) Recognized in Accumulated OCI (Effective Portion) December 31	
	2013	2012
Treasury locks, net of tax	\$ (28,191)	\$ (31,651)
Foreign currency exchange contracts, net of tax	(371)	(392)
Total	<u>\$ (28,562)</u>	<u>\$ (32,043)</u>

Location	Gain (Loss) Reclassified from Accumulated OCI into Income (Effective Portion) Year Ended December 31		
	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)
Other comprehensive income before 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.

Details about AOCI Components	Amounts Reclassified from AOCI Year Ended December 31		Affected Line Item in the Statement Where Net Income is Presented	
	2013	2012		
Unrealized loss on treasury locks, net	\$ (5,655)	\$ (2,988)	See (a) below	
	2,195	1,167	Tax benefit	
	<u>\$ (3,460)</u>	<u>\$ (1,821)</u>	Net of tax	
Unrealized loss on foreign exchange contracts	\$ (34)	\$ (34)	See (b) below	
	13	13	Tax benefit	
	<u>\$ (21)</u>	<u>\$ (21)</u>	Net of tax	
Unfunded employee benefit obligations				
	Amortization of prior service costs	\$ (16,704)	\$ (5,575)	See (c) below
	Amortization of actuarial gains / (losses)	(5,197)	(5,368)	See (c) below
		(21,901)	(10,943)	Total before tax
		8,492	4,254	Tax benefit
	<u>\$ (13,409)</u>	<u>\$ (6,689)</u>	Net of tax	

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

(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.

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.

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 risk-free 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	<u>\$ 32,047</u>	<u>\$ 5,145</u>

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	<u>\$ 214,058</u>	<u>\$ 122,696</u>

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):

Year Ended December 31, 2013 (a)	Sales, net			Operating Income (Loss)	Depreciation, Amortization, and Depletion	Capital Expenditures (k)	Assets
	Trade	Inter- segment	Total				
Packaging	\$ 3,431.3	\$ 0.4	\$ 3,431.7	\$ 554.2 (b)	\$ 190.2	\$ 222.2	\$ 3,988.5
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	316.9
Intersegment eliminations	—	(28.4)	(28.4)	—	—	—	—
	\$ 3,665.3	\$ —	\$ 3,665.3	481.9	\$ 201.8	\$ 234.4	\$ 5,243.8
Interest expense, net				(58.3) (e)			
Income before taxes				\$ 423.6			

Year Ended December 31, 2012	Sales, net			Operating Income (Loss)	Depreciation, Amortization, and Depletion	Capital Expenditures (k)	Assets
	Trade	Inter- segment	Total				
Packaging	\$ 2,843.9	\$ —	\$ 2,843.9	\$ 383.9 (f)	\$ 169.4	\$ 127.8	\$ 2,194.5
Paper	—	—	—	—	—	—	—
Corporate and Other	—	—	—	53.7 (g)	1.4	0.7	300.4
Intersegment eliminations	—	—	—	—	—	—	—
	\$ 2,843.9	\$ —	\$ 2,843.9	437.6	\$ 170.8	\$ 128.5	\$ 2,494.9
Interest expense, net				(62.9) (h)			
Income before taxes				\$ 374.7			

Year Ended December 31, 2011	Sales, net			Operating Income (Loss)	Depreciation, Amortization, and Depletion	Capital Expenditures (k)	Assets
	Trade	Inter- segment	Total				
Packaging	\$ 2,620.1	\$ —	\$ 2,620.1	\$ 311.2 (i)	\$ 162.9	\$ 280.2	\$ 2,235.0
Paper	—	—	—	—	—	—	—
Corporate and Other	—	—	—	(37.2) (j)	0.7	—	219.8
Intersegment eliminations	—	—	—	—	—	—	—
	<u>\$ 2,620.1</u>	<u>\$ —</u>	<u>\$ 2,620.1</u>	<u>274.0</u>	<u>\$ 163.6</u>	<u>\$ 280.2</u>	<u>\$ 2,454.8</u>
Interest expense, net				(29.2)			
Income before taxes				<u>\$ 244.8</u>			

- (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	\$	<u>251,255</u>

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	<u>28,776</u>	<u>28,776</u>
Less accumulated amortization	(8,676)	(6,845)
Total	<u>\$ 20,100</u>	<u>\$ 21,931</u>

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	\$	2,654
2015		2,654
2016		2,654
2017		2,654
2018		2,654
Thereafter		25,874
Total minimum capital lease payments		39,144
Less amounts representing interest		(14,240)
Present value of net minimum capital lease payments		24,904
Less current maturities of capital lease obligations		(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		2,545
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 (b)		Third (c)		Fourth (d)		Total	
	As Previously Reported	As Adjusted	As Previously Reported	As Adjusted	As Previously Reported	As Adjusted	As Previously Reported	As Adjusted	As Previously Reported	As Adjusted
2013 (a):										
Net sales	\$ 755,207	\$ 755,207	\$ 800,230	\$ 800,230	\$ 845,440	\$ 845,440	\$ 1,264,431	\$ 1,264,431	\$ 3,665,308	\$ 3,665,308
Gross profit	182,492	185,246	192,323	195,250	226,777	227,599	257,595	259,360	859,187	867,455
Income from operations	103,246	106,000	107,270	110,197	141,960	142,782	121,131	122,896	473,607	481,875
Net income	60,613	62,294	64,465	66,252	84,180	84,682	227,025	228,101	436,283	441,329
Basic earnings per share	0.63	0.65	0.67	0.69	0.87	0.88	2.35	2.36	4.52	4.57
Diluted earnings per share	0.62	0.64	0.66	0.68	0.86	0.87	2.33	2.34	4.47	4.52
Stock price - high	44.93	44.93	50.78	50.78	61.32	61.32	64.39	64.39	64.39	64.39
Stock price - low	37.86	37.86	42.36	42.36	48.45	48.45	55.66	55.66	37.86	37.86

	Fiscal Quarter									
	First (e)		Second (f)		Third (f)		Fourth (g)		Total	
	As Previously Reported	As Adjusted	As Previously Reported	As Adjusted	As Previously Reported	As Adjusted	As Previously Reported	As Adjusted	As Previously Reported	As Adjusted
2012 (a):										
Net sales	\$ 671,357	\$ 671,357	\$ 712,468	\$ 712,468	\$ 723,473	\$ 723,473	\$ 736,579	\$ 736,579	\$ 2,843,877	\$ 2,843,877
Gross profit	145,135	141,834	158,015	159,160	163,102	162,922	174,339	170,819	640,591	634,735
Income from operations	169,110	165,809	83,858	85,003	92,072	91,892	98,419	94,899	443,459	437,603
Net income	17,844	15,826	45,154	45,854	39,791	39,681	61,031	58,879	163,820	160,240
Basic earnings per share	0.18	0.16	0.47	0.48	0.41	0.41	0.63	0.61	1.70	1.66
Diluted earnings per share	0.18	0.16	0.46	0.47	0.41	0.41	0.63	0.60	1.68	1.64
Stock price - high	30.62	30.62	29.80	29.80	36.68	36.68	38.67	38.67	38.67	38.67
Stock price - low	24.82	24.82	25.77	25.77	27.59	27.59	33.89	33.89	24.82	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) Amounts have been adjusted for the change in inventory accounting method from LIFO to average cost. See Note 2, Summary of Significant Accounting Policies, for more information.
- (b) Includes a \$7.8 million non-cash pension curtailment charge (\$5.0 million after tax or \$0.05 per diluted share).
- (c) 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).
- (d) 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).
- (e) 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).
- (f) 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.
- (g) 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).

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