

**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 March 31, 2020

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)

36-4277050

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

1 North Field Court, Lake Forest, Illinois

(Address of Principal Executive Offices)

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 every Interactive Data File required to be submitted 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 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 Accelerated filer Emerging growth company
Non-accelerated filer Smaller reporting company

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 May 1, 2020 the Registrant had outstanding 94,842,778 shares of common stock, par value \$0.01 per share.

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

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, par value \$0.01 per share	PKG	New York Stock Exchange

Table of Contents

PART I

Item 1.	Financial Statements	1
Item 2.	Management's Discussion and Analysis of Financial Condition and Results of Operations	16
Item 3.	Quantitative and Qualitative Disclosures About Market Risk	24
Item 4.	Controls and Procedures	24

PART II

Item 1.	Legal Proceedings	25
Item 1A.	Risk Factors	25
Item 2.	Unregistered Sales of Equity Securities and Use of Proceeds	25
Item 3.	Defaults Upon Senior Securities	26
Item 4.	Mine Safety Disclosures	26
Item 5.	Other Information	26
Item 6.	Exhibits	27

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. 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 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	
	March 31,	
	2020	2019
Statements of Income:		
Net sales	\$ 1,708.7	\$ 1,733.7
Cost of sales	(1,343.7)	(1,312.3)
Gross profit	365.0	421.4
Selling, general and administrative expenses	(145.9)	(140.0)
Other expense, net	(10.0)	(6.0)
Income from operations	209.1	275.4
Non-operating pension income (expense)	0.6	(2.0)
Interest expense, net	(19.6)	(24.1)
Income before taxes	190.1	249.3
Provision for income taxes	(48.4)	(62.5)
Net income	\$ 141.7	\$ 186.8
Net income per common share:		
Basic	\$ 1.50	\$ 1.98
Diluted	\$ 1.49	\$ 1.97
Dividends declared per common share	\$ 0.79	\$ 0.79
Statements of Comprehensive Income:		
Net income	\$ 141.7	\$ 186.8
Other comprehensive income, net of tax:		
Reclassification adjustments to cash flow hedges included in net income, net of tax of \$0.0 million and \$0.3 million	—	1.0
Changes in unrealized losses on marketable debt securities, net of tax of \$0.1 million and \$0.0 million	(0.2)	—
Amortization of pension and postretirement plans actuarial loss and prior service cost, net of tax of \$0.9 million and \$0.8 million	2.7	2.3
Other comprehensive income	2.5	3.3
Comprehensive income	\$ 144.2	\$ 190.1

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)

	March 31, 2020	December 31, 2019
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 764.0	\$ 679.5
Short-term marketable debt securities	92.3	87.9
Accounts receivable, net of allowance for credit losses and customer deductions of \$13.3 million and \$12.6 million as of March 31, 2020, and December 31, 2019, respectively	879.5	845.6
Inventories	809.9	794.1
Prepaid expenses and other current assets	67.9	44.8
Federal and state income taxes receivable	—	26.5
Total current assets	<u>2,613.6</u>	<u>2,478.4</u>
Property, plant, and equipment, net	3,138.6	3,151.7
Goodwill	918.7	918.7
Other intangible assets, net	329.2	338.8
Operating lease right-of-use assets	235.3	234.3
Long-term marketable debt securities	57.1	58.1
Other long-term assets	55.1	55.8
Total assets	<u>\$ 7,347.6</u>	<u>\$ 7,235.8</u>
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Operating lease obligations	\$ 64.3	\$ 62.6
Finance lease obligations	1.6	1.5
Accounts payable	389.0	351.9
Dividends payable	77.0	76.6
Accrued liabilities	178.8	217.5
Accrued interest	30.2	13.7
Federal and state income taxes payable	3.7	—
Total current liabilities	<u>744.6</u>	<u>723.8</u>
Long-term liabilities:		
Long-term debt	2,477.4	2,476.8
Operating lease obligations	177.2	177.6
Finance lease obligations	15.6	16.0
Deferred income taxes	354.3	340.1
Compensation and benefits	372.3	375.5
Other long-term liabilities	56.3	55.0
Total long-term liabilities	<u>3,453.1</u>	<u>3,441.0</u>
Commitments and contingent liabilities		
Stockholders' equity:		
Common stock, par value \$0.01 per share, 300.0 million shares authorized, 94.8 million and 94.7 million shares issued as of March 31, 2020 and December 31, 2019, respectively	0.9	0.9
Additional paid in capital	534.9	524.8
Retained earnings	2,771.1	2,704.8
Accumulated other comprehensive loss	(157.0)	(159.5)
Total stockholders' equity	<u>3,149.9</u>	<u>3,071.0</u>
Total liabilities and stockholders' equity	<u>\$ 7,347.6</u>	<u>\$ 7,235.8</u>

See accompanying condensed notes to unaudited quarterly consolidated financial statements.

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

	Three Months Ended	
	March 31,	
	2020	2019
Cash Flows from Operating Activities:		
Net income	\$ 141.7	\$ 186.8
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation, depletion, and amortization of intangibles	100.3	94.8
Amortization of deferred financing costs	0.6	2.2
Share-based compensation expense	10.1	6.9
Deferred income tax provision	13.5	18.8
Pension and post-retirement benefits expense, net of contributions	1.0	7.3
Other, net	5.5	4.2
Changes in operating assets and liabilities:		
Increase in assets —		
Accounts receivable	(34.0)	(28.4)
Inventories	(15.7)	(36.1)
Prepaid expenses and other current assets	(23.0)	(19.7)
Increase (decrease) in liabilities —		
Accounts payable	28.5	13.2
Accrued liabilities	(22.0)	(44.0)
Federal and state income taxes payable / receivable	30.2	30.0
Net cash provided by operating activities	236.7	236.0
Cash Flows from Investing Activities:		
Additions to property, plant, and equipment	(70.5)	(78.8)
Additions to other long term assets	(2.7)	(1.3)
Purchases of marketable debt securities, net of redemptions	(3.9)	—
Proceeds from disposals	0.1	—
Net cash used for investing activities	(77.0)	(80.1)
Cash Flows from Financing Activities:		
Repayments of debt and finance lease obligations	(0.4)	(0.3)
Common stock dividends paid	(74.8)	(74.7)
Net cash used for financing activities	(75.2)	(75.0)
Net increase in cash and cash equivalents	84.5	80.9
Cash and cash equivalents, beginning of period	679.5	361.5
Cash and cash equivalents, end of period	\$ 764.0	\$ 442.4

See accompanying condensed notes to unaudited quarterly consolidated financial statements.

Packaging Corporation of America

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

	Common Stock		Additional Paid in Capital	Retained Earnings	Accumulated Other Comprehensive Loss	Total Stockholders' Equity
	Shares	Amount				
Balance at January 1, 2020	94,655	\$ 0.9	\$ 524.8	\$ 2,704.8	\$ (159.5)	\$ 3,071.0
Common stock withheld and retired to cover taxes on vested stock awards	(1)	—	—	—	—	—
Common stock dividends declared	—	—	—	(75.3)	—	(75.3)
Share-based compensation	194	—	10.1	—	—	10.1
Other	—	—	—	(0.1)	—	(0.1)
Comprehensive income	—	—	—	141.7	2.5	144.2
Balance at March 31, 2020	<u>94,848</u>	<u>\$ 0.9</u>	<u>\$ 534.9</u>	<u>\$ 2,771.1</u>	<u>\$ (157.0)</u>	<u>\$ 3,149.9</u>

	Common Stock		Additional Paid in Capital	Retained Earnings	Accumulated Other Comprehensive Loss	Total Stockholders' Equity
	Shares	Amount				
Balance at January 1, 2019	94,497	\$ 0.9	\$ 494.5	\$ 2,315.8	\$ (138.8)	\$ 2,672.4
Common stock dividends declared	—	—	—	(74.8)	—	(74.8)
Share-based compensation	(3)	—	6.9	—	—	6.9
Comprehensive income	—	—	—	186.8	3.3	190.1
Balance at March 31, 2019	<u>94,494</u>	<u>\$ 0.9</u>	<u>\$ 501.4</u>	<u>\$ 2,427.8</u>	<u>\$ (135.5)</u>	<u>\$ 2,794.6</u>

See accompanying 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. 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 containerboard and corrugated packaging products. The Paper segment manufactures and sells a range of communication-based papers. 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 18, Segment Information.

The consolidated financial statements of PCA as of March 31, 2020 and for the three months ended March 31, 2020 and 2019 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 notes required by accounting principles generally accepted in the United States for complete audited financial statements. Operating results for the three months ended March 31, 2020 are not necessarily indicative of the results that may be expected for the year ending December 31, 2020. These consolidated financial statements should be read in conjunction with our Annual Report on Form 10-K for the year ended December 31, 2019.

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

2. New and Recently Adopted Accounting Standards

Recently Adopted Accounting Standards

Effective January 1, 2020, we adopted Accounting Standards Update ("ASU") 2016-13, *Financial Instruments – Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments*. ASU 2016-13 introduces the Current Expected Credit Losses ("CECL") framework for evaluating credit losses on financial instruments measured at amortized cost. ASU 2016-13 was applied using the modified retrospective method, and as a result, amounts recorded prior to January 1, 2020 have not been retrospectively restated. This new framework requires entities to incorporate forward-looking information into their estimate of current expected credit loss as of each reporting date. Although available-for-sale ("AFS") debt securities are not within the scope of the new CECL framework, the ASU includes an amended impairment model for evaluating losses related to AFS debt securities. The guidance in this update also includes enhanced requirements for disclosures related to credit loss estimates.

Prior to adoption of the new standard, the Company already incorporated forward-looking information into its estimate of credit losses for trade receivables. Due to the short duration of the Company's trade receivables, the adoption of ASU 2016-13 did not have a material impact on trade receivables. The adoption of ASU 2016-13 also did not have a material impact on the Company's AFS marketable debt securities, as the Company only invests in highly-rated AFS marketable debt securities. Overall, the adoption of ASU 2016-13 did not have a material impact on the Company's financial condition, results of operations or cash flow for the period ended March 31, 2020.

Effective January 1, 2020, the Company adopted ASU 2018-13, *Fair Value Measurement (Topic 820): Disclosure Framework – Changes to the Disclosure Requirements for Fair Value Measurement*. ASU 2018-13 removes or modifies certain disclosure requirements and adds additional requirements to improve the usefulness of the fair value measurement disclosure for financial statement users. Certain new requirements of ASU 2018-13 are required to be applied prospectively for the first interim period of the initial year of adoption. However, the modifications and removal of certain information needs to be applied retrospectively. The adoption of this Update did not have a significant impact on the Company's related disclosures as reflected in this Quarterly Report on Form 10-Q.

New Accounting Standards Not Yet Adopted

In March 2020, the FASB issued ASU 2020-04, *Reference Rate Reform (Topic 848): Facilitation of the Effects of Reference Rate Reform on Financial Reporting*. ASU 2020-04 provides optional guidance for a limited period of time to ease the potential burden in accounting for, or recognizing the effects of, reference rate reform on financial reporting. The amendments in this Update are elective and apply to all entities, subject to meeting certain criteria, that have contracts, hedging relationships, and other transactions that reference LIBOR or another reference rate expected to be discontinued because of reference rate reform. Companies can apply the ASU immediately, but the guidance will only be available until December 31, 2022. The Company is currently evaluating the impact of this guidance, but does not expect the guidance to have a significant impact on its related disclosures.

In August 2018, the FASB issued ASU 2018-14, *Compensation – Retirement Benefits – Defined Benefit Plans – General* (Subtopic 715-20): *Disclosure Framework – Changes to the Disclosure Requirements for Defined Benefit Plans*. ASU 2018-14 removes certain disclosures that are not considered cost beneficial, clarifies certain required disclosures and adds additional disclosures. The ASU is effective for annual periods beginning after December 31, 2020, with early adoption permitted. The amendments in ASU 2018-14 would need to be applied on a retrospective basis. The Company is currently evaluating the impact of this guidance, but does not expect the guidance will have a significant impact on its related disclosures.

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

3. Revenue

Revenue Recognition

Revenue is recognized when control of the promised goods or services is transferred to customers in an amount that reflects the consideration expected to be received in exchange for those goods or services. Sales, value added, and other taxes collected concurrently with revenue-producing activities are excluded from revenue.

The following table presents our revenues disaggregated by product line (dollars in millions):

	Three Months Ended March 31,	
	2020	2019
Packaging	\$ 1,467.5	\$ 1,477.6
Paper	217.4	239.7
Corporate and Other	23.8	16.4
Total revenue	<u>\$ 1,708.7</u>	<u>\$ 1,733.7</u>

Packaging Revenue

Our containerboard mills produce linerboard and corrugating medium which are papers primarily used in the production of corrugated products. The majority of our containerboard production is used internally by our corrugated products manufacturing facilities. The remaining containerboard is sold to outside domestic and export customers. Our corrugated products manufacturing plants produce a wide variety of corrugated packaging products and retail merchandise displays. We sell corrugated products to national, regional and local customers, which are broadly diversified across industries and geographic locations.

The Company recognizes revenue for its packaging products when performance obligations under the terms of a contract with a customer are satisfied. This occurs with the transfer of control of our products at a specific point in time. Based on our express terms and conditions of the sale of products to our customers, as well as terms included in contractual arrangements with our customers, we do not have an enforceable right of payment that includes a reasonable profit throughout the duration of the contract for products that do not have an alternative use. Revenue is recognized when the product is shipped from the mill or from our manufacturing facility to our customer. Certain customers may receive volume-based incentives, which are accounted for as variable consideration. We estimate these amounts based on the expected amount to be provided to customers and reduce revenue recognized.

Certain customers receive a portion of their packaging products as consigned inventory with billing triggered once the customer uses or consumes the designated product. Prior to invoicing, these amounts are handled as unbilled receivables. Total unbilled receivables, which are immaterial in amount, are included in the accounts receivable financial statement caption.

Paper Revenue

We manufacture and sell a range of communication-based papers. Communication papers consist of cut-size office papers, and printing and converting papers.

The Company recognizes revenue for its paper products when performance obligations under the terms of a contract with a customer are satisfied. This occurs with the transfer of control of our products at a specific point in time. Revenue is recognized when the product is shipped from the mill or from our manufacturing facility or distribution center to our customer. Certain customers may receive volume-based incentives, which are accounted for as variable consideration. We estimate these amounts based on the expected amount to be provided to customers and reduce revenue recognized.

Corporate and Other Revenue

Revenue in this segment primarily relates to Louisiana Timber Procurement Company, L.L.C. (LTP), a variable-interest entity that is 50% owned by PCA and 50% owned by Boise Cascade Company (Boise Cascade). 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. See Note 17, Transactions With Related Parties, for more information related to LTP.

The Company recognizes revenue within this segment when performance obligations under the terms of a contract with a customer are satisfied. This occurs with the transfer of control of our products at a specific point in time.

Practical Expedients and Exemption

Shipping and handling fees billed to a customer are recorded on a gross basis in "Net sales" with the corresponding shipping and handling costs included in "Cost of sales" in the concurrent period as the revenue is recorded. We expense sales commissions when incurred because the amortization period is one year or less. Sales commissions are recorded in "Selling, general, and administrative expenses".

We do not disclose the value of unsatisfied performance obligations for contracts with an original expected duration of one year or less.

4. 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):

	Three Months Ended	
	March 31,	
	2020	2019
Numerator:		
Net income	\$ 141.7	\$ 186.8
Less: Distributed and undistributed earnings allocated to participating securities	(1.2)	(1.4)
Net income attributable to common shareholders	<u>\$ 140.5</u>	<u>\$ 185.4</u>
Denominator:		
Weighted average basic common shares outstanding	93.9	93.7
Effect of dilutive securities	0.4	0.3
Weighted average diluted common shares outstanding	<u>94.3</u>	<u>94.0</u>
Basic income per common share	\$ 1.50	\$ 1.98
Diluted income per common share	\$ 1.49	\$ 1.97

5. Other Expense, Net

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

	Three Months Ended	
	March 31,	
	2020	2019
Asset disposals and write-offs	\$ (6.0)	\$ (4.3)
Facilities closure and other costs (a)	(0.4)	—
Wallula mill restructuring (b)	—	(0.4)
Other	(3.6)	(1.3)
Total	<u>\$ (10.0)</u>	<u>\$ (6.0)</u>

(a) Includes charges consisting of closure costs related to corrugated products facilities.

(b) Includes charges related to the 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 produce virgin kraft linerboard.

6. Income Taxes

For the three months ended March 31, 2020 and 2019, we recorded \$48.4 million and \$62.5 million of income tax expense and had an effective tax rate of 25.5% and 25.1%, respectively. The increase in our effective tax rate for the three months ended March 31, 2020 compared with the same period in 2019 was primarily due to higher employee compensation related impacts from the elimination of the performance based compensation exclusion in tax reform and reduced benefit associated with Foreign Derived Intangible Income.

Our effective tax rate may differ from the federal statutory income tax rate of 21.0% due primarily to the effect of state and local income taxes. During the three months ended March 31, 2020 and 2019, cash paid for taxes, net of refunds received, was \$4.7 million and \$13.7 million, respectively. The decrease in cash tax payments between the periods is primarily due to lower taxable income.

During the three months ended March 31, 2020, there were no significant changes to our uncertain tax positions. For more information, see Note 8, Income Taxes, of the Notes to Consolidated Financial Statements in “Part II, Item 8. Financial Statements and Supplementary Data” of our 2019 Annual Report on Form 10-K.

7. 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):

	March 31, 2020	December 31, 2019
Raw materials	\$ 269.6	\$ 271.5
Work in process	12.9	11.0
Finished goods	220.2	207.7
Supplies and materials	307.2	303.9
Inventories	<u>\$ 809.9</u>	<u>\$ 794.1</u>

8. Property, Plant, and Equipment

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

	March 31, 2020	December 31, 2019
Land and land improvements	\$ 177.8	\$ 177.5
Buildings	844.7	837.4
Machinery and equipment	5,742.6	5,727.4
Construction in progress	205.8	174.0
Other	84.0	81.5
Property, plant and equipment, at cost	7,054.9	6,997.8
Less accumulated depreciation	(3,916.3)	(3,846.1)
Property, plant, and equipment, net	<u>\$ 3,138.6</u>	<u>\$ 3,151.7</u>

Depreciation expense for the three months ended March 31, 2020 and 2019 was \$89.8 million and \$85.2 million, respectively. We did not recognize any incremental depreciation expense during the three months ended March 31, 2020. We recognized \$0.2 million of incremental depreciation expense during the three months ended March 31, 2019 as a result of shortening the useful lives of certain assets primarily related to the Wallula mill restructuring.

At March 31, 2020 and December 31, 2019, purchases of property, plant, and equipment included in accounts payable were \$35.3 million and \$26.8 million, respectively.

9. 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 both March 31, 2020 and December 31, 2019, we had \$863.5 million of goodwill recorded in our Packaging segment and \$55.2 million of goodwill recorded in our Paper segment.

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):

	March 31, 2020			December 31, 2019		
	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	9.7	\$ 503.8	\$ 189.2	10.0	\$ 503.8	\$ 180.2
Trademarks and trade names	9.4	34.8	21.1	9.5	34.8	20.6
Other	1.8	4.3	3.4	2.1	4.3	3.3
Total intangible assets (excluding goodwill)	9.7	<u>\$ 542.9</u>	<u>\$ 213.7</u>	9.9	<u>\$ 542.9</u>	<u>\$ 204.1</u>

During the three months ended March 31, 2020 and 2019, amortization expense was \$9.6 million and \$9.5 million, respectively.

10. Accrued Liabilities

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

	March 31,	December 31,
	2020	2019
Compensation and benefits	\$ 85.0	\$ 124.5
Medical insurance and workers' compensation	26.3	26.3
Customer volume discounts and rebates	24.0	27.9
Franchise, property, sales and use taxes	19.1	15.3
Environmental liabilities and asset retirement obligations	5.1	5.6
Severance, retention, and relocation	4.1	3.5
Other	15.2	14.4
Total	<u>\$ 178.8</u>	<u>\$ 217.5</u>

11. Debt

For both the three months ended March 31, 2020 and 2019, cash payments for interest were \$7.3 million.

Included in interest expense, net is the amortization of financing costs, and, for 2019 only, the amortization of treasury lock settlements. The remaining balances of the treasury lock settlements were written off in connection with the debt refinancing completed in December 2019. For the three months ended March 31, 2020 and 2019, amortization of financing costs was \$0.5 million and \$0.7 million, respectively. For the three months ended March 31, 2019, amortization of treasury lock settlements was \$1.3 million.

At March 31, 2020, we had \$2,493.2 million of fixed-rate senior notes outstanding. The fair value of our fixed-rate debt was estimated to be \$2,615.4 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 2019 Annual Report on Form 10-K.

For more information on our long-term debt and interest rates on that debt, see Note 11, Debt, of the Notes to Consolidated Financial Statements in "Part II, Item 8. Financial Statements and Supplementary Data" of our 2019 Annual Report on Form 10-K.

12. Cash, Cash Equivalents, and Marketable Debt Securities

The following table shows the Company's cash and available-for-sale (AFS) debt securities by major asset category at March 31, 2020 and December 31, 2019 (in millions):

	March 31, 2020						
	Adjusted Cost Basis	Unrealized Gain	Unrealized Loss	Fair Value	Cash and Cash Equivalents	Short-Term Marketable Debt Securities	Long-Term Marketable Debt Securities
Cash and cash equivalents	\$ 763.2	\$ —	\$ —	\$ 763.2	\$ 763.2	\$ —	\$ —
Level 1 (a):							
Money market funds	0.3	—	—	0.3	0.3	—	—
U.S. Treasury securities	30.7	0.4	—	31.1	0.5	13.8	16.8
Subtotal	31.0	0.4	—	31.4	0.8	13.8	16.8
Level 2 (b):							
Certificates of deposit	3.9	—	—	3.9	—	3.9	—
Commercial paper	1.8	—	—	1.8	—	1.8	—
U.S. government agency securities	5.6	—	—	5.6	—	3.0	2.6
Corporate debt securities	108.2	0.1	(0.8)	107.5	—	69.8	37.7
Subtotal	119.5	0.1	(0.8)	118.8	—	78.5	40.3
Total	\$ 913.7	\$ 0.5	\$ (0.8)	\$ 913.4	\$ 764.0	\$ 92.3	\$ 57.1
	December 31, 2019						
	Adjusted Cost Basis	Unrealized Gain	Unrealized Loss	Fair Value (c)	Cash and Cash Equivalents	Short-Term Marketable Debt Securities	Long-Term Marketable Debt Securities
Cash and cash equivalents	\$ 675.6			\$ 675.6	\$ 675.6	\$ —	\$ —
Level 1 (a):							
Money market funds	0.1	—	—	0.1	0.1	—	—
U.S. Treasury securities	27.1	—	—	27.1	3.1	11.5	12.5
Subtotal	27.2			27.2	3.2	11.5	12.5
Level 2 (b):							
Certificates of deposit	3.9	—	—	3.9	—	3.9	—
Commercial paper	5.6	—	—	5.6	0.7	4.9	—
U.S. government agency securities	7.0	—	—	7.0	—	3.0	4.0
Corporate debt securities	106.2	—	—	106.2	—	64.6	41.6
Subtotal	122.7			122.7	0.7	76.4	45.6
Total	\$ 825.5	\$ —	\$ —	\$ 825.5	\$ 679.5	\$ 87.9	\$ 58.1

(a) Valuations based on quoted prices for identical assets or liabilities in active markets.

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

(c) Unrealized gains and losses were insignificant as of December 31, 2019. Therefore, the fair value approximates the adjusted cost basis for each major asset category.

For the three months ended March 31, 2020, net realized gains and losses on the sales and maturities of certain marketable debt securities were insignificant.

The Company invests in highly rated securities, with the primary objective of minimizing the potential risk of principal loss. The Company's investment policy requires securities to be investment grade and limits the amount of credit exposure to any one issuer. The maturities of the Company's long-term marketable debt securities generally range from one to two years.

Fair values were determined for each individual marketable debt security in the investment portfolio. The Company evaluates each individual security to determine whether the security is impaired. An impairment exists when a security's fair value is below its amortized cost basis. The Company reviews each impaired investment to determine if the decline in fair value below the amortized cost basis resulted from a credit loss or other factors. If the impairment of a marketable debt security (or a portion of the impairment) is due to credit factors of the issuer, the Company records an allowance for credit losses. Non-credit related impairments are recorded in Other Comprehensive Income (OCI). PCA reviews factors such as the duration and extent to which the fair value of the marketable debt security is less than its cost, the financial condition of the issuer and any changes thereto, the general market condition in which the issuer operates, and ability of the issuer to make all required payments of the marketable debt security. PCA utilizes various credit rating services to provide information on the impaired investment of a particular issuer.

As of March 31, 2020 and December 31, 2019, we do not consider any of our marketable debt securities to be other-than-temporarily impaired. Any impairment existing at March 31, 2020 or December 31, 2019 is not related to credit losses. Therefore, we have not recorded an allowance for credit losses related to our marketable debt securities. All unrealized gains and losses were recorded in OCI.

The following table provides information about the Company's marketable debt securities that have been in a continuous loss position as of March 31, 2020 and December 31, 2019 (in millions, except number of marketable debt securities in a loss position):

	March 31, 2020			December 31, 2019		
	Fair Value of Marketable Debt Securities	Number of Marketable Debt Securities in a Loss Position	Unrealized Losses	Fair Value of Marketable Debt Securities	Number of Marketable Debt Securities in a Loss Position	Unrealized Losses
Certificates of deposit	\$ 1.7	2	\$ —	\$ —	—	\$ —
U.S. Treasury securities	—	—	—	14.0	9	—
U.S. government agency securities	1.1	1	—	0.8	1	—
Corporate debt securities	102.1	105	(0.8)	63.3	61	—
	<u>\$ 104.9</u>	<u>108</u>	<u>\$ (0.8)</u>	<u>\$ 78.1</u>	<u>71</u>	<u>\$ —</u>

13. 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 March 31,	
	2020	2019
Service cost	\$ 5.9	\$ 6.2
Interest cost	10.0	11.7
Expected return on plan assets	(14.2)	(13.0)
Net amortization of unrecognized amounts		
Prior service cost	1.1	1.6
Actuarial loss	2.7	1.7
Net periodic benefit cost	<u>\$ 5.5</u>	<u>\$ 8.2</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 months ended March 31, 2020 and 2019, payments to our nonqualified pension plans were insignificant. For the three months ended March 31, 2020 and 2019, we made contributions of \$3.9 million and \$0.7 million, respectively, to our qualified pension plans. We expect to contribute at least the estimated required minimum contributions to our qualified plans of approximately \$19.8 million in 2020.

For the three months ended March 31, 2020 and 2019, the net periodic benefit cost for our postretirement plans was insignificant.

14. 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. On February 25, 2020, our board of directors approved and, on May 5, 2020, our stockholders approved, the amendment and restatement of the plan. The amendment extends the plan's term to May 5, 2030 and increases the number of shares of common stock available for issuance under the plan by 1,400,000 shares. The total number of shares authorized for past and future awards will be 11,950,000 shares.

As of March 31, 2020, 0.1 million shares were available for future grants under the current 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 three months ended March 31, 2020:

	Restricted Stock		Performance Units	
	Shares	Weighted Average Grant-Date Fair Value	Shares	Weighted Average Grant-Date Fair Value
Outstanding at January 1, 2020	716,952	\$ 94.50	323,147	\$ 96.56
Granted	197,470	94.28	108,415	96.63
Vested	(2,353)	86.24	—	—
Forfeitures	(3,092)	96.12	—	—
Outstanding at March 31, 2020	908,977	\$ 94.47	431,562	\$ 96.58

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):

	Three Months Ended March 31,	
	2020	2019
Restricted stock	\$ 8.0	\$ 4.9
Performance units	2.1	2.0
Total share-based compensation expense	10.1	6.9
Income tax benefit	(2.5)	(1.7)
Share-based compensation expense, net of tax benefit	\$ 7.6	\$ 5.2

The fair value of restricted stock is determined based on the closing price of the Company's stock on the grant date. Compensation expense, net of estimated forfeitures, is recorded over the requisite service period. As PCA's Board of Directors has the ability to accelerate the vesting of these awards upon an employee's retirement, the Company accelerates the recognition of compensation expense for certain employees approaching normal retirement age.

Performance unit awards are earned based on the achievement of defined performance rankings of Return on Invested Capital (ROIC) or Total Shareholder Return (TSR) compared to ROIC and TSR for peer companies. For performance unit awards made in 2020 and 2019, in terms of grant date value, 50% used TSR as the performance measure and 50% used ROIC as the performance measure. The ROIC component of performance unit awards is valued based on the closing price of the stock on the grant date. As the ROIC component contains a performance condition, compensation expense, net of estimated forfeitures, is recorded over the requisite service period based on the most probable number of awards expected to vest. The TSR component of performance unit awards is valued using a Monte Carlo simulation as the TSR component contains a market condition. The Monte Carlo simulation estimates the fair value of the TSR component based on the expected term of the award, a risk-free interest rate, expected dividends, and expected volatility of the Company's common stock and the common stock of the peer companies. Compensation expense is recorded ratably over the expected term of the award.

The unrecognized compensation expense for all share-based awards at March 31, 2020 was as follows (dollars in millions):

	March 31, 2020	
	Unrecognized Compensation Expense	Remaining Weighted Average Recognition Period (in years)
Restricted stock	\$ 37.6	3.0
Performance units	25.6	2.7
Total unrecognized share-based compensation expense	\$ 63.2	2.9

15. Stockholders' Equity

Dividends

During the three months ended March 31, 2020, we paid \$74.8 million of dividends to shareholders. On February 25, 2020, PCA's Board of Directors declared a regular quarterly cash dividend of \$0.79 per share of common stock, which was paid on April 15, 2020 to shareholders of record as of March 13, 2020. The dividend payment was \$74.9 million.

Repurchases of Common Stock

On February 25, 2016, PCA announced that its Board of Directors authorized the repurchase of \$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 under this authority during the three months ended March 31, 2020. At March 31, 2020, \$193.0 million of the authorized amount remained available for repurchase of the Company's common stock.

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:

	Foreign Currency Translation Adjustments	Unrealized Loss on Foreign Exchange Contracts	Unrealized Loss on Marketable Debt Securities	Unfunded Employee Benefit Obligations	Total
Balance at January 1, 2020	\$ (0.4)	\$ (0.2)	\$ —	\$ (158.9)	\$ (159.5)
Other comprehensive income before reclassifications, net of tax			(0.2)	—	(0.2)
Amounts reclassified from AOCI, net of tax	—	—	—	2.7	2.7
Balance at March 31, 2020	\$ (0.4)	\$ (0.2)	\$ (0.2)	\$ (156.2)	\$ (157.0)

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 March 31,		
	2020	2019	
Unrealized loss on treasury locks, net (a)	\$ —	\$ (1.3)	See (a) below
		0.3	Tax benefit
	\$ —	\$ (1.0)	Net of tax
Unfunded employee benefit obligations (b)			
Amortization of prior service costs	\$ (1.0)	\$ (1.5)	See (b) below
Amortization of actuarial losses	(2.6)	(1.6)	See (b) below
	(3.6)	(3.1)	Total before tax
	0.9	0.8	Tax benefit
	\$ (2.7)	\$ (2.3)	Net of tax

- (a) For 2019, 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 remaining balances of the treasury locks were written off as a result of the Company's November 2019 debt refinancing. For a discussion of treasury lock derivative instrument activity, see Note 16, Derivative Instruments and Hedging Activities, of the Notes to Consolidated Financial Statements in "Part II, Item 8. Financial Statements and Supplementary Data" of our 2019 Annual Report on Form 10-K.
- (b) These AOCI components are included in the computation of net pension and postretirement benefit costs. See Note 13, Employee Benefit Plans and Other Postretirement Benefits, for additional information.

16. Concentrations of Risk

Our Paper segment has 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 5% and 7% of our total Company sales revenue for the three month periods ended March 31, 2020 and 2019, respectively, and approximately 43% and 52% of our Paper segment sales revenue for both of those periods, respectively. For full year 2019, sales to Office Depot represented 50% of our Paper segment sales. At March 31, 2020 and December 31, 2019, we had \$56.8 million and \$76.2 million of accounts receivable due from Office Depot, respectively, which represents 6% and 9% of our total Company accounts receivable, respectively.

17. 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 non-inventory working capital items) on our Consolidated Balance Sheets were \$5.0 million at March 31, 2020 and \$3.9 million at December 31, 2019. During the three months ended March 31, 2020 and 2019, we recorded \$22.6 million and \$20.0 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 March 31, 2020 and 2019, fiber purchases from related parties were \$4.2 million and \$4.4 million, respectively. 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.

18. 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, non-operating pension expense, and income taxes. For certain 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 March 31, 2020	Sales, net			Operating Income (Loss)
	Trade	Intersegment	Total	
Packaging	\$ 1,465.4	\$ 2.1	\$ 1,467.5	\$ 199.8 (a)
Paper	217.4	—	217.4	32.5 (a)
Corporate and Other	25.9	34.3	60.2	(23.2)
Intersegment eliminations	—	(36.4)	(36.4)	—
	<u>\$ 1,708.7</u>	<u>\$ —</u>	<u>\$ 1,708.7</u>	<u>209.1</u>
Non-operating pension income				0.6
Interest expense, net				(19.6)
Income before taxes				<u>\$ 190.1</u>

Three Months Ended March 31, 2019	Sales, net			Operating Income (Loss)
	Trade	Intersegment	Total	
Packaging	\$ 1,470.8	\$ 6.8	\$ 1,477.6	\$ 249.6 (b)
Paper	239.7	—	239.7	45.6 (b)
Corporate and Other	23.2	33.5	56.7	(19.8)
Intersegment eliminations	—	(40.3)	(40.3)	—
	<u>\$ 1,733.7</u>	<u>\$ —</u>	<u>\$ 1,733.7</u>	<u>275.4</u>
Non-operating pension expense				(2.0)
Interest expense, net				(24.1)
Income before taxes				<u>\$ 249.3</u>

(a) The three months ended March 31, 2020 include the following:

1. \$0.8 million of incremental, out-of-pocket costs related to COVID-19, including supplies, cleaning and sick pay.
2. \$0.4 million of charges consisting of closure costs related to corrugated products facilities.

(b) Includes \$0.6 million of charges related to the 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 produce virgin kraft linerboard.

19. 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 11, Debt, and Note 21, 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 2019 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 March 31, 2020,

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 involving the decedents and other allegedly injured parties, alleging negligence on the part of the Company and claiming compensatory and punitive damages. The Company is vigorously defending these lawsuits. The Company believes that these suits are covered by its liability insurance policies, subject to an aggregate \$1.0 million deductible. All 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 cooperated with investigations from the U.S. Occupational Health and Safety Administration (OSHA), the U.S. Chemical Safety Board (CSB) and the U.S. Environmental Protection Agency (EPA). The U.S. Chemical Safety Board completed its investigation and issued its report during the second quarter of 2018. The Company settled with OSHA during the second quarter of 2018 and paid approximately \$40,000 in penalties for citations. The EPA investigation is ongoing.

Environmental Matters

On August 8, 2019, the EPA issued a notice of violation (NOV) alleging violations of the Clean Air Act, resulting from an inspection of our Wallula, Washington mill in September 2018. PCA denies the violations set forth in the NOV and has requested that the EPA's Office of Air Quality Planning and Standards provide an applicability determination to clarify that the relevant operations of PCA have not violated the regulations at issue in the NOV. While we cannot predict with certainty the ultimate resolution of this matter, we believe that we have a meritorious position that our operations have not violated the Clean Air Act, that we have taken appropriate action to address the matters raised by the EPA in the NOV, and that this matter will not result in a material adverse effect on our financial condition, results of operations, or cash flows.

Legal Proceedings

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

20. Subsequent Events

On April 27, 2020, Packaging Corporation of America approved and announced to affected employees a plan for the closure of its corrugated products production facility located in San Lorenzo, California. The San Lorenzo facility was acquired as part of the Boise acquisition in 2013 and was part of the Tharco stock box business. The majority of the plant's equipment will be transferred to other PCA facilities and approximately 20% of the San Lorenzo customer business will be absorbed into other PCA plants.

The last date of production at the plant is expected to be in June 2020. The closure is estimated to result in pre-tax: (1) total cash severance and other cash shutdown costs of approximately \$14 to \$18 million; and (2) total non-cash charges of approximately \$9 to \$13 million, which are primarily asset impairment and accelerated depreciation charges. PCA expects to record \$21 to \$25 million of charges in the second quarter of 2020.

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 2019 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 third largest producer of containerboard products and the third largest producer of uncoated freesheet paper in North America. We operate six containerboard mills, two 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 uncoated freesheet 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 2019 Annual Report on Form 10-K.

Executive Summary

First quarter net sales were \$1.71 billion in 2020 and \$1.73 billion in 2019. We reported \$142 million of net income, or \$1.49 per diluted share, during the first quarter of 2020, compared to \$187 million, or \$1.97 per diluted share, during the same period in 2019. Net income included \$1 million of expense for special items in the first quarter of 2020, compared to \$0.5 million of expense in 2019 (discussed below). Excluding special items, net income was \$143 million, or \$1.50 per diluted share, during the first quarter of 2020, compared to \$187 million, or \$1.98 per diluted share, in the first quarter of 2019. The decrease was driven primarily by lower prices and mix in our Packaging and Paper segments, lower volumes in our Paper segment, higher annual outage expenses, higher depreciation and other expenses, and a higher tax rate. These items were partially offset by higher volumes in our Packaging segment, lower operating and converting costs, lower freight and logistic costs, and lower interest expense and non-operating pension expense. PCA's facilities have been permitted to continue to operate as "essential operations" during the COVID-19 pandemic. PCA did not experience significant disruptions in its operations as a result of the pandemic and has maintained adequate availability of its workforce and supply of raw materials and services. For additional detail on special items included in reported GAAP results, as well as segment income (loss) excluding special items, earnings before non-operating pension expense, interest, income taxes, and depreciation, amortization, and depletion (EBITDA), and EBITDA excluding special items, see "Item 2. Reconciliations of Non-GAAP Financial Measures to Reported Amounts."

Packaging segment income from operations was \$200 million in the first quarter of 2020, compared to \$250 million in the first quarter of 2019. Packaging segment EBITDA excluding special items was \$290 million in the first quarter of 2020 compared to \$334 million in the first quarter of 2019. The decrease in EBITDA excluding special items was due primarily to lower prices and mix, partially offset by higher sales and production volumes, lower operating and converting costs, and lower freight and logistic expenses. With the onset of the COVID-19 pandemic, PCA experienced higher than expected sales volume in the Packaging segment. We cannot predict the future impact of the pandemic on our packaging operations, economic and operating conditions affecting our packaging business or demand for our packaging products.

Paper segment income from operations was \$33 million in the first quarter of 2020, compared to \$46 million in the first quarter of 2019. Paper segment EBITDA excluding special items was \$42 million in the first quarter of 2020, compared to \$55 million in the first quarter of 2019. The decrease in EBITDA excluding special items was due to lower prices and mix, lower sales and production volumes, and higher annual outage and other expenses, partially offset by lower operating costs. Demand for our paper products was slightly better than expected during the quarter. Due to the COVID-19 pandemic, we expect significantly lower demand in the second quarter and will temporarily cease operations at our Jackson, Alabama paper mill during the months of May and June, which will reduce production by approximately 70,000 tons. Due to lower sales and production, we expect lower segment income for the quarter.

As more fully described in Note 20, Subsequent Events, of the Condensed Notes to Unaudited Quarterly Consolidated Financial Statements in "Part I, Item 1. Financial Statements" of this Form 10-Q, on April 27, 2020, we announced the closure of our San Lorenzo, California corrugated products plant. We expect to incur \$23 million to \$31 million in total charges relating to this action, most of which will be taken in the second quarter of 2020.

Special Items and Earnings per Diluted Share, Excluding Special Items

A reconciliation of reported earnings per diluted share to earnings per diluted share, excluding special items, for the three months ended March 31, 2020 and 2019 are as follows:

	Three Months Ended			
	March 31,			
	2020	2019		
Earnings per diluted share, as reported	\$	1.49	\$	1.97
Special items:				
Incremental costs for COVID-19 (a)		0.01		—
Wallula mill restructuring (b)		—		0.01
Total special items		0.01		0.01
Earnings per diluted share, excluding special items	\$	1.50	\$	1.98

(a) Includes \$0.8 million of incremental, out-of-pocket costs related to the COVID-19 pandemic, including supplies, cleaning and sick pay.

(b) Includes \$0.6 million of charges related to the 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 produce virgin kraft linerboard.

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 shipments per work day were up 2.7% during the first quarter of 2020 compared to the same quarter of 2019. Reported industry containerboard production increased 7.6% compared to the first quarter of 2019. Reported industry containerboard inventories at the end of the first quarter of 2020 were approximately 2.5 million tons, down 7.9% compared to the same period in 2019. Reported containerboard export shipments were up 43.6% compared to the first quarter of 2019. Prices reported by trade publications decreased by \$10 per ton for linerboard and \$15 per ton for corrugating medium in January 2020.

Trade publications reported North American uncoated freesheet paper shipments were down 5.6% in the first quarter of 2020, compared to the same quarter of 2019. Average prices reported by a trade publication for cut size office papers were flat in the first quarter of 2020 compared to the fourth quarter of 2019. Average prices were lower by \$13 per ton, or 1.2%, in the first quarter of 2020, compared to the first quarter of 2019.

Results of Operations

Three Months Ended March 31, 2020, compared to Three Months Ended March 31, 2019

The historical results of operations of PCA for the three months ended March 31, 2020 and 2019 are set forth below (dollars in millions):

	Three Months Ended March 31,			Change
	2020	2019		
Packaging	\$ 1,467.5	\$ 1,477.6	\$	(10.1)
Paper	217.4	239.7		(22.3)
Corporate and Other	60.2	56.7		3.5
Intersegment eliminations	(36.4)	(40.3)		3.9
Net sales	\$ 1,708.7	\$ 1,733.7	\$	(25.0)
Packaging	\$ 199.8	\$ 249.6	\$	(49.8)
Paper	32.5	45.6		(13.1)
Corporate and Other	(23.2)	(19.8)		(3.4)
Income from operations	\$ 209.1	\$ 275.4	\$	(66.3)
Non-operating pension income (expense)	0.6	(2.0)		2.6
Interest expense, net	(19.6)	(24.1)		4.5
Income before taxes	190.1	249.3		(59.2)
Income tax provision	(48.4)	(62.5)		14.1
Net income	\$ 141.7	\$ 186.8	\$	(45.1)
<i>Non-GAAP Measures (a)</i>				
Net income excluding special items	\$ 142.6	\$ 187.3	\$	(44.7)
Consolidated EBITDA	309.4	370.2		(60.8)
Consolidated EBITDA excluding special items	310.6	370.6		(60.0)
Packaging EBITDA	288.8	333.6		(44.8)
Packaging EBITDA excluding special items	289.9	333.8		(43.9)
Paper EBITDA	41.9	54.7		(12.8)
Paper EBITDA excluding special items	42.0	54.9		(12.9)

- (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 decreased \$25 million, or 1.4%, to \$1,709 million during the three months ended March 31, 2020, compared to \$1,734 million during the same period in 2019.

Packaging. Net sales decreased \$10 million, or 0.7%, to \$1,468 million, compared to \$1,478 million in the first quarter of 2019 due to lower containerboard and corrugated products prices and mix (\$94 million), partially offset by higher containerboard and corrugated products volume (\$84 million). In the first quarter of 2020, our domestic containerboard prices were 8.0% lower, while export prices were 25.2% lower, than the same period in 2019. In the first quarter of 2020, export and domestic containerboard outside shipments increased 12.9%, compared to the first quarter of 2019. Total corrugated products shipments were up 5.6% with one additional workday, and up 3.9% per day compared to the same period in 2019.

Paper. Net sales during the three months ended March 31, 2020 decreased \$23 million, or 9.3%, to \$217 million, compared to \$240 million in the first quarter of 2019, due to decreased volume (\$17 million) and lower prices and mix (\$6 million).

Gross Profit

Gross profit decreased \$56 million during the three months ended March 31, 2020, compared to the same period in 2019. The decrease was driven primarily by lower prices and mix in our Packaging and Paper segments, lower volume in our Paper segment, higher annual outage expenses, partially offset by higher volumes in our Packaging segment, lower operating and converting costs, and lower freight and logistic costs. In the three months ended March 31, 2020, gross profit included \$1 million of special items for incremental out-of-pocket costs related to the COVID-19 pandemic, including supplies, cleaning and sick pay. There were no significant special items in the three months ended March 31, 2019.

Selling, General, and Administrative Expenses

Selling, general, and administrative expenses (“SG&A”) increased \$6 million during the three months ended March 31, 2020, compared to the same period in 2019. The increase was primarily due to higher employee salaries and fringes.

Other Expense, Net

Other expense, net, for the three months ended March 31, 2020 and 2019 are set forth below (dollars in millions):

	Three Months Ended	
	March 31,	
	2020	2019
Asset disposals and write-offs	\$ (6.0)	\$ (4.3)
Facilities closure and other costs	(0.4)	—
Wallula mill restructuring	—	(0.4)
Other	(3.6)	(1.3)
Total	\$ (10.0)	\$ (6.0)

We discuss these items in more detail in Note 5, Other 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 decreased \$66 million, or 24.0%, during the three months ended March 31, 2020, compared to the same period in 2019. The first quarter of 2020 included \$1 million of special items expense for incremental, out-of-pocket costs related to COVID-19, compared to \$1 million of expense primarily related to the Wallula Mill restructuring in the first quarter of 2019.

Packaging. Packaging segment income from operations decreased \$50 million to \$200 million, compared to \$250 million during the three months ended March 31, 2019. The decrease related primarily to lower containerboard and corrugated products prices and mix (\$81 million), higher depreciation expense (\$5 million), and other fixed costs (\$2 million), partially offset by higher sales and production volumes (\$18 million), lower operating and converting costs (\$18 million), and lower freight expenses (\$2 million). Special items during the first quarter of 2020 included \$1 million of incremental, out-of-pocket costs related to COVID-19, compared to an insignificant amount of special items in the Packaging segment in the first three months of 2019.

Paper. Paper segment income from operations decreased \$13 million to \$33 million, compared to \$46 million during the three months ended March 31, 2019. The decrease primarily related to lower prices and mix (\$6 million), lower sales and production volumes (\$4 million), higher annual outage expenses (\$5 million), and other fixed costs (\$3 million), partially offset by lower operating costs (\$5 million). There were no material special items in the Paper segment in the first quarter of 2020 or 2019.

Non-Operating Pension Expense, Interest Expense, Net and Income Taxes

Non-operating pension expense decreased \$3 million during the three months ended March 31, 2020, compared to the same period in 2019. The decrease in non-operating pension expense was primarily related to the favorable 2019 asset performance, partially offset by assumption changes.

Interest expense, net decreased \$5 million during the three months ended March 31, 2020, compared to the same period in 2019. The decrease in interest expense, net was primarily related to lower earnings on deferred compensation balances, no treasury lock amortization due to the write-off of the remaining balances of treasury locks in connection with the Company’s debt refinancing completed in December 2019, and higher interest income due to higher cash balances during the first quarter of 2020 compared to the first quarter of 2019.

During the three months ended March 31, 2020, we recorded \$48 million of income tax expense, compared to \$63 million of expense during the three months ended March 31, 2019. The effective tax rate for the three months ended March 31, 2020 and 2019 was 25.5% and 25.1%, respectively. The increase in our effective tax rate was primarily due to higher employee compensation related impacts from the elimination of the performance based exclusion in tax reform and reduced benefit associated with Foreign Derived Intangible Income.

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 March 31, 2020, we had \$764 million of cash and cash equivalents, \$149 million of marketable debt securities, and \$329 million of unused borrowing capacity under the revolving credit facility, net of letters of credit. Currently, our primary uses of cash are for operations, capital expenditures, acquisitions, debt service, common stock dividends, and repurchases of common stock. 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, refinance, extend, or replace such debt or credit 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):

	Three Months Ended March 31,		Change
	2020	2019	
Net cash provided by (used for):			
Operating activities	\$ 236.7	\$ 236.0	\$ 0.7
Investing activities	(77.0)	(80.1)	3.1
Financing activities	(75.2)	(75.0)	(0.2)
Net increase in cash and cash equivalents	<u>\$ 84.5</u>	<u>\$ 80.9</u>	<u>\$ 3.6</u>

Operating Activities

Our operating cash flow is primarily driven by our earnings and changes in operating assets and liabilities, such as accounts receivable, inventories, accounts payable and other accrued liabilities, as well as factors described below. 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.

During the three months ended March 31, 2020, net cash provided by operating activities was \$237 million, compared to \$236 million in the same period in 2019, an increase of \$1 million. Cash increased by \$49 million due to changes in operating assets and liabilities, primarily due to the following:

- a smaller increase in inventory for 2020 compared to 2019 primarily related to lower containerboard inventory on hand in the Packaging segment for the first quarter of 2020,
- a smaller increase in accrued liabilities for 2020 compared to 2019 primarily related to lower payouts and higher accruals for employee compensation and benefits liabilities for the first quarter of 2020, and
- an increase in accounts payable levels in 2020 compared to 2019 related to the timing of payments.

Cash from operations excluding changes in cash used for operating assets and liabilities decreased \$48 million, primarily due to lower income from operations as discussed above.

Investing Activities

We used \$77 million for investing activities during the three months ended March 31, 2020 compared to \$80 million during the same period in 2019. We spent \$71 million for internal capital investments during the three months ended March 31, 2020, compared to \$79 million during the same period in 2019.

We expect capital investments in 2020 to be between \$400 million and \$425 million, not including acquisitions. These expenditures could increase or decrease as a result of a number of factors, including our financial results, strategic opportunities, future economic conditions, and our regulatory compliance requirements. We currently estimate capital expenditures to comply with environmental regulations will be about \$10 million in 2020. 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 2019 Annual Report on Form 10-K.

Financing Activities

During both three month periods ended March 31, 2020 and 2019, net cash used for financing activities was \$75 million, primarily for dividends paid in both periods.

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 2019 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 months ended March 31, 2020 and 2019 follow (dollars in millions):

	Three Months Ended March 31,					
	2020			2019		
	Income before Taxes	Income Taxes	Net Income	Income before Taxes	Income Taxes	Net Income
As reported in accordance with GAAP	\$ 190.1	\$ (48.4)	\$ 141.7	\$ 249.3	\$ (62.5)	\$ 186.8
Special items:						
Incremental costs for COVID-19 (a)	0.8	(0.2)	0.6	—	—	—
Facilities closure and other costs (b)	0.4	(0.1)	0.3	—	—	—
Wallula mill restructuring (c)	—	—	—	0.6	(0.1)	0.5
Total special items	1.2	(0.3)	0.9	0.6	(0.1)	0.5
Excluding special items	\$ 191.3	\$ (48.7)	\$ 142.6	\$ 249.9	\$ (62.6)	\$ 187.3

(a) Includes \$0.8 million of incremental, out-of-pocket costs related to COVID-19, including supplies, cleaning and sick pay.

(b) Includes \$0.4 million of charges consisting of closure costs related to corrugated products facilities.

(c) Includes \$0.6 million of charges related to the 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 produce virgin kraft linerboard.

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

	Three Months Ended March 31,	
	2020	2019
Net income	\$ 141.7	\$ 186.8
Non-operating pension (income) expense	(0.6)	2.0
Interest expense, net	19.6	24.1
Income tax provision	48.4	62.5
Depreciation, amortization, and depletion	100.3	94.8
EBITDA	\$ 309.4	\$ 370.2
Special items:		
Incremental costs for COVID-19	0.8	—
Facilities closure and other costs	0.4	—
Wallula mill restructuring	—	0.4
Total special items	1.2	0.4
EBITDA excluding special items	\$ 310.6	\$ 370.6

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

	Three Months Ended March 31,	
	2020	2019
Packaging		
Segment income	\$ 199.8	\$ 249.6
Depreciation, amortization, and depletion	89.0	84.0
EBITDA	288.8	333.6
Incremental costs for COVID-19	0.7	—
Facilities closure and other costs	0.4	—
Wallula mill restructuring	—	0.2
EBITDA excluding special items	<u>\$ 289.9</u>	<u>\$ 333.8</u>
Paper		
Segment income	\$ 32.5	\$ 45.6
Depreciation, amortization, and depletion	9.4	9.1
EBITDA	41.9	54.7
Incremental costs for COVID-19	0.1	—
Wallula mill restructuring	—	0.2
EBITDA excluding special items	<u>\$ 42.0</u>	<u>\$ 54.9</u>
Corporate and Other		
Segment loss	\$ (23.2)	\$ (19.8)
Depreciation, amortization, and depletion	1.9	1.7
EBITDA	(21.3)	(18.1)
EBITDA excluding special items	<u>\$ (21.3)</u>	<u>\$ (18.1)</u>
EBITDA	<u>\$ 309.4</u>	<u>\$ 370.2</u>
EBITDA excluding special items	<u>\$ 310.6</u>	<u>\$ 370.6</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 March 31, 2020. For a discussion of derivatives and hedging activities, see Note 16, Derivative Instruments and Hedging Activities, of the Notes to Consolidated Financial Statements in “Part II, Item 8. Financial Statements and Supplementary Data” of our 2019 Annual Report on Form 10-K.

At March 31, 2020, interest rates on 100% of PCA’s outstanding debt are fixed.

Off-Balance-Sheet Activities

The Company does not have any off-balance sheet arrangements as of March 31, 2020.

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 2019 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 2019 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 three months of 2020.

New and Recently Adopted Accounting Standards

For a listing of our new and recently adopted accounting standards, see Note 2, 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 the COVID-19 pandemic on the health of our employees, on our vendors and customers and on economic conditions affecting our business;
- 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;
- 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, 2019, as supplemented by Part II, Item 1A. Risk Factors hereof.

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 March 31, 2020. 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 March 31, 2020.

**PART II
OTHER INFORMATION**

Item 1. LEGAL PROCEEDINGS

The disclosure set forth under the caption "Legal Proceedings" in Note 19, 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

In addition to the risk factors discussed in "Part I, Item 1A, Risk Factors" of our 2019 Annual Report on Form 10-K, the following are important factors that could cause our actual results to differ materially from those we project in any forward-looking statement.

The future effect of the COVID-19 pandemic on our operations is uncertain. On March 11, 2020, the World Health Organization declared the COVID-19 outbreak a pandemic. Since that time, federal, state and local authorities have taken measures to control the outbreak of COVID-19 in the United States, where we primarily operate. These measures have included travel bans and restrictions, quarantines and shelter in place orders. Due to the importance of our products to the continued distribution of food, beverage and other necessities, our operating facilities are permitted to remain in operation and we have not experienced material disruptions in operations to date. Despite the spread of the virus in the United States, we have maintained sufficient workforce availability as well as adequate supply of raw materials and necessary services to continue operating without material disruption. However, the impact of the further spread of the virus and the measures to control the spread of the virus are uncertain and may materially restrict or hinder our ability to operate our facilities, due to measures we may need to take to assure the health and safety of our employees, lack of available workforce, disruptions in the supply of key materials and services or restrictions due to governmental actions. If our operations are hindered or restricted, we may not be able to serve our customers, which could have a material adverse effect on our business, financial condition and results of operations.

The pandemic resulting from the COVID-19 outbreak, and measures to control the outbreak, are having a negative impact on domestic economic activity, which could adversely affect demand for our products and our business, financial condition and results of operations. Many businesses in the United States have been required to cease or curtail operations and workers have been laid off or furloughed, which could cause the economy to enter a recession. The severity and duration of the impact on the economy will depend on the future spread of the outbreak, future measures by governmental authorities to control the outbreak, the timing and manner in which normal social and business activities are permitted to resume and the effectiveness of governmental efforts to mitigate the economic effect of the outbreak, all of which are highly uncertain.

We are currently experiencing significantly lower demand for our uncoated freesheet paper products, due to economic conditions associated with the COVID-19 pandemic. Accordingly, we determined to cease production of products at our Jackson, Alabama paper mill for two months in the second quarter, which will negatively affect our income. While we have not experienced lower demand for our containerboard and corrugated packaging products to date, the effect of the pandemic on economic conditions affecting our business and future demand is uncertain and we have historically experienced lower demand for these products during periods of recession. It is uncertain to what extent economic conditions will deteriorate, or when and to what extent economic conditions will improve. With the uncertainty of economic conditions, we are unable to determine the effect on our operating and financial performance. A prolonged period of lower earnings and reduced cash flow could adversely affect our ability to fund operations, capital requirements, and common stock dividend payments and access capital markets.

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 March 31, 2020:

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)
January 1-31, 2020	309	\$ 99.62	—	\$ 193.0
February 1-29, 2020	224	94.80	—	193.0
March 1-31, 2020	168	86.83	—	193.0
Total	701	\$ 95.01	—	\$ 193.0

(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

Exhibit Number	Description
31.1	Certification of Chief Executive Officer, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002. †
31.2	Certification of Chief Financial Officer, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002. †
32	Certification of Chief Executive Officer and Chief Financial Officer Pursuant to 18 U.S.C. §1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002. †
101.INS	Inline XBRL Instance Document – the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document. †
101.SCH	Inline XBRL Taxonomy Extension Schema Document. †
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document. †
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document. †
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document. †
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document. †
104	Cover Page Interactive Data File (formatted as inline XBRL and contained in Exhibit 101). †

† 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/ PAMELA A. BARNES

Pamela A. Barnes

Senior Vice President, Finance and Controller

Date: May 6, 2020

**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

Mark W. Kowlzan

Chairman and Chief Executive Officer

Date: May 6, 2020

**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

Executive Vice President and Chief Financial Officer

Date: May 6, 2020

**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**

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 March 31, 2020 fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

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

/s/ Mark W. Kowlzan

Mark W. Kowlzan

Chairman and Chief Executive Officer

Date: May 6, 2020

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 March 31, 2020 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

Robert P. Mundy

Executive Vice President and Chief Financial Officer

Date: May 6, 2020