

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

**FORM 10-Q**

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

For the quarterly period ended September 30, 2017

or

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

For the transition period from \_\_\_\_\_ to \_\_\_\_\_

Commission file number 1-15399



(Exact Name of Registrant as Specified in its Charter)

**Delaware**

*(State or Other Jurisdiction of  
Incorporation or Organization)*

**1955 West Field Court, Lake Forest, Illinois**  
*(Address of Principal Executive Offices)*

**36-4277050**

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

**60045**

*(Zip Code)*

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

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

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

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

Large accelerated filer	<input checked="" type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input type="checkbox"/> (Do not check if a smaller reporting company)	Smaller reporting company	<input type="checkbox"/>
Emerging growth company	<input type="checkbox"/>		

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

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

As of October 31, 2017 the Registrant had outstanding 94,350,499 shares of common stock, par value \$0.01 per share.

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All reports we file with the Securities and Exchange Commission (SEC) are available free of charge via the Electronic Data Gathering Analysis and Retrieval (EDGAR) System on the SEC website at [www.sec.gov](http://www.sec.gov). We also provide copies of our SEC filings at no charge upon request and make electronic copies of our reports available through our website at [www.packagingcorp.com](http://www.packagingcorp.com) as soon as reasonably practicable after filing such material with the SEC.

**PART I**  
**FINANCIAL INFORMATION**

**Item 1. FINANCIAL STATEMENTS**

**Packaging Corporation of America**

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

	Three Months Ended		Nine Months Ended	
	September 30,		September 30,	
	2017	2016	2017	2016
<b>Statements of Income:</b>				
Net sales	\$ 1,640.1	\$ 1,484.0	\$ 4,760.6	\$ 4,302.4
Cost of sales	(1,242.8)	(1,154.5)	(3,660.1)	(3,353.8)
Gross profit	397.3	329.5	1,100.5	948.6
Selling, general, and administrative expenses	(130.2)	(116.9)	(388.9)	(346.0)
Other expense, net	(24.8)	(6.2)	(32.4)	(15.2)
Income from operations	242.3	206.4	679.2	587.4
Interest expense, net	(25.4)	(23.4)	(74.6)	(67.5)
Income before taxes	216.9	183.0	604.6	519.9
Provision for income taxes	(77.8)	(63.7)	(204.9)	(181.0)
Net income	<u>\$ 139.1</u>	<u>\$ 119.3</u>	<u>\$ 399.7</u>	<u>\$ 338.9</u>
Net income per common share:				
Basic	<u>\$ 1.47</u>	<u>\$ 1.27</u>	<u>\$ 4.24</u>	<u>\$ 3.59</u>
Diluted	<u>\$ 1.47</u>	<u>\$ 1.26</u>	<u>\$ 4.23</u>	<u>\$ 3.58</u>
Dividends declared per common share	<u>\$ 0.63</u>	<u>\$ 0.63</u>	<u>\$ 1.89</u>	<u>\$ 1.73</u>
<b>Statements of Comprehensive Income:</b>				
Net Income	\$ 139.1	\$ 119.3	\$ 399.7	\$ 338.9
Other comprehensive income, net of tax:				
Foreign currency translation adjustment	0.1	—	(0.2)	—
Reclassification adjustments to cash flow hedges included in net income, net of tax of \$0.5 million, \$0.5 million, \$1.6 million, and \$1.6 million	0.9	0.9	2.6	2.6
Amortization of pension and postretirement plans actuarial loss and prior service cost, net of tax of \$1.2 million, \$1.0 million, \$3.7 million, and \$3.1 million	1.9	1.8	6.2	5.0
Changes in unfunded employee benefit obligation net of tax of \$2.0 million	—	—	—	3.1
Other comprehensive income	<u>2.9</u>	<u>2.7</u>	<u>8.6</u>	<u>10.7</u>
Comprehensive income	<u>\$ 142.0</u>	<u>\$ 122.0</u>	<u>\$ 408.3</u>	<u>\$ 349.6</u>

See accompanying condensed notes to unaudited quarterly consolidated financial statements.

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

	September 30, 2017	December 31, 2016
<b>ASSETS</b>		
Current assets:		
Cash and cash equivalents	\$ 370.5	\$ 239.3
Accounts receivable, net of allowance for doubtful accounts and customer deductions of \$11.3 million and \$10.1 million as of September 30, 2017, and December 31, 2016, respectively	831.3	689.2
Inventories	736.6	723.6
Prepaid expenses and other current assets	43.4	30.3
Federal and state income taxes receivable	20.0	13.9
<b>Total current assets</b>	<b>2,001.8</b>	<b>1,696.3</b>
Property, plant, and equipment, net	2,881.6	2,895.7
Goodwill	732.1	737.9
Intangible assets, net	347.8	367.1
Other long-term assets	63.9	80.0
<b>Total assets</b>	<b>\$ 6,027.2</b>	<b>\$ 5,777.0</b>
<b>LIABILITIES AND STOCKHOLDERS' EQUITY</b>		
Current liabilities:		
Current maturities of long-term debt	\$ 156.5	\$ 25.8
Capital lease obligations	1.3	1.3
Accounts payable	379.5	323.8
Dividends payable	60.3	59.9
Accrued liabilities	207.8	201.2
Accrued interest	18.9	13.4
<b>Total current liabilities</b>	<b>824.3</b>	<b>625.4</b>
Long-term liabilities:		
Long-term debt	2,456.3	2,620.0
Capital lease obligations	19.3	20.3
Deferred income taxes	342.1	334.7
Compensation and benefits	322.8	357.2
Other long-term liabilities	68.2	59.6
<b>Total long-term liabilities</b>	<b>3,208.7</b>	<b>3,391.8</b>
Commitments and contingent liabilities		
Stockholders' equity:		
Common stock, par value \$0.01 per share, 300.0 million shares authorized, 94.4 million and 94.2 million shares issued as of September 30, 2017, and December 31, 2016, respectively	0.9	0.9
Additional paid in capital	466.1	451.4
Retained earnings	1,658.2	1,447.1
Accumulated other comprehensive loss	(131.0)	(139.6)
<b>Total stockholders' equity</b>	<b>1,994.2</b>	<b>1,759.8</b>
<b>Total liabilities and stockholders' equity</b>	<b>\$ 6,027.2</b>	<b>\$ 5,777.0</b>

See accompanying condensed notes to unaudited quarterly consolidated financial statements.

**Packaging Corporation of America**  
**Consolidated Statements of Cash Flows**  
(unaudited, dollars in millions)

	Nine Months Ended	
	September 30,	
	2017	2016
<b>Cash Flows from Operating Activities:</b>		
Net income	\$ 399.7	\$ 338.9
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation, depletion, and amortization of intangibles	283.7	264.3
Amortization of deferred financing costs	6.0	5.8
Share-based compensation expense	15.4	15.0
Deferred income tax provision	1.6	6.5
Net loss on impairment of assets	13.5	—
Pension and post retirement benefits expense, net of contributions	(25.3)	(33.5)
Other, net	12.0	3.7
Changes in operating assets and liabilities:		
(Increase) decrease in assets —		
Accounts receivable	(142.2)	(36.0)
Inventories	(13.0)	4.1
Prepaid expenses and other current assets	(10.3)	(11.2)
Increase (decrease) in liabilities —		
Accounts payable	37.7	13.6
Accrued liabilities	9.6	10.8
Federal and state income taxes payable / receivable	(5.1)	11.5
<b>Net cash provided by operating activities</b>	<b>583.3</b>	<b>593.5</b>
<b>Cash Flows from Investing Activities:</b>		
Additions to property, plant, and equipment	(226.2)	(188.1)
Acquisition of business, net of cash acquired	—	(385.6)
Additions to other long term assets	(6.9)	(9.4)
Proceeds from disposals	4.4	—
Other, net	1.1	0.4
<b>Net cash used for investing activities</b>	<b>(227.6)</b>	<b>(582.7)</b>
<b>Cash Flows from Financing Activities:</b>		
Repayments of debt and capital lease obligations	(35.6)	(30.7)
Proceeds from issuance of debt	—	385.0
Financing costs paid	—	(2.1)
Common stock dividends paid	(178.2)	(156.7)
Repurchases of common stock	—	(100.3)
Shares withheld to cover employee restricted stock taxes	(10.7)	(10.2)
Other, net	—	(0.2)
<b>Net cash (used for) provided by financing activities</b>	<b>(224.5)</b>	<b>84.8</b>
<b>Net increase in cash and cash equivalents</b>	<b>131.2</b>	<b>95.6</b>
<b>Cash and cash equivalents, beginning of period</b>	<b>239.3</b>	<b>184.2</b>
<b>Cash and cash equivalents, end of period</b>	<b>\$ 370.5</b>	<b>\$ 279.8</b>

See accompanying condensed notes to unaudited quarterly consolidated financial statements.

## Condensed Notes to Unaudited Quarterly 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. We are a large diverse manufacturer of both packaging and paper products. We are headquartered in Lake Forest, Illinois and we operate primarily in the United States.

We report 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 white papers, including uncoated free sheet and coated one-side grades. During the third quarter of 2017, the Company announced that it will discontinue the production of uncoated free sheet and coated one-side grades at the Wallula, Washington mill in the second quarter of 2018 to begin the conversion of the No. 3 machine to a 400,000 ton-per-year virgin kraft linerboard machine. 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 16 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.

The consolidated financial statements of PCA as of September 30, 2017 and for the three and nine months ended September 30, 2017 and 2016 are unaudited but include all adjustments (consisting only of normal recurring adjustments) that management considers necessary for a fair presentation of such financial statements. The preparation of the consolidated financial statements involves the use of estimates and accruals. Actual results may vary from those estimates. These financial statements have been prepared in accordance with accounting principles generally accepted in the United States for interim financial information and with Article 10 of Regulation S-X of the Securities and Exchange Commission (SEC). Accordingly, they do not include all of the information and footnotes required by accounting principles generally accepted in the United States for complete audited financial statements. Operating results for the three and nine months ended September 30, 2017 are not necessarily indicative of the results that may be expected for the year ending December 31, 2017. These consolidated financial statements should be read in conjunction with our Annual Report on Form 10-K for the year ended December 31, 2016.

The consolidated financial statements include the accounts of PCA and its majority-owned subsidiaries after elimination of intercompany balances and transactions.

### 2. Acquisitions

#### TimBar Acquisition

On August 29, 2016, PCA acquired substantially all of the assets of TimBar Corporation ("TimBar"), a large independent corrugated products producer with six corrugated products production facilities, for a purchase price of \$385.6 million, net of cash acquired. We financed the acquisition with a new \$385.0 million five-year term loan facility. TimBar provides solutions to customers in the higher margin retail, industrial packaging and display and fulfillment markets with a focus on a multi-color graphics and technical innovation. TimBar's financial results are included in the Packaging segment from the date of acquisition.

The Company accounted for the TimBar acquisition using the acquisition method of accounting in accordance with ASC 805, *Business Combinations*. The total purchase price has been allocated to tangible and intangible assets acquired and liabilities assumed based on respective fair values, as follows (dollars in millions):

	12/31/16 Allocation	Adjustments	Revised Allocation
Goodwill	\$ 157.3	\$ (1.1)	\$ 156.2
Other intangible assets	94.4	-	94.4
Property, plant and equipment	95.3	-	95.3
Other net assets	38.6	-	38.6
Net assets acquired	<u>\$ 385.6</u>	<u>\$ (1.1)</u>	<u>\$ 384.5</u>

During the first quarter of 2017, we received \$1.1 million from the seller related to a working capital adjustment. We recorded the adjustment as a decrease to goodwill which lowered the purchase price to \$384.5 million.

Goodwill is calculated as the excess of the purchase price over the fair value of the net assets acquired. Among the factors that contributed to the recognition of goodwill were TimBar's commitment to continuous improvement and innovation in their operations, as well as the expected increases in PCA's containerboard integration levels. Goodwill is deductible for tax purposes.

Other intangible assets, primarily customer relationships, were assigned an estimated weighted average useful life of 14.2 years.

Property, plant and equipment were assigned estimated useful lives ranging from two to 24 years.

### Columbus Container Acquisition

On November 30, 2016, PCA acquired substantially all of the assets of Columbus Container, Inc., an independent corrugated products producer with one production facility and five warehousing facilities, for a purchase price of \$99.7 million, net of cash acquired. We paid the purchase price with available cash on hand. Columbus Container, Inc. is a full-service provider of corrugated packaging products utilizing state-of-the-art technologies and design centers to provide customers a solution for nearly any packaging need. Columbus Container's financial results are included in the Packaging segment from the date of acquisition.

The Company accounted for the Columbus Container acquisition using the acquisition method of accounting in accordance with ASC 805, *Business Combinations*. The total purchase price has been preliminarily allocated to tangible and intangible assets acquired and liabilities assumed based on respective fair values, as follows (dollars in millions):

	<u>12/31/16 Allocation</u>	<u>Adjustments</u>	<u>Revised Allocation</u>
Goodwill	\$ 36.6	\$ (4.7)	\$ 31.9
Other intangible assets	26.3	6.0	32.3
Property, plant and equipment	27.2	1.0	28.2
Other net assets	9.6	(0.1)	9.5
Net assets acquired	<u>\$ 99.7</u>	<u>\$ 2.2</u>	<u>\$ 101.9</u>

During the third quarter of 2017, we increased the purchase price by \$2.2 million as a result of a working capital adjustment expected to be paid to the seller. We recorded the adjustment as a \$2.2 million increase to goodwill. The purchase price allocation above is preliminary and is subject to the finalization of working capital adjustments. Our current estimates and assumptions may change as more information becomes available.

Goodwill is calculated as the excess of the purchase price over the fair value of the net assets acquired. Among the factors that contributed to the recognition of goodwill were Columbus Container's commitment to continuous improvement and innovation in their operations, as well as the expected increases in PCA's containerboard integration levels. Goodwill is deductible for tax purposes.

Other intangible assets, primarily customer relationships, were assigned an estimated weighted average useful life of 14.1 years.

Property, plant and equipment were assigned estimated useful lives ranging from one to 32 years.

### 3. Earnings Per Share

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

	<u>Three Months Ended</u>		<u>Nine Months Ended</u>	
	<u>September 30,</u>		<u>September 30,</u>	
Numerator:	<u>2017</u>	<u>2016</u>	<u>2017</u>	<u>2016</u>
Net income	\$ 139.1	\$ 119.3	\$ 399.7	\$ 338.9
Less: distributed and undistributed earnings allocated to participating securities	(1.1)	(1.1)	(3.4)	(3.4)
Net income attributable to common shareholders	<u>\$ 138.0</u>	<u>\$ 118.2</u>	<u>\$ 396.3</u>	<u>\$ 335.5</u>
Denominator:				
Weighted average basic common shares outstanding	93.6	93.4	93.5	93.6
Effect of dilutive securities	0.2	0.2	0.2	0.1
Weighted average diluted common shares outstanding	<u>93.8</u>	<u>93.6</u>	<u>93.7</u>	<u>93.7</u>
Basic income per common share	\$ 1.47	\$ 1.27	\$ 4.24	\$ 3.59
Diluted income per common share	\$ 1.47	\$ 1.26	\$ 4.23	\$ 3.58

#### 4. Other Income (Expense), Net

The components of other income (expense), net, were as follows (dollars in millions):

	Three Months Ended		Nine Months Ended	
	September 30,		September 30,	
	2017	2016	2017	2016
Wallula mill restructuring (a)	\$ (22.7)	\$ —	\$ (22.7)	\$ —
DeRidder mill incident (b)	2.6	—	0.1	—
Facilities closure and other costs (c)(f)	(0.9)	(1.6)	(1.9)	(5.9)
Acquisition and integration related costs (d)(g)	(0.5)	(2.0)	(0.8)	(2.3)
Hexacomb working capital adjustment (e)	—	—	2.3	—
Asset disposals and write-offs	(3.9)	(0.6)	(8.6)	(3.5)
Other	0.6	(2.0)	(0.8)	(3.5)
Total	<u>\$ (24.8)</u>	<u>\$ (6.2)</u>	<u>\$ (32.4)</u>	<u>\$ (15.2)</u>

- (a) The three and nine months ended September 30, 2017 include \$22.7 million of charges related to the announced second quarter 2018 discontinuation of uncoated free sheet and coated one-side grades at the Wallula, Washington mill associated with the conversion of the No. 3 paper machine to a high-performance 100% virgin kraft linerboard machine.
- (b) The three and nine months ended September 30, 2017 include \$2.6 million and \$0.1 million of net recoveries, respectively, for the property damage and business interruption insurance recoveries and corresponding costs related to the February 2017 explosion at our DeRidder, LA mill.
- (c) The three and nine months ended September 30, 2017 include \$0.9 million and \$1.9 million, respectively, of charges consisting of closure costs related to corrugated products facilities, a paper administration facility and costs related to a lump sum settlement payment of a multiemployer pension plan withdrawal liability for one of our corrugated products facilities.
- (d) The three and nine months ended September 30, 2017 include \$0.5 million and \$0.8 million, respectively, of charges related to the Sacramento Container Corporation acquisition and integration costs related to other recent acquisitions.
- (e) The nine months ended September 30, 2017 include \$2.3 million of income related to a working capital adjustment from the April 2015 sale of our Hexacomb corrugated manufacturing operations in Europe and Mexico.
- (f) The three and nine months ended September 30, 2016 include \$1.6 million and \$5.9 million, respectively, of charges consisting of closure costs related to corrugated products facilities and a paper products facility and costs related to our withdrawal from a multiemployer pension plan for one of our corrugated products facilities.
- (g) The three and nine months ended September 30, 2016 include \$2.0 million and 2.3 million, respectively, of charges related to the acquisition and integration of TimBar Corporation.

#### 5. Income Taxes

For the three months ended September 30, 2017 and 2016 we recorded \$77.8 million and \$63.7 million of income tax expense and had an effective tax rate of 35.9% and 34.8%, respectively. The increase in our effective tax rate for the three months ended September 30, 2017 compared with the same period in 2016, was primarily due to an internal legal entity consolidation that will simplify future operating activities and resulted in \$3.3 million of tax expense for the change in value of deferred taxes.

For the nine months ended September 30, 2017 and 2016, we recorded \$204.9 million and \$181.0 million of income tax expense and had an effective tax rate of 33.9% and 34.8%, respectively. The decrease in our effective tax rate for the nine months ended September 30, 2017 compared with the same period in 2016, was primarily due to the adoption of ASU 2016-09 (Topic 718): *Improvements to Employee Share-Based Payment Accounting*, which requires all excess tax benefits and deficiencies from employee share-based payment awards to be recognized in the income statement as opposed to additional paid in capital. This was partially offset by the tax expense from the internal legal entity consolidation.

Our effective tax rate may differ from the federal statutory income tax rate of 35.0%, due primarily to the effect of employee share-based payment awards, the domestic manufacturing deduction, and state and local income taxes.

During the three and nine months ended September 30, 2017 there were no significant changes to our uncertain tax positions. For more information, see Note 6, Income Taxes, of the Notes to Consolidated Financial Statements in “Part II, Item 8. Financial Statements and Supplementary Data” of our 2016 Annual Report on Form 10-K.

During the nine months ended September 30, 2017 and 2016 cash paid for taxes, net of refunds received, was \$208.3 million and \$158.8 million, respectively.



## 6. Inventories

We value our raw materials, work in process, and finished goods inventories using lower of cost, as determined by the average cost method, or market. Supplies and materials are valued at the first-in, first-out (FIFO) or average cost methods.

The components of inventories were as follows (dollars in millions):

	September 30, 2017	December 31, 2016
Raw materials	\$ 263.7	\$ 271.9
Work in process	13.0	12.9
Finished goods	214.5	206.5
Supplies and materials	245.4	232.3
Inventories	<u>\$ 736.6</u>	<u>\$ 723.6</u>

## 7. Property, Plant, and Equipment

The components of property, plant, and equipment were as follows (dollars in millions):

	September 30, 2017	December 31, 2016
Land and land improvements	\$ 156.1	\$ 149.7
Buildings	731.2	717.1
Machinery and equipment	5,066.2	4,951.4
Construction in progress	177.6	125.4
Other	66.5	66.7
Property, plant and equipment, at cost	6,197.6	6,010.3
Less accumulated depreciation	(3,316.0)	(3,114.6)
Property, plant, and equipment, net	<u>\$ 2,881.6</u>	<u>\$ 2,895.7</u>

Depreciation expense for the three months ended September 30, 2017 and 2016 was \$87.0 million and \$79.9 million, respectively. During the nine months ended September 30, 2017 and 2016, depreciation expense was \$253.0 million and \$240.5 million, respectively. During the nine months ended September 30, 2017, we recognized \$2.6 million incremental depreciation expense from shortening the useful lives of certain assets related to the Wallula mill restructuring.

At September 30, 2017 and December 31, 2016 purchases of property, plant, and equipment included in accounts payable were \$30.4 million and \$12.8 million, respectively.

## 8. 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 September 30, 2017 and December 31, 2016 we had \$676.9 million and \$682.7 million of goodwill recorded in our Packaging segment, respectively. At both September 30, 2017 and December 31, 2016 we had \$55.2 million of goodwill recorded in our Paper segment.

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

	Goodwill
Balance at January 1, 2017	\$ 737.9
Acquisitions (a)(b)	(5.8)
Balance at September 30, 2017	<u>\$ 732.1</u>

(a) During the nine months ended September 30, 2017, the Company recorded a \$4.7 million opening balance sheet adjustment to decrease the goodwill balance for the Company's November 2016 acquisition of Columbus Container, Inc.

(b) During the nine months ended September 30, 2017, the Company received \$1.1 million from the seller related to a working capital adjustment. This adjustment was recorded as a decrease to the goodwill balance for the Company's August 2016 acquisition of TimBar Corporation.

## Intangible Assets

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

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

	September 30, 2017			December 31, 2016		
	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	12.5	\$ 429.4	\$ 100.9	13.1	\$ 424.5	\$ 79.8
Trademarks and trade names	10.7	28.8	11.8	10.5	27.7	8.1
Other	3.9	4.2	1.9	4.3	4.2	1.4
Total intangible assets (excluding goodwill)	12.3	<u>\$ 462.4</u>	<u>\$ 114.6</u>	12.9	<u>\$ 456.4</u>	<u>\$ 89.3</u>

During the three months ended September 30, 2017 and 2016, amortization expense was \$8.4 million and \$6.3 million, respectively. During the nine months ended September 30, 2017 and 2016, amortization expense was \$25.3 million and \$17.5 million, respectively.

## 9. Accrued Liabilities

The components of accrued liabilities were as follows (dollars in millions):

	September 30,	December 31,
	2017	2016
Compensation and benefits	\$ 119.3	\$ 120.4
Medical insurance and workers' compensation	28.8	28.8
Franchise, property, sales and use taxes	22.8	16.7
Customer volume discounts and rebates	21.0	18.9
Environmental liabilities and asset retirement obligations	4.2	6.4
Severance, retention, and relocation	4.2	3.0
Other	7.5	7.0
Total	<u>\$ 207.8</u>	<u>\$ 201.2</u>

## 10. Debt

During the nine months ended September 30, 2017, we made principal payments of \$29.8 million and \$4.9 million on our five-year term loan due August 2021 and our seven-year term loan due October 2020, respectively. For the nine months ended September 30, 2017 and 2016, cash payments for interest were \$67.2 million and \$59.5 million, respectively.

Included in interest expense, net, are amortization of treasury lock settlements and amortization of financing costs. For both the three months ended September 30, 2017 and 2016, amortization of treasury lock settlements was \$1.4 million, and for both the nine months ended September 30, 2017 and 2016, amortization of treasury locks was \$4.2 million. For both the three months ended September 30, 2017 and 2016, amortization of financing costs was \$0.5 million and during the nine months ended September 30, 2017 and 2016, amortization of financing costs was \$1.5 million and \$1.4 million, respectively.

At September 30, 2017 we had \$1,647.7 million of fixed-rate senior notes and \$977.6 million of variable-rate term loans outstanding. At September 30, 2017 the fair value of our fixed-rate debt was estimated to be \$1,739.2 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 2 inputs) within the fair value hierarchy, which is further defined in 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 our 2016 Annual Report on Form 10-K. The fair value of our variable-rate term debt approximates the carrying amount as our cost of borrowing is variable and approximates current market rates.

For more information on our long-term debt and interest rates on that debt, see Note 9, Debt, of the Notes to Consolidated Financial Statements in "Part II, Item 8. Financial Statements and Supplementary Data" of our 2016 Annual Report on Form 10-K.

## 11. Employee Benefit Plans and Other Postretirement Benefits

The components of net periodic benefit cost for our pension plans were as follows (dollars in millions):

	Pension Plans			
	Three Months Ended September 30,		Nine Months Ended September 30,	
	2017	2016	2017	2016
Service cost	\$ 5.8	\$ 6.2	\$ 18.0	\$ 18.4
Interest cost	10.4	10.2	31.1	30.6
Expected return on plan assets	(13.5)	(12.3)	(40.5)	(37.1)
Net amortization of unrecognized amounts				
Prior service cost	1.4	1.4	4.4	4.3
Actuarial loss	1.9	1.5	5.7	4.3
Net periodic benefit cost	<u>\$ 6.0</u>	<u>\$ 7.0</u>	<u>\$ 18.7</u>	<u>\$ 20.5</u>

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 additional discretionary contributions based on the funded status of the plans, tax deductibility, income from operations, and other factors. During the three and nine months ended September 30, 2017 and 2016 payments to our nonqualified pension plans were insignificant. For the three and nine months ended September 30, 2017, we made contributions of \$36.2 million and \$42.1 million, respectively, to our qualified pension plans, which exceeded our 2017 minimum pension contributions of \$8.0. We made contributions of \$49.7 million and \$53.4 million to our qualified plans during the three and nine months ended September 30, 2016 .

The components of net periodic benefit cost for our postretirement plans were as follows (dollars in millions):

	Postretirement Plans			
	Three Months Ended September 30,		Nine Months Ended September 30,	
	2017	2016	2017	2016
Service cost	\$ 0.1	\$ 0.1	\$ 0.2	\$ 0.5
Interest cost	0.2	0.1	0.5	0.5
Net amortization of unrecognized amounts				
Prior service cost	(0.1)	(0.1)	(0.1)	(0.1)
Actuarial income	(0.1)	—	(0.1)	(0.4)
Net periodic benefit cost	<u>\$ 0.1</u>	<u>\$ 0.1</u>	<u>\$ 0.5</u>	<u>\$ 0.5</u>

## 12. Share-Based Compensation

The Company has a long-term equity incentive plan, which allows for grants of restricted stock, performance awards, stock appreciation rights, and stock options 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 September 30, 2017, 1.0 million shares were 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.

The following table presents restricted stock and performance unit award activity for the nine months ended September 30, 2017:

	Restricted Stock		Performance Units	
	Shares	Weighted Average Grant-Date Fair Value	Shares	Weighted Average Grant-Date Fair Value
Outstanding at January 1, 2017	786,079	\$ 63.44	232,088	\$ 62.68
Granted	173,199	107.57	61,861	108.19
Vested	(212,172)	51.54	(67,391)	56.08
Forfeitures	(4,714)	68.85	—	—
Outstanding at September 30, 2017	<u>742,392</u>	<u>\$ 77.11</u>	<u>226,558</u>	<u>\$ 77.07</u>

### 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 millions):

	<u>Three Months Ended September 30,</u>		<u>Nine Months Ended September 30,</u>	
	<u>2017</u>	<u>2016</u>	<u>2017</u>	<u>2016</u>
Restricted stock	\$ 3.8	\$ 3.5	\$ 11.3	\$ 12.2
Performance units	1.4	1.3	4.1	2.8
Total share-based compensation expense	5.2	4.8	15.4	15.0
Income tax benefit	(2.0)	(1.8)	(5.9)	(5.8)
Share-based compensation expense, net of tax benefit	<u>\$ 3.2</u>	<u>\$ 3.0</u>	<u>\$ 9.5</u>	<u>\$ 9.2</u>

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 at September 30, 2017 was as follows (dollars in millions):

	<u>September 30, 2017</u>	
	<u>Unrecognized Compensation Expense</u>	<u>Remaining Weighted Average Recognition Period (in years)</u>
Restricted stock	\$ 34.3	2.7
Performance units	10.9	3.0
Total unrecognized share-based compensation expense	<u>\$ 45.2</u>	<u>2.8</u>

### 13. Stockholders' Equity

#### Dividends

During the nine months ended September 30, 2017, we paid \$178.2 million of dividends to shareholders. On August 25, 2017 PCA's Board of Directors announced a regular quarterly cash dividend of \$0.63 per share of common stock, which was paid on October 13, 2017 to shareholders of record as of September 15, 2017. The July 2017 dividend payment was \$59.4 million.

#### Repurchases of Common Stock

On February 25, 2016, PCA announced that its Board of Directors authorized the repurchase of an additional \$200.0 million of the Company's outstanding common stock. Repurchases may be made from time to time in open market or privately negotiated transactions in accordance with applicable securities regulations. The timing and amount of repurchases will be determined by the Company in its discretion based on factors such as PCA's stock price and market and business conditions.

The Company did not repurchase any shares of its common stock during the three and nine months ended September 30, 2017.

#### Accumulated Other Comprehensive Income (Loss)

Changes in accumulated other comprehensive income (loss) (AOCI) by component were as follows (dollars in millions). Amounts in parentheses indicate losses:

	<u>Unrealized Loss On Treasury Locks, Net</u>	<u>Unrealized Loss on Foreign Exchange Contracts</u>	<u>Unfunded Employee Benefit Obligations</u>	<u>Total</u>
Balance at January 1, 2017	\$ (17.8)	\$ (0.4)	\$ (121.4)	\$ (139.6)
Amounts reclassified from AOCI, net of tax	2.6	(0.2)	6.2	8.6
Balance at September 30, 2017	<u>\$ (15.2)</u>	<u>\$ (0.6)</u>	<u>\$ (115.2)</u>	<u>\$ (131.0)</u>

Reclassifications out of AOCI were as follows (dollars in millions). Amounts in parentheses indicate expenses in the Consolidated Statements of Income:

Details about AOCI Components	Amounts Reclassified from AOCI				
	Three Months Ended September 30,		Nine Months Ended September 30,		
	2017	2016	2017	2016	
Unrealized loss on treasury locks, net	\$ (1.4)	\$ (1.4)	\$ (4.2)	\$ (4.2)	See (a) below
	0.5	0.5	1.6	1.6	Tax benefit
	<u>\$ (0.9)</u>	<u>\$ (0.9)</u>	<u>\$ (2.6)</u>	<u>\$ (2.6)</u>	Net of tax
Unfunded employee benefit obligations					
Amortization of prior service costs	\$ (1.3)	\$ (1.3)	\$ (4.3)	\$ (4.2)	See (b) below
Amortization of actuarial losses	(1.8)	(1.5)	(5.6)	(3.9)	See (b) below
	(3.1)	(2.8)	(9.9)	(8.1)	Total before tax
	1.2	1.0	3.7	3.1	Tax benefit
	<u>\$ (1.9)</u>	<u>\$ (1.8)</u>	<u>\$ (6.2)</u>	<u>\$ (5.0)</u>	Net of tax

- (a) This AOCI component is included in interest expense, net. Amount relates to the amortization of the effective portion of treasury lock derivative instruments recorded in AOCI. The net amount of settlement gains or losses on derivative instruments included in AOCI to be amortized over the next 12 months is a net loss of \$5.4 million (\$3.3 million after tax). For a discussion of treasury lock derivative instrument activity, see Note 13, Derivative Instruments and Hedging Activities, of the Notes to Consolidated Financial Statements in "Part II, Item 8. Financial Statements and Supplementary Data" of our 2016 Annual Report on Form 10-K.
- (b) These AOCI components are included in the computation of net pension and postretirement benefit costs. See Note 11, Employee Benefit Plans and Other Postretirement Benefits, for additional information.

#### 14. Concentrations of Risk

Our Paper segment has had a long-standing commercial and contractual relationship with Office Depot, our largest customer in the paper business. This relationship exposes us to a significant concentration of business and financial risk. Our sales to Office Depot represent approximately 7% and 8% of our total Company sales revenue for the nine months ended September 30, 2017 and 2016, respectively, and approximately 42% and 41% of our Paper segment sales revenue for both of those periods, respectively. At September 30, 2017 and December 31, 2016 we had \$31.2 million and \$31.8 million of accounts receivable due from Office Depot, which represents 4% and 5% of our total Company accounts receivable for both of those periods, respectively.

In 2016, sales to Office Depot represented 42% of our Paper segment sales. If these sales are reduced, we would need to find new customers. We may not be able to fully replace any lost sales, and any new sales may be at lower prices or higher costs. Any significant deterioration in the financial condition of Office Depot affecting its ability to pay or any other change that affects its willingness to purchase our products will harm our business and results of operations.

#### 15. Transactions With Related Parties

Louisiana Timber Procurement Company, L.L.C. (LTP) is a variable-interest entity that is 50% owned by PCA 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 Sheets were \$4.6 million at September 30, 2017 and \$5.0 million at December 31, 2016. During the three months ended September 30, 2017 and 2016, we recorded \$20.8 million and \$15.5 million, respectively, and during the nine months ended September 30, 2017 and 2016 we recorded \$66.0 million and \$54.8 million, respectively, 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".

During the three months ended September 30, 2017 and 2016, fiber purchases from related parties were \$4.0 million and \$3.9 million, respectively. Fiber purchases from related parties were \$13.6 million and \$13.2 million, respectively, during the nine months ended September 30, 2017 and 2016. 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. Segment Information

We report 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.

Each segment's profits and losses are measured on operating profits before interest expense, net, and income taxes. For many of these allocated expenses, the related assets and liabilities remain in the Corporate and Other segment.

Selected financial information by reportable segment was as follows (dollars in millions):

Three Months Ended September 30, 2017	Sales, net			Operating Income (Loss)
	Trade	Inter-segment	Total	
Packaging	\$ 1,340.6	\$ 6.0	\$ 1,346.6	\$ 261.5 (a)
Paper	271.4	—	271.4	(0.7) (a)
Corporate and Other	28.1	33.0	61.1	(18.5)
Intersegment eliminations	—	(39.0)	(39.0)	—
	<u>\$ 1,640.1</u>	<u>—</u>	<u>\$ 1,640.1</u>	<u>242.3</u>
Interest expense, net				(25.4)
Income before taxes				<u>\$ 216.9</u>

Three Months Ended September 30, 2016	Sales, net			Operating Income (Loss)
	Trade	Inter-segment	Total	
Packaging	\$ 1,165.0	\$ 2.1	\$ 1,167.1	\$ 179.6 (c)
Paper	292.8	—	292.8	44.5 (c)
Corporate and Other	26.2	36.7	62.9	(17.7)
Intersegment eliminations	—	(38.8)	(38.8)	—
	<u>\$ 1,484.0</u>	<u>—</u>	<u>\$ 1,484.0</u>	<u>206.4</u>
Interest expense, net				(23.4)
Income before taxes				<u>\$ 183.0</u>

Nine Months Ended September 30, 2017	Sales, net			Operating Income (Loss)
	Trade	Inter-segment	Total	
Packaging	\$ 3,897.4	\$ 17.6	\$ 3,915.0	\$ 676.8 (a)(b)
Paper	784.3	—	784.3	58.1 (a)
Corporate and Other	78.9	92.3	171.2	(55.7) (a)(b)
Intersegment eliminations	—	(109.9)	(109.9)	—
	<u>\$ 4,760.6</u>	<u>—</u>	<u>\$ 4,760.6</u>	<u>679.2</u>
Interest expense, net				(74.6)
Income before taxes				<u>\$ 604.6</u>

Nine Months Ended September 30, 2016	Sales, net			Operating Income (Loss)
	Trade	Inter-segment	Total	
Packaging	\$ 3,382.4	\$ 5.5	\$ 3,387.9	\$ 533.5 (c)
Paper	840.1	—	840.1	105.0 (c)
Corporate and Other	79.9	105.7	185.6	(51.1) (c)
Intersegment eliminations	—	(111.2)	(111.2)	—
	<u>\$ 4,302.4</u>	<u>—</u>	<u>\$ 4,302.4</u>	<u>587.4</u>
Interest expense, net				(67.5)
Income before taxes				<u>\$ 519.9</u>

(a) The three and nine months ended September 30, 2017 include:

- \$0.9 million and \$1.9 million, respectively, of charges consisting of closure costs related to corrugated products facilities, a paper administration facility, and a lump sum settlement of a multiemployer pension plan withdrawal liability for one of our corrugated products facilities.
- \$0.5 million and \$0.8 million, respectively, of charges related to the Sacramento Container Corporation acquisition and integration costs related to other recent acquisitions.

3. \$25.3 million of charges related to the announced second quarter 2018 discontinuation of uncoated free sheet and coated one-side grades at the Wallula, Washington mill associated with the conversion of the No. 3 paper machine to a high-performance 100% virgin kraft linerboard machine.

(b) The nine months ended September 30, 2017 include the following:

1. \$5.0 million of costs for the property damage and business interruption insurance deductible corresponding to the February 2017 explosion at our DeRidder, LA mill.
2. \$2.3 million of income related to a working capital adjustment from the April 2015 sale of our Hexacomb corrugated manufacturing operations in Europe and Mexico.

(c) The three and nine months ended September 30, 2016 include:

1. \$2.0 million and \$7.4 million, respectively, of charges consisting of closure costs related to corrugated products facilities and a paper products facility and costs related to our withdrawal from a multiemployer pension plan for one of our corrugated products facilities.
2. \$2.9 million and \$3.2 million, respectively, of charges related to the acquisition and integration of TimBar Corporation.

## 17. New and Recently Adopted Accounting Standards

In May 2014, the Financial Accounting Standards Board ("FASB") issued ASU 2014-09 (Topic 606): Revenue from Contracts with Customers. This ASU amends the guidance for revenue recognition to replace numerous industry-specific requirements. The ASU implements a five-step process for customer contract revenue recognition that focuses on transfer of control as opposed to transfer of risk and rewards. The amendment also requires enhanced disclosures regarding the nature, amount, timing and uncertainty of revenue and cash flows from contracts with customers.

There are two permitted transition methods under the standard: full retrospective method, in which case the cumulative effect of applying the standard would be recognized in the earliest period shown, or the modified retrospective method, in which case the cumulative effect of applying the standard would be recognized at the date of initial application. The new standard becomes effective for us as of January 1, 2018, at which time we expect to adopt it using the modified retrospective method.

We have established a transition team to analyze the impact of the standard on our revenue contracts by reviewing our current accounting policies and practices and identifying potential differences that would result from applying the requirements of the new standard. Specifically, we have identified significant revenue streams within each of our reportable segments and have reviewed representative contracts to identify corresponding purchase obligations, variable consideration, acquisition costs and fulfillment costs. In addition, we are in the process of identifying and assessing appropriate changes to our business processes, systems and controls to support revenue recognition and disclosures under the new standard. This team has reported, and will continue to report, its findings and progress of the project to management and the Audit Committee on a periodic basis.

During our assessment, the Company considered whether the adoption would require a transition from point-in-time revenue recognition to an over-time approach for products produced by the Company without an alternative use, which would result in acceleration of revenue. The Company has determined that based on the express terms included in the majority of its contracts, and the Company's standard terms and conditions, an enforceable right of payment that includes a reasonable profit throughout the duration of the contract does not exist. Therefore, the Company would remain at a point-in-time approach and record revenue at the point control transfers to the customer.

While we continue to assess ASU 2014-09, we do not expect that there will be a material effect on the Company's financial position or its results of operations as a result of adoption and we anticipate the primary impact to be the additional required disclosures around revenue recognition in the notes to the consolidated financial statements.

Effective January 1, 2017, the Company adopted ASU 2016-09 (Topic 718): *Improvements to Employee Share-Based Payment Accounting*, which is intended to improve the accounting for share-based payment transactions as part of the FASB's simplification initiative. This ASU requires all excess tax benefits and deficiencies from share-based payment awards (including tax benefits of dividends on share-based payment awards) to be recognized in the income statement when the awards vest or are settled. Excess tax benefits and deficiencies were previously recognized in additional paid in capital in our consolidated balance sheet. Additionally, the guidance requires these excess tax benefits and deficiencies to be presented as an operating activity in the statement of cash flows rather than as a financing activity. As a result of this adoption, the Company recorded \$0.3 million and \$6.6 million of excess tax benefits from share-based compensation as an income tax benefit in the income statement for the three and nine months ended September 30, 2017, respectively. The Company also retrospectively reclassified excess tax benefits and deficiencies as an operating activity rather than as a financing activity on its consolidated statements of cash flows. The Company will continue to estimate forfeitures at the time of the grant. The Company had no unrecognized excess tax benefits from prior periods to record upon the adoption of this ASU, and all other adopted amendments did not have a material impact on the Company's financial position, results of operations and cash flow.

Effective January 1, 2017, the Company prospectively adopted ASU 2015-11 (Topic 330): *Simplifying the Measurement of Inventory*, as part of its simplification initiative. Under the ASU, inventory is measured at the "lower of cost and net realizable value" and other options that currently exist for market value will be eliminated. ASU 2015-11 defines net realizable value as the estimated selling prices in the ordinary course of business, less reasonably predictable costs of completion, disposal and transportation. No other changes were made to the current guidance on inventory measurement. The adoption of this guidance did not have a material impact on the Company's financial position, results of operations and cash flow.

In May 2017, the FASB issued ASU 2017-09 *Compensation - Stock Compensation* (Topic 718): *Scope of Modification Accounting*, to clarify which changes to the terms or conditions of a share-based payment award require an entity to apply modification accounting in Topic 718. This ASU is effective for annual periods beginning after December 15, 2017. This ASU will be applied prospectively when changes to the terms or conditions of a share-based payment award occur.

In January 2017, the FASB issued ASU 2017-04 (Topic 350): *Intangibles - Goodwill and Other - Simplifying the Test for Goodwill Impairment*, eliminating the requirement to determine the fair value of individual assets and liabilities of a reporting unit to measure goodwill impairment. Under ASU 2017-04, goodwill impairment testing will be performed by comparing the fair value of the reporting unit with its carrying amount and recognizing an impairment charge for the amount by which the carrying amount exceeds the reporting unit's fair value. This ASU is effective for annual and interim goodwill impairment tests in fiscal years beginning after December 15, 2019, and early adoption is permitted. This ASU will be applied prospectively to our future goodwill impairment tests beginning with our annual goodwill impairment test in the fourth quarter of 2017.

In January 2017, the FASB issued ASU 2017-01 (Topic 805), *Clarifying the Definition of a Business*, which amends the guidance in ASC 805, "Business Combinations". The ASU changes the definition of a business to assist entities with evaluating when a set of transferred assets and activities is a business. Under the new guidance, an entity first determines whether substantially all of the fair value of the gross assets acquired is concentrated in a single identifiable asset or a group of similar identifiable assets. If this threshold is met, the set is not a business. If it is not met, the entity then evaluates whether the set meets the requirements that a business include, at a minimum, an input and a substantive process that together significantly contribute to the ability to create outputs. The ASU defines an output as "the result of inputs and processes applied to those inputs that provide goods or services to customers, investment income (such as dividends or interest), or other revenues." The ASU is effective for annual reporting periods beginning after December 15, 2017, including interim periods within those annual periods, and early adoption is permitted. The ASU will be applied prospectively to any transactions subsequent to adoption.

In August 2016, the FASB issued ASU 2016-15 (Topic 230), *Statement of Cash Flows: Classification of Certain Cash Receipts and Cash Payments*. This ASU adds or clarifies guidance on the classification of certain cash receipts and payments in the statement of cash flows. It is effective for annual periods beginning after December 15, 2017, and interim periods within those annual periods, with early adoption permitted. The Company does not expect this ASU to have a material impact on the Company's financial condition, results of operations, or cash flows.

In February 2016, the FASB issued ASU 2016-02 (Topic 842): *Leases*. This ASU amends a number of aspects of lease accounting, including requiring lessees to recognize operating leases with a term greater than one year on their balance sheet as a right-of-use asset and corresponding lease liability, measured at the present value of the lease payments. This ASU is effective for fiscal years beginning after December 15, 2018, including interim periods within those fiscal years, and early adoption is permitted. This ASU is required to be adopted using a modified retrospective approach. We currently plan to adopt this ASU on January 1, 2019 and expect to recognize a liability and corresponding asset associated with in-scope operating leases, but are still in the process of determining the effects on our financial statements and the processes required to account for leasing activity on an ongoing basis.

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.

## **18. 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, capital commitments, lease obligations, and purchase commitments for goods and services, and legal proceedings, all of which are discussed in Note 9, Debt, and Note 18, Commitments, Guarantees, Indemnifications, and Legal Proceedings, of the Notes to Consolidated Financial Statements in "Part II, Item 8. Financial Statements and Supplementary Data" of our 2016 Annual Report on Form 10-K.

### ***Guarantees and Indemnifications***

We provide guarantees, indemnifications, and other assurances to third parties in the normal course of our business. These include tort indemnifications, product guarantees, environmental assurances, and representations and warranties in commercial agreements. At September 30, 2017 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.

### ***DeRidder Mill Incident***

On February 8, 2017, a tank located in the pulp mill at the Company's DeRidder, Louisiana facility exploded, resulting in three contractor fatalities and other injuries. The Company has been served with multiple lawsuits and is on notice of additional claims. The Company maintains liability insurance subject to a \$1.0 million deductible; however, the incident remains under investigation and the lawsuits are in the early stages. Accordingly, the Company is unable to estimate a range of reasonable possible losses at this time.

The Company has also incurred property damage and business interruption losses and has claimed these losses, subject to a \$5.0 million deductible, under its property damage and business interruption insurance policy. The Company expects to resolve the claim with the insurance carrier over the next several months.



The Company is cooperating with investigations from the U.S. Occupational Health and Safety Administration, the U.S. Chemical Safety Board and the Environmental Protection Agency relating to the incident.

### **Legal Proceedings**

We are party to other legal actions arising in the ordinary course of our business. These legal actions include commercial liability claims, premises liability claims, commercial disputes, 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.

### **19. Subsequent Event**

On October 2, 2017, we completed the acquisition of the assets of Sacramento Container Corporation and 100% membership interests of Northern Sheets, LLC and Central California Sheets, LLC in a cash-free, debt-free transaction. Funding for the \$265 million purchase price came from available cash on hand. The acquired companies operate two full-line corrugated product operations and sheet feeders in McClellan, California and Kingsburg, California. The operating results of Sacramento Container Corporation will be included in PCA's fourth quarter 2017 results.

## **Item 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS**

This management's discussion and analysis includes statements regarding our expectations with respect to our future performance, expected business conditions, liquidity, and capital resources. Such statements, along with any other statements that are not historical in nature 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 our 2016 Annual Report on 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 statement. Our actual results may differ materially from those contained in or implied by any of the forward-looking statements in this Form 10-Q. Please see "Forward Looking Statements" elsewhere in this Item 2.

### **Overview**

PCA is the fourth largest producer of containerboard products and the third largest producer of uncoated freesheet paper in the United States, based on production capacity. We operate five containerboard mills, three paper mills, and 94 corrugated products manufacturing plants. Our containerboard mills produce linerboard and corrugating medium, which are papers primarily used in the production of corrugated products. Our corrugated products manufacturing plants produce a wide variety of corrugated packaging products, including conventional shipping containers used to protect and transport manufactured goods, multi-color boxes and displays with strong visual appeal that help to merchandise the packaged product in retail locations, and honeycomb protective packaging. In addition, we are a large producer of packaging for meat, fresh fruit and vegetables, processed food, beverages, and other industrial and consumer products. We also manufacture and sell white papers, including both commodity and specialty papers, which may have custom or specialized features such as colors, coatings, high brightness, and recycled content. We are headquartered in Lake Forest, Illinois and operate primarily in the United States.

This Item 2 is intended to supplement, and should be read in conjunction with, "Management's Discussion and Analysis of Financial Condition and Results of Operations" included in our 2016 Annual Report on Form 10-K.

### **Executive Summary**

Third quarter net sales were \$1.64 billion in 2017 and \$1.48 billion in 2016. We reported \$139 million of net income, or \$1.47 per diluted share, during the third quarter of 2017, compared to \$119 million of net income, or \$1.26 per diluted share, during the same period in 2016. The third quarter of 2017 included \$27 million of pre-tax expense for special items (discussed below) compared to \$5 million of pre-tax expense for special items in 2016. Excluding special items, we recorded \$159 million of net income, or \$1.68 per diluted share, during the third quarter of 2017, compared to \$123 million of net income, or \$1.30 per diluted share, in the third quarter of 2016. The increase was driven primarily by higher containerboard and corrugated products prices and mix and sales and production volumes, and a partial insurance recovery related to the DeRidder Mill incident, partially offset by lower prices and mix and sales and production volumes in our Paper segment, higher input and operating costs, higher freight and annual outage expenses, and higher depreciation and interest expense.

Packaging segment income from operations was \$262 million in the third quarter of 2017, compared to \$180 million in the third quarter of 2016. Packaging segment earnings before interest, taxes, depreciation, amortization, and depletion (EBITDA) excluding special items was \$341 million in the third quarter of 2017 and \$256 million in the third quarter of 2016. The increase was driven primarily by higher containerboard and corrugated products prices and mix and sales and production volumes, and a partial insurance recovery related to the DeRidder Mill incident, partially offset by higher input costs, primarily recycled fiber, higher labor costs, and higher freight expense.

Paper segment income from operations was a loss of \$1 million in the third quarter of 2017, which includes \$25 million of charges related to the Wallula mill restructuring as discussed below. This compares to income of \$45 million in the third quarter of 2016. Paper segment EBITDA excluding special items was \$39 million in the third quarter of 2017, compared to \$59 million in the third quarter of 2016.

The decrease was due to lower paper prices and mix and lower sales and production volumes, higher costs for energy, and higher annual mill outage and freight expense.

During the first nine months of 2017, we reported \$400 million of net income, or \$4.23 per diluted share, compared to \$339 million of net income, or \$3.58 per diluted share, during the same period in 2016. The nine months ended September 30, 2017 included \$31 million of pre-tax expense for special items (discussed below), compared to \$11 million of pre-tax expense for special items during the same period in 2016. Excluding special items, we recorded \$422 million of net income, or \$4.47 per diluted share, during the first nine months of 2017, compared to \$346 million of net income, or \$3.65 per diluted share, in the first nine months of 2016. The increase was driven primarily by higher containerboard and corrugated products prices and mix and sales and production volumes, and lower costs for annual mill outages, partially offset by lower sales and production volumes and prices and mix in our Paper segment, higher input and operating costs, higher freight expense, and higher depreciation and interest expense. Earnings for the year to date were negatively impacted due to the DeRidder Mill incident described in Note 18 to the Financial Statements included in this report.

Packaging segment income from operations was \$677 million in the first nine months of 2017, compared to \$534 million in the same period of 2016. Packaging segment EBITDA excluding special items was \$917 million in the first nine months of 2017, compared to \$759 million in the first nine months of 2016. The increase was driven primarily by higher containerboard and corrugated products prices and mix and sales and production volumes, and lower costs for annual mill outages, partially offset by higher input costs, primarily recycled fiber and energy, higher labor costs, and higher freight expense. The Packaging segment was negatively impacted by the DeRidder Mill incident losses described above.

Paper segment income from operations was \$58 million in the first nine months of 2017, which includes \$25 million of charges related to the Wallula mill restructuring as discussed below. This compares to \$105 million in the first nine months of 2016. Paper segment EBITDA excluding special items was \$126 million in the first nine months of 2017, compared to \$149 million in the same period of 2016. The decrease was due primarily to lower paper sales and production volumes and prices and mix, and higher input costs, partially offset by lower operating costs and lower annual mill outage expense.

During the third quarter, the Company announced that it will discontinue production of uncoated freesheet and coated one-side grades at its Wallula, Washington mill in the second quarter of 2018 to begin the conversion of the No. 3 paper machine to a 400,000 ton-per-year virgin kraft linerboard machine. The Company incurred charges in the Paper segment relating to these activities during the third quarter as described below under "Special Items and Earnings per Diluted Share, Excluding Special Items," and will incur future charges. The total capital cost of the conversion is expected to be approximately \$150 million.

During the third quarter, the Company also agreed to acquire substantially all of the assets of Sacramento Container Corporation, and 100% of the membership interests of Northern Sheets, LLC and Central California Sheets, LLC, in a cash-free, debt-free transaction for \$265 million. The Company completed the acquisition on October 2, 2017 and funded the purchase price with cash on hand. The acquired companies operate two full-line corrugated product operations and sheet feeders in McClellan, California and Kingsburg, California.

#### *Special Items and Earnings per Diluted Share, Excluding Special Items*

The third quarter of 2017 included \$27 million of pre-tax expense for special items compared to \$5 million of pre-tax expense in the same period in 2016. The special items in the third quarter of 2017 consist of \$25 million of charges related to the previously announced conversion of the Wallula No. 3 paper machine to a virgin kraft linerboard machine, and \$2 million for facility closure costs related to corrugated products facilities and a paper administration facility, and integration costs related to recent acquisitions. The \$5 million of special items in the third quarter of 2016 related to closing a corrugated manufacturing facility and a paper distribution center and integration related costs for recent acquisitions.

The nine months ended September 30, 2017 included \$31 million of pre-tax expense for special items, compared to \$11 million of pre-tax expense for special items during the same period in 2016. The nine months ended September 30, 2017 included \$25 million of charges related to the previously announced conversion of the Wallula No. 3 paper machine to a virgin kraft linerboard machine; \$5 million for the property damage and business interruption insurance deductible related to the DeRidder Mill incident; \$3 million of closure costs related to corrugated products facilities and a paper administration facility, integration costs related to the recent acquisitions, and costs related to a lump sum settlement payment for a multiemployer pension plan withdrawal liability; and \$2 million of income related to a working capital adjustment from the April 2015 sale of our Hexacomb corrugated manufacturing operations in Europe and Mexico. The \$11 million of special items in the nine months ended September 30, 2016 included \$7 million of facility closure costs related to corrugated products facilities and a paper distribution facility and \$4 million of acquisition-related costs for the TimBar Corporation, and costs related to our withdrawal from a multiemployer pension plan.

A reconciliation of reported earnings per diluted share to earnings per share, excluding special items, for the three and nine months ended September 30, 2017 and 2016 are as follows:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2017	2016	2017	2016
Earnings per diluted share, as reported	\$ 1.47	\$ 1.26	\$ 4.23	\$ 3.58
Special items:				
Wallula mill restructuring	0.16	—	0.16	—
DeRidder mill incident	—	—	0.03	—
Internal legal entity consolidation	0.04	—	0.04	—
Facilities closure and other costs	0.01	0.02	0.01	0.05
Acquisition and integration related costs	—	0.02	0.01	0.02
Hexacomb working capital adjustment	—	—	(0.01)	—
Total special items	0.21	0.04	0.24	0.07
Earnings per diluted share, excluding special items	\$ 1.68	\$ 1.30	\$ 4.47	\$ 3.65

Included in this Item 2 are various non-GAAP financial measures, including diluted EPS excluding special items, segment income excluding special items and EBITDA excluding special items. Management excludes special items as it believes these items are not necessarily reflective of the ongoing results of operations of our business. 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, because these measures assist in providing a meaningful comparison between periods presented and because these measures are frequently used by investors and other interested parties in the evaluation of companies and the performance of their segments. A 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 in Item 2 under "Reconciliations of Non-GAAP Financial Measures to Reported Amounts." Any analysis of non-GAAP financial measures should be done in conjunction with results presented in accordance with GAAP. The non-GAAP measures are not intended to be substitutes for GAAP financial measures and should not be used as such.

### Industry and Business Conditions

Trade publications reported North American industry-wide corrugated products total shipments increased 1.0% during the third quarter of 2017, compared to the same quarter in 2016. Reported industry containerboard production increased 1.5% compared to the third quarter of 2016, and reported industry containerboard inventories at the end of the third quarter of 2017 were approximately 2.4 million tons, flat compared to the same period in 2016. Reported containerboard export shipments were down 5.5% compared to the third quarter of 2016. Trade publications reported a \$30 per ton price increase on corrugating medium during the third quarter of 2017.

The market for communication papers competes heavily with electronic data transmission and document storage alternatives. Increasing shifts to these alternatives have reduced usage of, and lowered demand for, traditional print media and communication papers. Trade publications reported that North American uncoated freesheet paper shipments were down 1.4% in the third quarter of 2017, compared to the same quarter in 2016. Average prices reported by a trade publication for cut size office papers were lower by \$30 per ton, or 3.0%, in the third quarter of 2017, compared to the third quarter of 2016.

### Outlook

Looking ahead to the fourth quarter of 2017, we expect Packaging segment demand to remain strong although at seasonally lower volumes, which includes one less shipping day, as well as a seasonally less rich mix in corrugated products, compared to the third quarter. We will also have the addition of our newly acquired Sacramento Container operations in the fourth quarter. In our Paper segment, we have started implementing our recently announced price increases, but expect seasonally lower volumes and a less rich sales mix. While recycled fiber prices should move lower, seasonally higher wood and energy costs along with higher prices for certain key chemicals and higher freight costs are also expected. Annual mill outage costs are estimated to be higher than the third quarter due to scheduled maintenance work at four of our mills. Considering these items, we expect fourth quarter earnings, excluding special items, to be lower than third quarter earnings.

## Results of Operations

### Three Months Ended September 30, 2017, compared to Three Months Ended September 30, 2016

The historical results of operations of PCA for the three months ended September 30, 2017 and 2016 are set forth below (dollars in millions):

	Three Months Ended September 30,		Change
	2017	2016	
Packaging	\$ 1,346.6	\$ 1,167.1	\$ 179.5
Paper	271.4	292.8	(21.4)
Corporate and Other	61.1	62.9	(1.8)
Intersegment eliminations	(39.0)	(38.8)	(0.2)
Net sales	\$ 1,640.1	\$ 1,484.0	\$ 156.1
Packaging	\$ 261.5	\$ 179.6	\$ 81.9
Paper	(0.7)	44.5	(45.2)
Corporate and Other	(18.5)	(17.7)	(0.8)
Income from operations	\$ 242.3	\$ 206.4	\$ 35.9
Interest expense, net	(25.4)	(23.4)	(2.0)
Income before taxes	216.9	183.0	33.9
Income tax provision	(77.8)	(63.7)	(14.1)
Net income	\$ 139.1	\$ 119.3	\$ 19.8
<i>Non-GAAP Measures (a)</i>			
Net income excluding special items	\$ 158.8	\$ 122.6	\$ 36.2
Consolidated EBITDA	339.8	294.4	45.4
Consolidated EBITDA excluding special items	363.9	298.9	65.0
Packaging EBITDA	340.2	251.6	88.6
Packaging EBITDA excluding special items	341.3	256.0	85.3
Paper EBITDA	16.4	59.2	(42.8)
Paper EBITDA excluding special items	39.4	59.3	(19.9)

(a) See "Reconciliations of Non-GAAP Financial Measures to Reported Amounts" included in this Item 2 for a reconciliation of non-GAAP measures to the most comparable GAAP measure.

### Net Sales

Net sales increased \$156 million, or 10.5%, to \$1,640 million during the three months ended September 30, 2017, compared to \$1,484 million during the same period in 2016.

*Packaging.* Net sales increased \$180 million, or 15.4%, to \$1,347 million, compared to \$1,167 million in the third quarter of 2016, due to higher domestic and export containerboard and corrugated products prices and mix (\$121 million) and increased containerboard and corrugated products volume (\$59 million). Our domestic containerboard prices in the third quarter of 2017 increased 14.8%, and export prices increased 21.3%, compared to the same period in 2016. In the third quarter of 2017, our containerboard outside shipments increased 5.7%, and total corrugated products shipments were up 4.0%, compared to the third quarter of 2016. Containerboard mill production in the third quarter of 2017 was 996,000 tons compared to 950,000 in 2016. Prices for corrugating medium reported by trade publications increased by \$30 per ton during the third quarter of 2017.

*Paper.* Net sales during the three months ended September 30, 2017 decreased \$21 million, or 7.3%, to \$271 million, compared to \$293 million in the third quarter of 2016, due to lower pulp volume (\$12 million) as a result of the 2016 shutdown of our market pulp operations at our Wallula Mill, lower white paper volume (\$2 million), and unfavorable changes in prices and mix (\$7 million).

### Gross Profit

Gross profit increased \$68 million during the three months ended September 30, 2017, compared to the same period in 2016. The increase was driven primarily by higher containerboard and corrugated products prices and mix and sales and production volumes, partially offset by lower Paper segment prices and mix and sales and production volumes, and higher input and operating costs. In the three months ended September 30, 2017, gross profit included special items of \$3 million related to the conversion of the No. 3 machine at the Wallula Mill, compared to \$1 million in the same period last year for acquisition related costs and facility closure costs.

### ***Selling, General, and Administrative Expenses***

Selling, general, and administrative expenses increased \$13 million during the three months ended September 30, 2017, compared to the same period in 2016. The increase was primarily due to higher administrative costs corresponding to the TimBar and Columbus Container acquisitions.

### ***Other Income (Expense), Net***

Other income (expense), net, during the three months ended September 30, 2017 was \$25 million of expense, compared to \$6 million of expense during the three months ended September 30, 2016. The third quarter of 2017 included \$23 million of charges related to the conversion of the No. 3 machine at the Wallula Mill, and \$4 million for asset disposals and write-offs, partially offset by \$3 million of property damage and business interruption insurance net recoveries related to the February 2017 incident at our DeRidder Mill. The third quarter of 2016 included \$4 million of closure costs related to corrugated products facilities and integration costs related to the recent acquisitions, and \$1 million of asset disposals and write-offs. We discuss these items in more detail in Note 4, Other Income (Expense), Net of the Condensed Notes to Unaudited Quarterly Consolidated Financial Statements in “Part I, Item 1. Financial Statements” of this Form 10-Q.

### ***Income from Operations***

Income from operations increased \$36 million, or 17.4%, during the three months ended September 30, 2017, compared to the same period in 2016. The third quarter of 2017 included \$27 million of expense for special items compared to \$5 million in the same period in 2016. The special items in the third quarter of 2017 consist of \$25 million of charges related to the previously announced conversion of the Wallula No. 3 paper machine to a virgin kraft linerboard machine, and \$2 million for facility closure costs related to corrugated products facilities and a paper administration facility, and integration costs related to recent acquisitions. Third quarter 2016 special items of \$5 million related to closing a corrugated manufacturing facility and a paper distribution center and integration related costs for recent acquisitions.

*Packaging.* Packaging segment income from operations increased \$82 million to \$262 million, compared to \$180 million during the three months ended September 30, 2016. The increase in the third quarter of 2017 related primarily to favorable changes in containerboard and corrugated products prices and mix (\$88 million), higher containerboard and corrugated products sales and production volumes (\$17 million), lower wood costs (\$5 million), and a partial insurance recovery related to the DeRidder Mill incident (\$3 million), partially offset by higher costs for recycled fiber (\$15 million), labor (\$6 million), chemicals (\$2 million), repairs (\$2 million), energy (\$1 million), converting costs (\$1 million), freight (\$2 million), and higher depreciation expense (\$3 million). Special items during the third quarter of 2017 included expense of \$1 million related to closure costs for corrugated products facilities and integration costs for the recent acquisitions. Special items for the third quarter 2016 included expense of \$5 million related to integration costs and closing a corrugated manufacturing facility.

*Paper.* Paper segment income from operations decreased \$45 million to a loss of \$1 million, compared to income of \$45 million during the three months ended September 30, 2016. The decrease primarily related to unfavorable changes in prices and mix (\$7 million), lower sales and production volumes (\$7 million), higher energy (\$2 million), and higher mill outage (\$2 million) and freight (\$1 million) expense. Special items during the third quarter of 2017 included expense of \$25 million related to the conversion of the Wallula No. 3 machine to a virgin kraft linerboard machine. There were no special items in the same period of 2016. Excluding special items, income from operations decreased \$20 million.

### ***Interest Expense, Net, and Income Taxes***

Interest expense, net, increased \$2 million, during the three months ended September 30, 2017, compared to the same period in 2016. The increase in interest expense was primarily due to higher interest rates on PCA's variable rate debt in the third quarter of 2017 due to increases in LIBOR and the interest paid on term loan borrowings for the TimBar acquisition made in August 2016.

During the three months ended September 30, 2017, we recorded \$78 million of income tax expense, compared to \$64 million of expense during the three months ended September 30, 2016. The effective tax rate for the three months ended September 30, 2017 and 2016 was 35.9% and 34.8%, respectively. The increase in our effective tax rate for the three months ended September 30, 2017 compared to the same period in 2016, was primarily due to an internal legal entity consolidation that will simplify future operating activities and resulted in \$3 million of tax expense for the change in value of deferred taxes.

## Nine Months Ended September 30, 2017, compared to Nine Months Ended September 30, 2016

The historical results of operations of PCA for the nine months ended September 30, 2017 and 2016 are set forth below (dollars in millions):

	Nine Months Ended September 30,			Change
	2017	2016		
Packaging	\$ 3,915.0	\$ 3,387.9	\$	527.1
Paper	784.3	840.1		(55.8)
Corporate and Other	171.2	185.6		(14.4)
Intersegment eliminations	(109.9)	(111.2)		1.3
Net sales	\$ 4,760.6	\$ 4,302.4	\$	458.2
Packaging	\$ 676.8	\$ 533.5	\$	143.3
Paper	58.1	105.0		(46.9)
Corporate and Other	(55.7)	(51.1)		(4.6)
Income from operations	\$ 679.2	\$ 587.4	\$	91.8
Interest expense, net	(74.6)	(67.5)		(7.1)
Income before taxes	604.6	519.9		84.7
Income tax provision	(204.9)	(181.0)		(23.9)
Net income	\$ 399.7	\$ 338.9	\$	60.8
<i>Non-GAAP Measures (a)</i>				
Net income excluding special items	\$ 422.0	\$ 345.9	\$	76.1
Consolidated EBITDA	962.9	851.7		111.2
Consolidated EBITDA excluding special items	991.0	861.5		129.5
Packaging EBITDA	911.0	750.8		160.2
Packaging EBITDA excluding special items	916.8	759.4		157.4
Paper EBITDA	103.2	148.2		(45.0)
Paper EBITDA excluding special items	126.2	149.1		(22.9)

- (a) See "Reconciliations of Non-GAAP Financial Measures to Reported Amounts" included in this Item 2 for a reconciliation of non-GAAP measures to the most comparable GAAP measure.

### Net Sales

Net sales increased \$458 million, or 10.6%, to \$4,761 million during the nine months ended September 30, 2017, compared to \$4,302 million during the same period in 2016.

*Packaging.* Net sales increased \$527 million, or 15.6%, to \$3,915 million, compared to \$3,388 million in the nine months ended September 30, 2016, due to higher containerboard and corrugated products volume (\$315 million) and higher domestic and export containerboard and corrugated products prices and mix (\$212 million). Our domestic containerboard prices in the first nine months of 2017 increased 11.6% reflecting higher prices reported by trade publications. Additionally, our export containerboard prices increased 12.0%, compared to the same period in 2016. In the first nine months of 2017, our containerboard outside shipments increased 4.7%, and corrugated products shipments were up 8.1% compared to the first nine months of 2016.

*Paper.* Net sales during the nine months ended September 30, 2017 decreased \$56 million, or 6.6%, to \$784 million, compared to \$840 million in the nine months ended September 30, 2016. Sales decreased due to lower pulp volume (\$38 million) as a result of the 2016 shutdown of our market pulp operations at our Wallula Mill, lower white paper volume (\$16 million), and unfavorable changes in prices and mix (\$2 million).

### Gross Profit

Gross profit increased \$152 million, or 16.0%, during the nine months ended September 30, 2017, compared to the same period in 2016. The increase was primarily due to higher containerboard and corrugated products prices and mix and sales and production volumes, partially offset by lower Paper segment sales and production volumes and prices and mix, and higher input and operating costs. In the first nine months of 2017, gross profit included special items of \$3 million related to the conversion of the No. 3 machine at the Wallula Mill, compared to \$2 million in the same period last year for acquisition related costs and facility closure costs.

### ***Selling, General, and Administrative Expenses***

Selling, general, and administrative expenses increased \$43 million, or 12.4% during the nine months ended September 30, 2017, compared to the same period in 2016. The increase was primarily due to higher administrative costs corresponding to the TimBar and Columbus Container acquisitions.

### ***Other Income (Expense), Net***

Other expense, net, during the nine months ended September 30, 2017 was \$32 million, compared to \$15 million during the nine months ended September 30, 2016. The nine months ended September 30, 2017 included charges of \$23 million for charges related to the conversion of the No. 3 machine at the Wallula Mill; \$9 million for asset disposals and write-offs; \$3 million of charges consisting of closure costs related to corrugated products facilities, integration costs related to the recent acquisitions, and costs related to lump sum settlement payments for multiemployer pension plan withdrawal liability; and \$2 million of income related to a working capital adjustment from the April 2015 sale of our Hexacomb corrugated manufacturing operations in Europe and Mexico. The nine months ended September 30, 2016 included \$6 million of charges consisting of closure costs related to corrugated products facilities and a paper distribution facility and costs related to our withdrawal from a multiemployer pension plan, \$2 million of acquisition-related costs for the TimBar Corporation, and \$4 million of asset disposal and write-offs. We discuss these items in more detail in Note 4, Other Income (Expense), Net of the Condensed Notes to Unaudited Quarterly Consolidated Financial Statements in "Part I, Item 1. Financial Statements" of this Form 10-Q.

### ***Income from Operations***

Income from operations increased \$92 million, or 15.6%, during the nine months ended September 30, 2017, compared to the same period in 2016. The first nine months of 2017 included \$31 million of pre-tax expense for special items, compared to \$11 million of pre-tax expense for special items during the same period in 2016. The nine months ended September 30, 2017 included \$25 million of charges related to the previously announced conversion of the Wallula No. 3 paper machine to a virgin kraft linerboard machine; \$5 million for the property damage and business interruption insurance deductible related to the DeRidder Mill incident; \$3 million of closure costs related to corrugated products facilities and a paper administration facility, integration costs related to the recent acquisitions, and costs related to a lump sum settlement payment for a multiemployer pension plan withdrawal liability; and \$2 million of income related to a working capital adjustment from the April 2015 sale of our Hexacomb corrugated manufacturing operations in Europe and Mexico. The nine months ended September 30, 2016 included \$7 million of facility closure costs related to corrugated products facilities and a paper distribution facility and \$4 million of acquisition-related costs for the TimBar Corporation, and costs related to our withdrawal from a multiemployer pension plan.

*Packaging.* Packaging segment income from operations increased \$143 million to \$677 million, during the first nine months of 2017 compared to the same period last year. The first nine months of 2017 included higher containerboard and corrugated products prices and mix (\$148 million), higher sales and production volumes (\$63 million), a partial insurance recovery related to the DeRidder Mill incident (\$7 million), and lower mill outage costs (\$2 million), partially offset by higher costs for recycled fiber (\$38 million), energy (\$10 million), labor (\$12 million), freight (\$8 million), and higher depreciation expense (\$9 million). Special items included \$5 million of expense for the property damage and business interruption insurance deductible related to the DeRidder Mill incident; \$3 million of charges consisting of closure costs related to corrugated products facilities, integration costs related to the recent acquisitions, and costs related to a lump sum settlement payment for a multiemployer pension plan withdrawal liability; and \$2 million of income related to a working capital adjustment from the April 2015 sale of our Hexacomb corrugated manufacturing operations in Europe and Mexico in the first nine months of 2017. The nine months ended September 30, 2016 included \$6 million of charges consisting of closure costs related to corrugated products facilities and our withdrawal from a multiemployer pension plan and \$3 million of TimBar acquisition-related costs. Excluding special items, income from operations increased \$140 million.

*Paper.* Paper segment income from operations decreased \$47 million to \$58 million, compared to the nine months ended September 30, 2016. The decrease primarily relates to lower paper sales and production volumes (\$18 million), lower paper prices and mix (\$3 million), and higher costs for energy (\$11 million), partially offset by lower fiber costs (\$8 million) and lower mill outage costs (\$2 million). Special items during the first nine months of 2017 included expense of \$25 million related to the conversion of the Wallula No. 3 machine to containerboard, compared to \$2 million of facility closure costs for the same period in 2016. Excluding special items, income from operations decreased \$23 million.

### ***Interest Expense, Net, and Income Taxes***

Interest expense, net, was \$75 million during the nine months ended September 30, 2017, compared to \$68 million during the nine months ended September 30, 2016. The increase in interest expense was primarily due to interest on term loan borrowings for the TimBar acquisition made in August 2016 and higher interest rates on PCA's variable rate debt due to increases in LIBOR during the nine months ended September 30, 2017 compared to the same period in 2016.

During the nine months ended September 30, 2017, we recorded \$205 million of income tax expense, compared to \$181 million of expense during the nine months ended September 30, 2016. The effective tax rate for the nine months ended September 30, 2017 and 2016 was 33.9% and 34.8%, respectively. The decrease in our effective tax rate for the nine months ended September 30, 2017 compared to the

same period in 2016, was primarily due to the adoption of ASU 2016-09 (Topic 718): *Improvements to Employee Share-Based Payment Accounting*, which requires all excess tax benefits and deficiencies from employee share-based payment awards to be recognized in the income statement as opposed to additional paid in capital. This was partially offset by the tax expense from the internal legal entity consolidation.

## 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. At September 30, 2017 we had \$371 million of cash and \$327 million of unused borrowing capacity under the revolving credit facility, net of letters of credit. We paid the \$265 million cash purchase price for the Sacramento Container acquisition on October 2, 2017 from cash on hand. Currently, our primary uses of cash are for operations, capital expenditures, acquisitions, debt service (including voluntary payments of debt), repurchases of common stock, and declared common stock dividends. 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):

	Nine Months Ended September 30,		Change
	2017	2016	
Net cash provided by (used for):			
Operating activities	\$ 583.3	\$ 593.5	\$ (10.2)
Investing activities	(227.6)	(582.7)	355.1
Financing activities	(224.5)	84.8	(309.3)
Net increase in cash and cash equivalents	<u>\$ 131.2</u>	<u>\$ 95.6</u>	<u>\$ 35.6</u>

### Operating Activities

During the nine months ended September 30, 2017, net cash provided by operating activities was \$583 million, compared to \$593 million in the same period in 2016, a decrease of \$10 million. Cash from operations excluding changes in cash used for operating assets and liabilities increased \$106 million, primarily due to higher income from operations as discussed above. The increase was offset by \$116 million of cash used for operating assets and liabilities primarily due to the following: (a) an increase in accounts receivable in the first nine months of 2017, primarily related to higher sales volumes and prices in the Packaging segment, and (b) an increase in inventories in both the Packaging and Paper segments in anticipation of the four mill outages in the fourth quarter of 2017 as well as additional inventory build in Packaging segment as we begin the integration of the Sacramento Container acquisition that we purchased in early October 2017. This was partially offset by an increase in accounts payable, primarily related to timing of payments in the third quarter of 2017. 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.

### Investing Activities

Net cash used for investing activities during the nine months ended September 30, 2017 decreased \$355 million, to \$228 million, compared to \$583 million during the same period in 2016, primarily due to an acquisition we made in the prior year. During the third quarter of 2016 we acquired TimBar for a purchase price of \$386 million, net of cash acquired. We also spent \$226 million for capital investments during the nine months ended September 30, 2017, compared to \$188 million during the same period in 2016.

We expect capital investments to be approximately \$370 million in 2017, including \$30 million for the Wallula mill paper machine conversion. On October 2, 2017, we acquired the assets of Sacramento Container Corporation and the membership interests of Northern Sheets, LLC and Central California Sheets, LLC for \$265 million. 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 in 2017 of up to \$1 million, and we expect other environmental capital expenditures of about \$7 million in 2017. 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 "Part II, Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations" of our 2016 Annual Report on Form 10-K.

### Financing Activities

During the nine months ended September 30, 2017, net cash used by financing activities changed by \$309 million to a use of \$225 million, compared to a source of \$85 million during the same period in 2016. The decrease primarily relates to 2016 borrowings of \$385 million to finance the TimBar acquisition in August 2016. Additionally, we have not repurchased common stock in 2017, have increased debt



repayments in 2017 and have paid out higher dividends in 2017. During the nine months ended September 30, 2017 we did not repurchase any common stock, compared to \$100 million in the same period in 2016. In the first nine months of 2017, we made \$36 million of principal payments on long-term debt and capital leases, compared to \$31 million during the same period in 2016. In the first nine months of 2017, we paid \$178 million of dividends compared to \$157 million of dividends paid during the first nine months of 2016.

For more information about our debt, see Note 9, Debt, of the Notes to Consolidated Financial Statements in “Part II, Item 8. Financial Statements and Supplementary Data” of our 2016 Annual Report on Form 10-K.

### Contractual Obligations

There have been no material changes to the contractual obligations table disclosed in Item 7. “Management’s Discussion and Analysis of Financial Condition and Results of Operations” of our 2016 Annual Report on Form 10-K.

### Reconciliations of Non-GAAP Financial Measures to Reported Amounts

Income from operations excluding special items, net income excluding special items, EBITDA, and EBITDA excluding special items are non-GAAP financial measures. Management excludes special items as it believes that these items are not necessarily reflective of the ongoing operations of our business. These measures are presented 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, because these measures assist in providing a meaningful comparison between periods and because these measures are frequently used by investors and other interested parties in the evaluation of companies and the performance of their segments. 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 three and nine months ended September 30, 2017 and 2016 follow (dollars in millions):

	Three Months Ended September 30,					
	2017			2016		
	Income before Taxes	Income Taxes	Net Income	Income before Taxes	Income Taxes	Net Income
As reported in accordance with GAAP	\$ 216.9	\$ (77.8)	\$ 139.1	\$ 183.0	\$ (63.7)	\$ 119.3
Special items:						
Wallula mill restructuring (a)	25.3	(9.8)	15.5	—	—	—
Internal legal entity consolidation (b)	—	3.3	3.3	—	—	—
Facilities closure and other costs (a)(d)	0.9	(0.3)	0.6	2.0	(0.6)	1.4
Acquisition and integration related costs (a)(d)	0.5	(0.2)	0.3	2.9	(1.0)	1.9
Total special items	26.7	(7.0)	19.7	4.9	(1.6)	3.3
Excluding special items	\$ 243.6	\$ (84.8)	\$ 158.8	\$ 187.9	\$ (65.3)	\$ 122.6

	Nine Months Ended September 30,					
	2017			2016		
	Income before Taxes	Income Taxes	Net Income	Income before Taxes	Income Taxes	Net Income
As reported in accordance with GAAP	\$ 604.6	\$ (204.9)	\$ 399.7	\$ 519.9	\$ (181.0)	\$ 338.9
Special items:						
Wallula mill restructuring (a)	25.3	(9.7)	15.6	—	—	—
DeRidder mill incident (c)	5.0	(1.9)	3.1	—	—	—
Internal legal entity consolidation (b)	—	3.3	3.3	—	—	—
Facilities closure and other costs (a)(d)	1.9	(0.7)	1.2	7.4	(2.5)	4.9
Acquisition and integration related costs (a)(d)	0.8	(0.3)	0.5	3.2	(1.1)	2.1
Hexacomb working capital adjustment (c)	(2.3)	0.9	(1.4)	—	—	—
Total special items	30.7	(8.4)	22.3	10.6	(3.6)	7.0
Excluding special items	\$ 635.3	\$ (213.3)	\$ 422.0	\$ 530.5	\$ (184.6)	\$ 345.9

(a) The three and nine months ended September 30, 2017 include the following:

- \$0.9 million and \$1.9 million, respectively, of charges consisting of closure costs related to corrugated products facilities, a paper administration facility, and a lump sum settlement of a multiemployer pension plan withdrawal liability for one of our corrugated products facilities, which were recorded in “Other expense, net”.

2. \$0.5 million and \$0.8 million, respectively, of charges related to the Sacramento Container Corporation acquisition and integration costs related to other recent acquisitions, which were recorded in "Other expense, net".
  3. \$25.3 million of charges related to the announced second quarter 2018 discontinuation of uncoated free sheet and coated one-side grades at the Wallula, Washington mill in preparation for the conversion of the No. 3 paper machine to a high-performance 100% virgin kraft linerboard machine. The costs were recorded within "Other expense, net" and "Cost of sales", as appropriate.
- (b) The three and nine months ended September 30, 2017 include \$3.3 million of tax expense for the change in value of deferred taxes as a result of an internal legal entity consolidation that will simplify future operating activities.
- (c) The nine months ended September 30, 2017 include the following:
1. \$5.0 million of costs for the property damage and business interruption insurance deductible corresponding to the February 2017 explosion at our DeRidder, LA mill.
  2. \$2.3 million of income related to a working capital adjustment from the April 2015 sale of our Hexacomb corrugated manufacturing operations in Europe and Mexico.
- (d) The three and nine months ended September 30, 2016 include the following:
1. \$2.0 million and \$7.4 million, respectively, of closure costs related to corrugated products facilities and a paper products facility and costs related to our withdrawal from a multiemployer pension plan for one of our corrugated products facilities. The costs were recorded within "Other expense, net" and "Cost of sales", as appropriate.
  2. \$2.9 million and \$3.2 million, respectively, of charges related to the acquisition and integration of TimBar Corporation, which we recorded in "Other expense, net" and "Cost of sales", as appropriate.

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

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2017	2016	2017	2016
Net income	\$ 139.1	\$ 119.3	\$ 399.7	\$ 338.9
Interest expense, net	25.4	23.4	74.6	67.5
Income tax provision	77.8	63.7	204.9	181.0
Depreciation, amortization, and depletion	97.5	88.0	283.7	264.3
EBITDA	<u>\$ 339.8</u>	<u>\$ 294.4</u>	<u>\$ 962.9</u>	<u>\$ 851.7</u>
Special items:				
Wallula mill restructuring	22.7	—	22.7	—
Facilities closure and other costs	0.9	1.6	1.9	6.6
Acquisition and integration related costs	0.5	2.9	0.8	3.2
DeRidder mill incident	—	—	5.0	—
Hexacomb working capital adjustment	—	—	(2.3)	—
Total special items	24.1	4.5	28.1	9.8
EBITDA excluding special items	<u>\$ 363.9</u>	<u>\$ 298.9</u>	<u>\$ 991.0</u>	<u>\$ 861.5</u>

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

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2017	2016	2017	2016
<b>Packaging</b>				
Segment income	\$ 261.5	\$ 179.6	\$ 676.8	\$ 533.5
Depreciation, amortization, and depletion	78.7	72.0	234.2	217.3
EBITDA	340.2	251.6	911.0	750.8
Facilities closure and other costs	0.6	1.5	1.6	5.7
Acquisition and integration related costs	0.5	2.9	0.8	2.9
DeRidder mill incident	—	—	5.0	—
Hexacomb working capital adjustment	—	—	(1.6)	—
EBITDA excluding special items	<u>\$ 341.3</u>	<u>\$ 256.0</u>	<u>\$ 916.8</u>	<u>\$ 759.4</u>
<b>Paper</b>				
Segment income	\$ (0.7)	\$ 44.5	\$ 58.1	\$ 105.0
Depreciation, amortization, and depletion	17.1	14.7	45.1	43.2
EBITDA	16.4	59.2	103.2	148.2
Wallula mill restructuring	22.7	—	22.7	—
Integration-related, facilities closure and other costs	0.3	0.1	0.3	0.9
EBITDA excluding special items	<u>\$ 39.4</u>	<u>\$ 59.3</u>	<u>\$ 126.2</u>	<u>\$ 149.1</u>
<b>Corporate and Other</b>				
Segment loss	\$ (18.5)	\$ (17.7)	\$ (55.7)	\$ (51.1)
Depreciation, amortization, and depletion	1.7	1.3	4.4	3.8
EBITDA	(16.8)	(16.4)	(51.3)	(47.3)
Hexacomb working capital adjustment	—	—	(0.7)	—
Acquisition and integration related costs	—	—	—	0.3
EBITDA excluding special items	<u>\$ (16.8)</u>	<u>\$ (16.4)</u>	<u>\$ (52.0)</u>	<u>\$ (47.0)</u>
<b>EBITDA</b>	<u>\$ 339.8</u>	<u>\$ 294.4</u>	<u>\$ 962.9</u>	<u>\$ 851.7</u>
<b>EBITDA excluding special items</b>	<u>\$ 363.9</u>	<u>\$ 298.9</u>	<u>\$ 991.0</u>	<u>\$ 861.5</u>

## Market Risk and Risk Management Policies

PCA is exposed to the impact of interest rate changes and changes in the market value of its financial instruments. We periodically enter into derivatives to minimize these risks, but not for trading purposes. We were not a party to any derivatives-based arrangements at September 30, 2017. For a discussion of derivatives and hedging activities, see Note 13, Derivative Instruments and Hedging Activities, of the Notes to Consolidated Financial Statements in “Part II, Item 8. Financial Statements and Supplementary Data” of our 2016 Annual Report on Form 10-K.

The interest rates on approximately 63% of PCA’s debt are fixed. A one percent increase in interest rates related to variable-rate debt would have resulted in an increase in interest expense and a corresponding decrease in income before taxes of approximately \$10 million annually.

## Off-Balance-Sheet Activities

The Company does not have any off-balance sheet arrangements as of September 30, 2017.

## Environmental Matters

There have been no material changes to the disclosure set forth in Item 7. “Management’s Discussion and Analysis of Financial Condition and Results of Operations - Environmental Matters” filed with our 2016 Annual Report on Form 10-K.

## 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, pensions and other postretirement benefits, goodwill and intangible assets, long-lived asset impairment, environmental liabilities and income taxes, 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.

PCA has included in its 2016 Annual Report on Form 10-K a discussion of its critical accounting policies and estimates which require management’s most difficult, subjective, or complex judgments used in the preparation of its consolidated financial statements. PCA has not had any changes to these critical accounting estimates during the first nine months of 2017.

## New and Recently Adopted Accounting Standards

For a listing of our new and recently adopted accounting standards, see Note 17, New and Recently Adopted Accounting Standards, of the Condensed Notes to Unaudited Quarterly Consolidated Financial Statements in “Part I, Item 1. Financial Statements” of this Form 10-Q.

## Forward-Looking Statements

Some of the statements in this Quarterly Report on Form 10-Q, and in particular, statements found in this Management’s Discussion and Analysis of Financial Condition and Results of Operations, that are not historical in nature are forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Forward-looking statements include statements about our expectations regarding our future liquidity, earnings, expenditures, and financial condition. These statements are often identified by the words “will,” “should,” “anticipate,” “believe,” “expect,” “intend,” “estimate,” “hope,” or similar expressions. These statements reflect management’s current views with respect to future events and are subject to risks and uncertainties. There are important factors that could cause actual results to differ materially from those in forward-looking statements, many of which are beyond our control. These factors, risks and uncertainties include the following:

- the impact of general economic conditions;
- the impact of acquired businesses and risks and uncertainties regarding operation, expected benefits and integration of such businesses;
- containerboard, corrugated products, and white paper general industry conditions, including competition, product demand, product pricing, and input costs;
- fluctuations in wood fiber and recycled fiber costs;
- fluctuations in purchased energy costs;
- the possibility of unplanned outages or interruptions at our principal facilities;
- the timing and amount of insurance recoveries relating to the DeRidder incident; and
- legislative or regulatory actions or requirements, particularly concerning environmental or tax matters.

Our actual results, performance or achievement could differ materially from those expressed in, or implied by, these forward-looking statements, and accordingly, we can give no assurances that any of the events anticipated by the forward-looking statements will transpire or occur, or if any of them do occur, what impact they will have on our results of operations or financial condition. Given these uncertainties, investors are cautioned not to place undue reliance on these forward-looking statements. We expressly disclaim any obligation to publicly revise any forward-looking statements that have been made to reflect the occurrence of events after the date hereof. For a discussion of other factors, risks and uncertainties that may affect our business, see Item 1A. Risk Factors included in our Annual Report on Form 10-K for the year ended December 31, 2016.

**Item 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK**

For a discussion of market risks related to PCA, see Part I, Item 2, “Management’s Discussion and Analysis of Financial Condition and Results of Operations - Market Risk and Risk Management Policies” in this Quarterly Report on Form 10-Q.

**Item 4. CONTROLS AND PROCEDURES**

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

Prior to filing this report, PCA completed an evaluation under the supervision and with the participation of PCA’s management, including PCA’s Chief Executive Officer and Chief Financial Officer, of the effectiveness of the design and operation of PCA’s disclosure controls and procedures as of September 30, 2017. The evaluation of PCA’s disclosure controls and procedures included a review of the controls’ objectives and design, PCA’s implementation of the controls, and the effect of the controls on the information generated for use in this report. Based on this evaluation, PCA’s Chief Executive Officer and Chief Financial Officer concluded that PCA’s disclosure controls and procedures were effective at the reasonable assurance level as of September 30, 2017.

**Changes in Internal Control over Financial Reporting**

On November 30, 2016, PCA acquired Columbus Container, Inc. (“Columbus Container”). We are currently in the process of evaluating and integrating Columbus Container’s controls over financial reporting which may result in changes or additions to PCA’s internal control over financial reporting. Under guidelines established by the SEC, companies are permitted to exclude acquisitions from their assessment of internal control over financial reporting during the first year of an acquisition while integrating the acquired company. Except as may relate to the integration of the Columbus Container acquisition, there were no other changes in our internal control over financial reporting (as defined in Rule 13a-15(f) under the Exchange Act) that occurred during the most recent fiscal quarter ended September 30, 2017 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

**PART II  
OTHER INFORMATION**

**Item 1. LEGAL PROCEEDINGS**

The disclosure set forth under the caption "Legal Proceedings" in Note 18, Commitments, Guarantees, Indemnifications and Legal Proceedings, of the Condensed Notes to Unaudited Quarterly Consolidated Financial Statements in "Part I, Item 1. Financial Statements" of this Form 10-Q is incorporated herein by reference.

**Item 1A. RISK FACTORS**

There have been no material changes to the risk factors disclosed in "Part I, Item 1A. Risk Factors" in our Annual Report on Form 10-K for the year ended December 31, 2016.

**Item 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS**

The following table presents information related to our repurchases of common stock made under repurchase plans authorized by PCA's Board of Directors, and shares withheld to cover taxes on vesting of equity awards, during the three months ended September 30, 2017:

Issuer Purchases of Equity Securities				
Period	Total Number of Shares Purchased (a)	Average Price Paid Per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Approximate Dollar Value of Shares That May Yet Be Purchased Under the Plans or Programs (in millions)
July 1-31, 2017	1,136	\$ 112.11	—	\$ 193.0
August 1-31, 2017	73	109.62	—	193.0
September 1-30, 2017	—	—	—	193.0
Total	<u>1,209</u>	<u>\$ 111.96</u>	<u>—</u>	<u>\$ 193.0</u>

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

**Item 3. DEFAULTS UPON SENIOR SECURITIES**

None.

**Item 4. MINE SAFETY DISCLOSURES**

Not applicable.

**Item 5. OTHER INFORMATION**

None.

**Item 6. EXHIBITS**

<b>Exhibit Number</b>	<b>Description</b>
31.1	<a href="#">Certification of Chief Executive Officer, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.</a> †
31.2	<a href="#">Certification of Chief Financial Officer, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.</a> †
32	<a href="#">Certification of Chief Executive Officer and Chief Financial Officer Pursuant to 18 U.S.C. §1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.</a> †
101	The following financial information from Packaging Corporation of America's Quarterly Report on Form 10-Q for the quarter ended September 30, 2017, formatted in XBRL (eXtensible Business Reporting Language): (i) Consolidated Statements of Income and Comprehensive Income for the three and nine months ended September 30, 2017 and 2016, (ii) Consolidated Balance Sheets at September 30, 2017 and December 31, 2016, (iii) Consolidated Statements of Cash Flows for the nine months ended September 30, 2017 and 2016, and (iv) the Condensed Notes to Unaudited Quarterly Consolidated Financial Statements. †

† Filed herewith.

**SIGNATURES**

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

Packaging Corporation of America

/s/ MARK W. KOWLZAN

Mark W. Kowlzan

Chairman and Chief Executive Officer

/s/ ROBERT P. MUNDY

Robert P. Mundy

Senior Vice President and Chief Financial Officer

Date: November 3, 2017



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

I, Mark W. Kowlzan, certify that:

(1) I have reviewed this quarterly report on Form 10-Q of Packaging Corporation of America (PCA);

(2) Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

(3) Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of PCA as of, and for, the periods presented in this report;

(4) PCA's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for PCA and have:

a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to PCA, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

c) evaluated the effectiveness of PCA's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

d) disclosed in this report any change in PCA's internal control over financial reporting that occurred during PCA's most recent fiscal quarter (PCA's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, PCA's internal control over financial reporting; and

(5) PCA's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to PCA's auditors and the Audit Committee of PCA's Board of Directors (or persons performing the equivalent functions):

a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect PCA's ability to record, process, summarize and report financial information; and

b) any fraud, whether or not material, that involves management or other employees who have a significant role in PCA's internal control over financial reporting.

/s/ Mark W. Kowlzan

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Mark W. Kowlzan  
*Chairman and Chief Executive Officer*

Date: November 3, 2017

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

I, Robert P. Mundy, certify that:

(1) I have reviewed this quarterly report on Form 10-Q of Packaging Corporation of America (PCA);

(2) Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

(3) Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of PCA as of, and for, the periods presented in this report;

(4) PCA's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for PCA and have:

a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to PCA, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

c) evaluated the effectiveness of PCA's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

d) disclosed in this report any change in PCA's internal control over financial reporting that occurred during PCA's most recent fiscal quarter (PCA's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, PCA's internal control over financial reporting; and

(5) PCA's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to PCA's auditors and the Audit Committee of PCA's Board of Directors (or persons performing the equivalent functions):

a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect PCA's ability to record, process, summarize and report financial information; and

b) any fraud, whether or not material, that involves management or other employees who have a significant role in PCA's internal control over financial reporting.

/s/ Robert P. Mundy

Robert P. Mundy

*Senior Vice President and Chief Financial Officer*

Date: November 3, 2017

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

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I, Mark W. Kowlzan, Chief Executive Officer of Packaging Corporation of America (the “Company”), certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

(1) The Quarterly Report of the Company on Form 10-Q for the period ended September 30, 2017 fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in such Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ Mark W. Kowlzan

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Mark W. Kowlzan

*Chairman and Chief Executive Officer*

Date: November 3, 2017

I, Robert P. Mundy, Chief Financial Officer of Packaging Corporation of America (the “Company”), certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

(1) The Quarterly Report of the Company on Form 10-Q for the period ended September 30, 2017 fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in such Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ Robert P. Mundy

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Robert P. Mundy

*Senior Vice President and Chief Financial Officer*

Date: November 3, 2017