

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

FORM 8-K

**CURRENT REPORT
Pursuant to Section 13 or 15(d)
of the Securities Exchange Act of 1934**

Date of Report (Date of earliest event reported): June 10, 2019 (June 5, 2019)



GREIF, INC.

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction
of incorporation)

425 Winter Road, Delaware, Ohio
(Address of principal executive offices)

001-00566
(Commission
File Number)

31-4388903
(IRS Employer
Identification No.)
43015
(Zip Code)

Registrant's telephone number, including area code: (740) 549-6000

Not Applicable
(Former name or former address, if changed since last report.)

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§240.12b-2 of this chapter).

Emerging growth 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.

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (see General Instruction A.2. below):

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

Section 2 – Financial Information

Item 2.02. Results of Operations and Financial Condition.

On June 5, 2019, Greif, Inc. (the “Company”) issued a press release (the “Earnings Release”) announcing the financial results for its second quarter ended April 30, 2019. The full text of the Earnings Release is attached as Exhibit 99.1 to this Current Report on Form 8-K.

The Earnings Release included the following non-GAAP financial measures (the “non-GAAP Measures”):

- (i) the Company's consolidated Adjusted EBITDA for the second quarter of 2019 and the second quarter of 2018, which is equal to the Company's consolidated net income for the applicable period plus interest expense, net, including debt extinguishment charges, plus income tax expense, plus depreciation, depletion and amortization expense, plus restructuring charges, plus acquisition-related costs, plus non-cash asset impairment charges, less (gain) loss on disposal of properties, plants, equipment and businesses, net, each on a consolidated basis for the applicable period;
- (ii) the Company's net income, excluding the impact of adjustments, for the second quarter of 2019 and the second quarter of 2018, which is equal to the Company's consolidated net income for the applicable period plus restructuring charges, plus acquisition-related costs, plus debt extinguishment charges, plus non-cash asset impairment charges, less (gain) loss on disposal of properties, plants, equipment and businesses, net, each net of tax, noncontrolling interest and equity earnings of unconsolidated affiliates and on a consolidated basis for the applicable period;
- (iii) the Company's earnings per diluted class A share, excluding the impact of adjustments, for the second quarter of 2019 and the second quarter of 2018, which is equal to earnings per diluted class A share of the Company for the applicable period plus restructuring charges, plus acquisition-related costs, plus debt extinguishment charges, plus non-cash asset impairment charges, less (gain) loss on disposal of properties, plants, equipment and businesses, net, each net of tax, noncontrolling interest and equity earnings of unconsolidated affiliates and on a consolidated basis for the applicable period;
- (iv) the Company's consolidated adjusted free cash flow for the second quarter of 2019 and the second quarter of 2018, which is equal to the Company's consolidated net cash provided by operating activities for the applicable period less cash paid for purchases of properties, plants and equipment, plus cash paid for acquisition-related costs and plus cash paid for debt issuance costs for the applicable period.
- (v) the Company's income tax rate, excluding the impact of adjustments, for the second quarter of 2019, which is equal to the Company's consolidated tax expense for such period plus the tax expense (benefit) of restructuring charges, plus the tax expense (benefit) of acquisition-related costs, plus the tax expense (benefit) of debt extinguishment charges, plus the tax expense (benefit) of non-cash asset impairment charges, plus the net tax expense (benefit) resulting from the Tax Cuts and Jobs Act of 2017 (the “Tax Reform Act”), less the tax expense (benefit) of gains on disposal of properties, plants, equipment and businesses, net, divided by the Company's consolidated income before income tax expense and equity earnings of unconsolidated affiliates, net for such period plus restructuring charges, plus acquisition-related costs, plus debt extinguishment charges, plus non-cash asset impairment charges, less (gain) loss on disposal of properties, plants, equipment and businesses, net, each on a consolidated basis for such period;
- (vi) net sales excluding foreign currency translation for the Company's Rigid Industrial Packaging & Services business segment for the second quarter of 2019 and the second quarter of 2018, which is equal to that business segment's net sales for the applicable quarter, after adjusting such sales for the second quarter of 2019 for foreign currency translation;
- (vii) Adjusted EBITDA for the Company's Rigid Industrial Packaging & Services business segment for the second quarter of 2019 and the second quarter of 2018, which is equal to that business segment's operating profit less other (income) expense, net, less equity earnings of unconsolidated affiliates, net of tax, plus depreciation and amortization expense, plus restructuring charges, plus acquisition-related costs, plus non-cash asset impairment charges, less (gain) loss on disposal of properties, plants, equipment and businesses, net, each for the applicable period;
- (viii) Adjusted EBITDA for the Company's Paper Packaging & Services business segment for the second quarter of 2019 and the second quarter of 2018, which is equal to that business segment's operating profit less other (income) expense, net, plus depreciation and amortization expense, plus restructuring charges, plus acquisition-

related costs, less (gain) loss on disposal of properties, plants, equipment and businesses, net, each for the applicable period;

- (ix) net sales excluding foreign currency translation for the Company's Flexible Products & Services business segment for the second quarter of 2019 and the second quarter of 2018, which is equal to that business segment's net sales for the applicable quarter, after adjusting such sales for the second quarter of 2019 for foreign currency translation;
- (x) Adjusted EBITDA for the Company's Flexible Products & Services business segment for the second quarter of 2019 and the second quarter of 2018, which is equal to that business segment's operating profit less other (income) expense, net, plus depreciation and amortization expense, plus restructuring charges, less (gain) loss on disposal of properties, plants, equipment and businesses, net, each for the applicable period; and
- (xi) Adjusted EBITDA for the Company's Land Management business segment for the second quarter of 2019 and the second quarter of 2018, which is equal to that business segment's operating profit plus depreciation, depletion and amortization expense, plus restructuring charges, less (gain) loss on disposal of properties, plants, equipment and businesses, net, each for the applicable period.

The Earnings Release also included the following forward-looking non-GAAP measures:

- (i) the Company's fiscal year 2019 Class A earnings per share before adjustments guidance, which is equal to earnings per diluted class A share of the Company for such period plus restructuring charges, plus acquisition-related costs, plus non-cash asset impairment charges, plus debt extinguishment charges, plus the net tax benefit resulting from the Tax Reform Act, less (gain) loss on disposal of properties, plants, equipment and businesses, net, each net of tax, noncontrolling interest and equity earnings of unconsolidated affiliates and on a consolidated basis for such period; and
- (ii) the Company's fiscal year 2019 tax rate guidance, excluding the impact of adjustments, which is equal to the Company's consolidated tax expense for such period plus the tax expense (benefit) of restructuring charges, plus the tax expense (benefit) of acquisition-related costs, plus the tax expense (benefit) of acquisition-related costs, plus the tax expense (benefit) of non-cash asset impairment charges, plus the net tax benefit resulting from the Tax Reform Act, plus the tax expense (benefit) of debt extinguishment charges, less the tax expense (benefit) of gains on disposal of properties, plants, equipment and businesses, net, divided by the Company's consolidated income before income tax expense and equity earnings of unconsolidated affiliates, net for such period plus restructuring charges, plus acquisition-related costs, plus non-cash asset impairment charges, less (gain) loss on disposal of properties, plants, equipment and businesses, net, each on a consolidated basis for such period; and
- (iii) the Company's fiscal year 2019 projected adjusted free cash flow guidance, which is equal to the Company's consolidated net cash provided by operating activities for such period, less cash paid for purchases of properties, plants and equipment, plus acquisition-related costs, plus cash paid for debt issuance costs for such period. A reconciliation of this forward-looking non-GAAP financial measure was included in the Earnings Release.

No reconciliation of the forward-looking non-GAAP financial measures were included in the Earnings Release for items (i) and (ii) because, due to the high variability and difficulty in making accurate forecasts and projections of some of the excluded information, together with some of the excluded information not being ascertainable or accessible, the Company is unable to quantify certain amounts that would be required to be included in the most directly comparable GAAP financial measures without unreasonable efforts.

Management of the Company uses the non-GAAP Measures to evaluate ongoing operations and believes that these non-GAAP Measures are useful to investors. The exclusion of the impact of the identified adjustments (restructuring charges, acquisition-related costs, non-cash asset impairment charges, debt extinguishment charges, disposals of properties, plants, equipment and businesses, net, and the tax benefit resulting from the Tax Reform Act) enable management and investors to perform meaningful comparisons of current and historical performance of the Company. Management of the Company also believes that the exclusion of the impact of the identified adjustments provides a stable platform on which to compare the historical performance of the Company and that investors desire this information. Management believes that the use of consolidated adjusted free cash flow, which excludes cash paid for capital expenditures, acquisition-related costs and cash paid for debt issuance costs from the Company's consolidated net cash provided by operating activities, provides additional information on which to evaluate the cash flow generated by the Company and believes that this is information that investors find valuable. The non-GAAP Measures are intended to supplement and should be read together with our financial results. The non-GAAP Measures should not be considered an alternative

or substitute for, and should not be considered superior to, our reported financial results. Accordingly, users of this financial information should not place undue reliance on the non-GAAP Measures.

Section 7 – Regulation FD

Item 7.01. Regulation FD Disclosure.

On June 6, 2019, management of the Company held a conference call with interested investors and financial analysts (the “Conference Call”) to discuss the Company’s financial results for its second quarter ended April 30, 2019. The file transcript of the Conference Call is attached as Exhibit 99.2 to this Current Report on Form 8-K.

Section 9 – Financial Statements and Exhibits

Item 9.01. Financial Statements and Exhibits.

(d) Exhibits.

<u>Exhibit No.</u>	<u>Description</u>
99.1	Press release issued by Greif, Inc. on June 5, 2019 announcing the financial results for its second quarter ended April 30, 2019.
99.2	File transcript of conference call with interested investors and financial analysts held by management of Greif, Inc. on June 6, 2019.

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 hereunto duly authorized.

Date: June 10, 2019

GREIF, INC.

By /s/ Lawrence A. Hilsheimer

Lawrence A. Hilsheimer,

Executive Vice President and Chief Financial Officer



Contact:

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Greif Reports Second Quarter 2019 Results

DELAWARE, Ohio (June 5, 2019) – Greif, Inc. (NYSE: GEF, GEF.B), a world leader in industrial packaging products and services, today announced second quarter 2019 results.

Second Quarter Highlights include (all results compared to the second quarter of 2018 unless otherwise noted):

- Net sales increased by \$245.0 million to \$1,213.3 million.
- Gross profit increased by \$53.4 million to \$248.7 million.
- Net income of \$13.6 million or \$0.23 per diluted Class A share decreased compared to net income of \$45.1 million or \$0.77 per diluted Class A share. Net income, excluding the impact of adjustments⁽¹⁾, of \$47.6 million or \$0.81 per diluted Class A share increased compared to net income, excluding the impact of adjustments, of \$44.7 million or \$0.76 per diluted Class A share. Adjusted EBITDA⁽²⁾ increased by \$38.7 million to \$162.0 million.
- Net cash provided by operating activities increased by \$4.0 million to \$62.2 million. Adjusted Free Cash Flow⁽³⁾ increased by \$16.2 million to \$46.1 million.
- Completed the acquisition of Caraustar Industries, Inc. ("Caraustar"), on February 11, 2019 and included the results of Caraustar in the Company's financial results under the Paper Packaging & Services segment since that date.
- Identified \$15.0 million of new estimated run-rate synergies related to the Caraustar acquisition. The company now estimates that it will be able to achieve at least \$60.0 million of run rate synergies over the 36 months from deal close.

"Greif produced solid financial results in fiscal second quarter 2019 despite the continuation of trade-related market softness in parts of our global Rigid Packaging segment and a more challenging demand environment in our Paper Packaging segment in the U.S.," said Pete Watson, Greif's President and Chief Executive Officer. "Second quarter Adjusted EBITDA rose by roughly 31.0 percent versus the prior year quarter, while Class A earnings per share, excluding the impact of adjustments, increased by more than 6.5 percent."

"We completed the Caraustar acquisition during the quarter and are currently integrating these operations in a disciplined manner. I am pleased with the energy and pace of the integration, but I am most impressed with how well our teams have come together. Through their collective efforts, the combined team has uncovered a variety of operational enhancements and new synergies not previously identified during the due diligence process."

"We have revised our fiscal 2019 guidance slightly higher, despite expected continuation of market demand challenges for the remainder of the fiscal year. Looking beyond 2019, the long term fundamentals for our business remain favorable as we integrate Caraustar into our business and advance ongoing value optimization activities in our global portfolio. Our team remains focused on delivering exceptional value for our shareholders and customers."

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- (1) A summary of all adjustments that are excluded from net income before adjustments and from earnings per diluted Class A share before adjustments are set forth in the Selected Financial Highlights table following the Company Outlook in this release.
 - (2) Adjusted EBITDA is defined as net income, plus interest expense, net, including debt extinguishment charges, plus income tax expense, plus depreciation, depletion and amortization expense, plus restructuring charges, plus acquisition-related costs, plus non-cash impairment charges, plus non-cash pension settlement charges, less (gain) loss on disposal of properties, plants, equipment and businesses, net.
 - (3) Adjusted free cash flow is defined as net cash provided by operating activities, plus cash paid for acquisition-related costs, plus cash paid for debt issuance costs, less cash paid for purchases of properties, plants and equipment.

Note: A reconciliation of the differences between all non-GAAP financial measures used in this release with the most directly comparable GAAP financial measures is included in the financial schedules that are a part of this release. These non-GAAP financial measures are intended to supplement and should be read together with our financial results. They should not be considered an alternative or substitute for, and should not be considered superior to, our reported financial results. Accordingly, users of this financial information should not place undue reliance on these non-GAAP financial measures.

Customer Service

The Company's consolidated CSI⁽⁴⁾ score improved by roughly four percent versus the prior year quarter and finished above 90.0 for the first time. Greif's objective is that each business segment delivers a CSI score of 95.0 or better. The Paper Packaging & Services segment is currently above that threshold at 96.7 and the Flexible Products & Services segment is close with a CSI score of 92.1. CSI for the Rigid Industrial Packaging & Services segment remained roughly flat to the prior year quarter at 90.1. We anticipate incorporating Caraustar's CSI into the Paper Packaging & Services segment reporting during the fiscal third quarter. The Company's focus on CSI adds discipline to the business, improves business insights, strengthens customer relationships and fosters a better understanding of their unique needs. Additionally, we recently completed our eighth NPS⁽⁵⁾ survey and achieved a best ever score of 57, which is slightly above our aspirational goal of 55 which is in line with top performers in the manufacturing space. This latest survey result is approximately 43 percent better than the baseline survey score conducted in the fourth quarter of 2015 and highlights customer service improvement across all segments of the business. We believe the true value of NPS is the customer interactions that accompany each survey which result in additional enhancements for our customers and better strategic insight into their business needs.

Segment Results (all results compared to the second quarter of 2018 unless otherwise noted)

Net sales are impacted mainly by the volume of primary products⁽⁶⁾ sold, selling prices, product mix and the impact of changes in foreign currencies against the U.S. Dollar. The table below shows the percentage impact of each of these items on net sales for our primary products for the second quarter of 2019 as compared to the prior year quarter for the business segments with manufacturing operations. Net sales from Caraustar's primary products are not included in the table below, but will be included in the Paper Packaging & Services segment starting in the second quarter of Fiscal 2020:

<u>Net Sales Impact - Primary Products</u>	<u>Rigid Industrial Packaging & Services</u>	<u>Paper Packaging & Services</u>	<u>Flexible Products & Services</u>
	%	%	%
Currency Translation	(6.1)%	—	(7.4)%
Volume	(2.5)%	(8.8)%	(0.6)%
Selling Prices and Product Mix	3.9 %	4.7 %	2.1 %
Total Impact of Primary Products	(4.7)%	(4.1)%	(5.9)%

Rigid Industrial Packaging & Services

Net sales decreased by \$31.1 million to \$631.6 million. Net sales excluding foreign currency translation increased by \$2.3 million due primarily to a 3.9 percent increase in selling prices on our primary products as a result of strategic pricing decisions, partially offset by continued softness in Western/Central Europe, APAC and the U.S. Gulf Coast.

Gross profit decreased by \$3.9 million to \$121.0 million. The decrease in gross profit was primarily due to the same factors that impacted net sales.

Operating profit decreased by \$0.2 million to \$47.0 million. Adjusted EBITDA decreased by \$2.7 million to \$68.9 million due to the same factors that impacted net sales, partially offset by a reduction in segment SG&A expense.

Paper Packaging & Services

Net sales increased by \$283.7 million to \$497.6 million. The increase in sales was primarily due to \$293.3 million of contribution from the acquired Caraustar operations, partially offset by the impact of approximately 27,000 tons of economic downtime taken across the Company's containerboard operations during the quarter.

Gross profit increased by \$58.4 million to \$108.3 million. The increase in gross profit was primarily due to \$56.3 million of contribution from the acquired Caraustar operations, as well as more favorable price/cost mix. Gross profit was impacted by a one-time \$9.0 million acquisition inventory step-up charge that was approximately \$2.0 million higher than initially contemplated in post-acquisition guidance.

Operating profit decreased by \$2.8 million to \$30.2 million. Adjusted EBITDA increased by \$41.0 million to \$82.1 million primarily due to \$34.9 million of contribution from the acquired Caraustar operations.

Flexible Products & Services

Net sales decreased by \$7.1 million to \$77.0 million. Net sales excluding foreign currency translation decreased by \$0.8 million due to market softness in parts of Europe.

Gross profit decreased by \$1.0 million to \$16.6 million primarily due to lower sales, partially offset by lower labor and manufacturing costs across the network.

Operating profit increased by \$6.2 million to \$11.2 million primarily due to a \$5.1 million gain on disposal of properties, plants and equipment. Adjusted EBITDA increased by \$0.3 million to \$7.7 million. The improvement in Adjusted EBITDA was primarily due to a reduction in segment SG&A expense, partially offset by lower gross profit.

Land Management

Net sales decreased by \$0.5 million to \$7.1 million.

Operating profit decreased by \$0.3 million to \$2.2 million. Adjusted EBITDA increased by \$0.1 million to \$3.3 million.

Tax Summary

During the second quarter, the Company recorded an income tax rate of 35.4 percent and a tax rate excluding the impact of adjustments of 27.4 percent. As previously disclosed, the application of FIN 18 may cause fluctuations in our quarterly effective tax rates. For Fiscal 2019, the Company expects its tax rate to range between 29-33 percent and its tax rate excluding adjustments to range between 28-32 percent.

Dividend Summary

On June 4, 2019, the Board of Directors declared quarterly cash dividends of \$0.44 per share of Class A Common Stock and \$0.66 per share of Class B Common Stock. Dividends are payable on July 1, 2019, to stockholders of record at the close of business on June 18, 2019.

Investor Day 2019

Investor Day 2019 will be held on Wednesday, June 26, 2019, at the Sofitel Hotel in New York City. Registration and breakfast will commence at 8:00 a.m. ET and the event will commence at 8:30 a.m. ET. Greif's President and Chief Executive Officer Pete Watson, Chief Financial Officer Larry Hilsheimer and various other senior operational leaders will provide an overview of Greif; discuss ongoing business performance and strategy; review the recently announced Carastar acquisition; and review new long term financial commitments. There will be several question and answer sessions and webcast details for the event will be published in mid-June 2019.

Company Outlook

<i>(in millions, except per share amounts)</i>	Fiscal 2019 Outlook Reported at Q1	Fiscal 2019 Outlook Reported at Q2
Class A earnings per share before special items	\$3.60 - \$4.00	\$3.70 - \$4.00
Adjusted Free Cash Flow	\$215 - \$245	\$230 - \$250

Note: 2019 Class A earnings per share and tax rate guidance on a GAAP basis are not provided in this release due to the potential for one or more of the following, the timing and magnitude of which we are unable to reliably forecast: gains or losses on the disposal of businesses, timberland or properties, plants and equipment, net; non-cash asset impairment charges due to unanticipated changes in the business; restructuring-related activities; non-cash pension settlement charges; or acquisition costs, and the income tax effects of these items and other income tax-related events. No reconciliation of the fiscal year 2019 Class A earnings per share before adjustments guidance or tax rate excluding the impact of adjustments guidance, both non-GAAP financial measures which exclude gains and losses on the disposal of businesses, timberland and properties, plants and equipment, non-cash pension settlement charges, acquisition costs, restructuring and impairment charges, is included in this release because, due to the high variability and difficulty in making accurate forecasts and projections of some of the excluded information, together with some of the excluded information not being ascertainable or accessible, we are unable to quantify certain amounts that would be required to be included in the most directly comparable GAAP financial measure without unreasonable efforts. A reconciliation of 2019 adjusted free cash

flow guidance to forecasted net cash provided by operating activities, the most directly comparable GAAP financial measure, is included in this release.

- (4) Customer satisfaction index (CSI) tracks a variety of internal metrics designed to enhance the customer experience in dealing with Greif.
- (5) Net Promoter Score (NPS) is derived from a survey conducted by a third party that measures how likely a customer is to recommend Greif as a business partner. NPS scores are calculated by subtracting the percentage of detractors a business has from the percentage of its promoters.
- (6) Primary products are manufactured steel, plastic and fibre drums; intermediate bulk containers; linerboard, medium, corrugated sheets and corrugated containers; and 1&2 loop and 4 loop flexible intermediate bulk containers.

GREIF, INC. AND SUBSIDIARY COMPANIES
SELECTED FINANCIAL HIGHLIGHTS
UNAUDITED

<i>(in millions, except for per share amounts)</i>	Three months ended April 30,		Six months ended April 30,	
	2019	2018	2019	2018
Selected Financial Highlights				
Net sales	\$ 1,213.3	\$ 968.3	\$ 2,110.3	\$ 1,874.0
Gross profit	248.7	195.3	421.5	367.0
Gross profit margin	20.5%	20.2%	20.0%	19.6%
Operating profit	90.6	87.7	157.8	153.2
EBITDA ⁽⁷⁾	143.9	118.4	242.7	207.9
Adjusted EBITDA ⁽⁸⁾	162.0	123.3	268.3	215.4
Net cash provided by operating activities	62.2	58.2	52.6	4.5
Adjusted Free cash flow ⁽⁹⁾	46.1	29.9	10.5	(51.6)
Net income attributable to Greif, Inc.	13.6	45.1	43.3	101.6
Diluted Class A earnings per share attributable to Greif, Inc.	\$ 0.23	\$ 0.77	\$ 0.74	\$ 1.73
Adjusted Diluted Class A earnings per share attributable to Greif, Inc.	\$ 0.81	\$ 0.76	\$ 1.46	\$ 1.25
Adjustments				
Restructuring charges	\$ 7.5	\$ 6.0	\$ 11.2	\$ 10.1
Acquisition-related costs	13.8	—	16.4	0.2
Debt extinguishment charges	21.9	—	21.9	—
Non-cash asset impairment charges	—	0.4	2.1	3.3
Gain on disposal of properties, plants and equipment and businesses, net	(3.2)	(1.5)	(4.1)	(6.1)
Tax net expense (benefit) resulting from the Tax Reform Act	—	(4.3)	—	(33.4)
Total Adjustments	\$ 40.0	\$ 0.6	\$ 47.5	\$ (25.9)
	April 30, 2019	October 31, 2018	April 30, 2018	October 31, 2017
Operating working capital ⁽¹⁰⁾	\$ 652.5	\$ 342.4	\$ 420.6	\$ 327.3

⁽⁷⁾EBITDA is defined as net income, plus interest expense, net, including debt extinguishment charges, plus income tax expense, plus depreciation, depletion and amortization.

⁽⁸⁾Adjusted EBITDA is defined as net income, plus interest expense, net, including debt extinguishment charges, plus income tax expense, plus depreciation, depletion and amortization expense, plus restructuring charges, plus acquisition-related costs, plus non-cash impairment charges, plus non-cash pension settlement charges, less (gain) loss on disposal of properties, plants, equipment and businesses, net.

⁽⁹⁾Adjusted free cash flow is defined as net cash provided by operating activities, plus cash paid for acquisition-related costs, plus cash paid for debt issuance costs, less cash paid for purchases of properties, plants and equipment.

⁽¹⁰⁾Operating working capital is defined as trade accounts receivable plus inventories less accounts payable.

Conference Call

The Company will host a conference call to discuss the second quarter of 2019 results on June 6, 2019, at 8:30 a.m. Eastern Time (ET). To participate, domestic callers should call 833-231-8265. The Greif ID is 1585685. The number for international callers is +1-647-689-4110. Phone lines will open at 8:00 a.m. ET. The conference call will also be available through a live webcast, including slides, which can be accessed at <http://investor.greif.com> by clicking on the Events and Presentations tab and searching under the events calendar. A replay of the conference call will be available on the Company's website approximately two hours following the call.

About Greif

Greif is a global leader in industrial packaging products and services and is pursuing its vision: in industrial packaging, be the best performing customer service company in the world. The Company produces steel, plastic and fibre drums, intermediate bulk containers, reconditioned containers, flexible products, containerboard, uncoated recycled paperboard, coated recycled paperboard, tubes and cores and a diverse mix of specialty products. The Company also manufactures packaging accessories and provides filling, packaging and other services for a wide range of industries. Greif also manages timber properties in the southeastern United States. The Company is strategically positioned in over 40 countries to serve global as well as regional customers. Additional information is on the Company's website at www.greif.com.

Forward-Looking Statements

This release contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. The words "may," "will," "expect," "intend," "estimate," "anticipate," "aspiration," "objective," "project," "believe," "continue," "on track" or "target" or the negative thereof and similar expressions, among others, identify forward-looking statements. All forward-looking statements are based on assumptions, expectations and other information currently available to management. Such forward-looking statements are subject to certain risks and uncertainties that could cause the Company's actual results to differ materially from those forecasted, projected or anticipated, whether expressed or implied. The most significant of these risks and uncertainties are described in Part I of the Company's Annual Report on Form 10-K for the fiscal year ended October 31, 2018. The Company undertakes no obligation to update or revise any forward-looking statements.

Although the Company believes that the expectations reflected in forward-looking statements have a reasonable basis, the Company can give no assurance that these expectations will prove to be correct. Forward-looking statements are subject to risks and uncertainties that could cause the Company's actual results to differ materially from those forecasted, projected or anticipated, whether expressed in or implied by the statements. Such risks and uncertainties that might cause a difference include, but are not limited to, the following: (i) historically, our business has been sensitive to changes in general economic or business conditions, (ii) we may not successfully implement our business strategies, including achieving our transformation and growth objectives, (iii) our operations subject us to currency exchange and political risks that could adversely affect our results of operations, (iv) the current and future challenging global economy and disruption and volatility of the financial and credit markets may adversely affect our business, (v) the continuing consolidation of our customer base and suppliers may intensify pricing pressure, (vi) we operate in highly competitive industries, (vii) our business is sensitive to changes in industry demands, (viii) raw material and energy price fluctuations and shortages may adversely impact our manufacturing operations and costs, (ix) changes in U.S. trade policies could impact the cost of imported goods into the U.S., which may materially impact or revenues or increase our operating costs, (x) the results of the United Kingdom's referendum on withdrawal from the European Union may have a negative effect on global economic conditions, financial markets and our business, (xi) geopolitical conditions, including direct or indirect acts of war or terrorism, could have a material adverse effect on our operations and financial results, (xii) we may encounter difficulties arising from acquisitions, including the inability to realize projected synergies (xiii) in connection with acquisitions or divestitures, we may become subject to liabilities (xiv) we may incur additional restructuring costs and there is no guarantee that our efforts to reduce costs will be successful, (xv) we could be subject to changes our tax rates, the adoption of new U.S. or foreign tax legislation or exposure to additional tax liabilities, (xvi) full realization of our deferred tax assets may be affected by a number of factors, (xvii) several operations are conducted by joint ventures that we cannot operate solely for our benefit, (xviii) certain of the agreements that govern our joint ventures provide our partners with put or call options, (xix) our ability to attract, develop and retain talented and qualified employees, managers and executives is critical to our success, (xx) our business may be adversely impacted by work stoppages and other labor relations matters, (xxi) we may not successfully identify illegal immigrants in our workforce, (xxii) our pension and postretirement plans are underfunded and will require future cash contributions and our required future cash contributions could be higher than we expect, each of which could have a material adverse effect on our financial condition and liquidity, (xxiii) we may be subject to losses that might not be covered in whole or in part by existing insurance reserves or insurance coverage, (xxiv) our business depends on the uninterrupted operations of our facilities, systems and business functions, including our information technology and other business systems, (xxv) a security breach of customer, employee,

supplier or Company information may have a material adverse effect on our business, financial condition and results of operations, (xxvi) legislation/regulation related to environmental and health and safety matters and corporate social responsibility could negatively impact our operations and financial performance, (xxvii) product liability claims and other legal proceedings could adversely affect our operations and financial performance, (xxviii) we may incur fines or penalties, damage to our reputation or other adverse consequences if our employees, agents or business partners violate, or are alleged to have violated, anti-bribery, competition or other laws, (xxix) changing climate, climate change regulations and greenhouse gas effects may adversely affect our operations and financial performance, (xxx) the frequency and volume of our timber and timberland sales will impact our financial performance, (xxxi) changes in U.S. generally accepted accounting principles (U.S. GAAP) and SEC rules and regulations could materially impact our reported results, (xxxii) if the Company fails to maintain an effective system of internal control, the Company may not be able to accurately report financial results or prevent fraud, and (xxxiii) the Company has a significant amount of goodwill and long-lived assets which, if impaired in the future, would adversely impact our results of operations. The risks described above are not all-inclusive, and given these and other possible risks and uncertainties, investors should not place undue reliance on forward-looking statements as a prediction of actual results. For a detailed discussion of the most significant risks and uncertainties that could cause our actual results to differ materially from those forecasted, projected or anticipated, see "Risk Factors" in Part I, Item 1A of our most recently filed Form 10-K and our other filings with the Securities and Exchange Commission. All forward-looking statements made in this news release are expressly qualified in their entirety by reference to such risk factors. Except to the limited extent required by applicable law, we undertake no obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise.

GREIF, INC. AND SUBSIDIARY COMPANIES
CONDENSED CONSOLIDATED STATEMENTS OF INCOME
UNAUDITED

<i>(in millions, except per share amounts)</i>	Three months ended April 30,		Six months ended April 30,	
	2019	2018	2019	2018
Net sales	\$ 1,213.3	\$ 968.3	\$ 2,110.3	\$ 1,874.0
Cost of products sold	964.6	773.0	1,688.8	1,507.0
Gross profit	248.7	195.3	421.5	367.0
Selling, general and administrative expenses	140.0	102.7	238.1	206.3
Restructuring charges	7.5	6.0	11.2	10.1
Acquisition-related costs	13.8	—	16.4	0.2
Non-cash asset impairment charges	—	0.4	2.1	3.3
Gain on disposal of properties, plants and equipment, net	(4.9)	(1.5)	(5.8)	(6.1)
Loss on disposal of businesses, net	1.7	—	1.7	—
Operating profit	90.6	87.7	157.8	153.2
Interest expense, net	33.9	13.0	45.6	26.3
Debt extinguishment charges	21.9	—	21.9	—
Other expense, net	2.3	2.5	2.1	10.2
Income before income tax expense and equity earnings of unconsolidated affiliates, net	32.5	72.2	88.2	116.7
Income tax expense	11.5	21.1	31.5	5.5
Equity earnings of unconsolidated affiliates, net of tax	(0.1)	(0.8)	(0.2)	(0.8)
Net income	21.1	51.9	56.9	112.0
Net income attributable to noncontrolling interests	(7.5)	(6.8)	(13.6)	(10.4)
Net income attributable to Greif, Inc.	\$ 13.6	\$ 45.1	\$ 43.3	\$ 101.6
Basic earnings per share attributable to Greif, Inc. common shareholders:				
Class A common stock	\$ 0.23	\$ 0.77	\$ 0.74	\$ 1.73
Class B common stock	\$ 0.34	\$ 1.14	\$ 1.09	\$ 2.58
Diluted earnings per share attributable to Greif, Inc. common shareholders:				
Class A common stock	\$ 0.23	\$ 0.77	\$ 0.74	\$ 1.73
Class B common stock	\$ 0.34	\$ 1.14	\$ 1.09	\$ 2.58
Shares used to calculate basic earnings per share attributable to Greif, Inc. common shareholders:				
Class A common stock	26.3	25.9	26.1	25.9
Class B common stock	22.0	22.0	22.0	22.0
Shares used to calculate diluted earnings per share attributable to Greif, Inc. common shareholders:				
Class A common stock	26.3	25.9	26.1	25.9
Class B common stock	22.0	22.0	22.0	22.0

GREIF, INC. AND SUBSIDIARY COMPANIES
CONDENSED CONSOLIDATED BALANCE SHEETS
 UNAUDITED

<i>(in millions)</i>	April 30, 2019	October 31, 2018
ASSETS		
CURRENT ASSETS		
Cash and cash equivalents	\$ 89.8	\$ 94.2
Trade accounts receivable	704.8	456.7
Inventories	421.5	289.5
Other current assets	137.0	136.3
	<u>1,353.1</u>	<u>976.7</u>
LONG-TERM ASSETS		
Goodwill	1,522.6	776.0
Intangible assets	778.8	80.6
Assets held by special purpose entities	50.9	50.9
Other long-term assets	119.6	118.7
	<u>2,471.9</u>	<u>1,026.2</u>
PROPERTIES, PLANTS AND EQUIPMENT	<u>1,685.4</u>	<u>1,191.9</u>
	<u>\$ 5,510.4</u>	<u>\$ 3,194.8</u>
LIABILITIES AND EQUITY		
CURRENT LIABILITIES		
Accounts payable	\$ 473.8	\$ 403.8
Short-term borrowings	6.9	7.3
Current portion of long-term debt	83.8	18.8
Other current liabilities	244.9	240.3
	<u>809.4</u>	<u>670.2</u>
LONG-TERM LIABILITIES		
Long-term debt	2,851.8	884.1
Liabilities held by special purpose entities	43.3	43.3
Other long-term liabilities	645.2	407.5
	<u>3,540.3</u>	<u>1,334.9</u>
REDEEMABLE NONCONTROLLING INTERESTS	<u>24.3</u>	<u>35.5</u>
EQUITY		
Total Greif, Inc. equity	1,086.6	1,107.8
Noncontrolling interests	49.8	46.4
	<u>1,136.4</u>	<u>1,154.2</u>
	<u>\$ 5,510.4</u>	<u>\$ 3,194.8</u>

GREIF, INC. AND SUBSIDIARY COMPANIES
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
UNAUDITED

<i>(in millions)</i>	Three months ended April 30,		Six months ended April 30,	
	2019	2018	2019	2018
CASH FLOWS FROM OPERATING ACTIVITIES:				
Net income	\$ 21.1	\$ 51.9	\$ 56.9	\$ 112.0
Depreciation, depletion and amortization	55.5	32.4	86.8	64.1
Asset impairments	—	0.4	2.1	3.3
Other non-cash adjustments to net income	6.7	(5.5)	4.3	(37.2)
Operating working capital changes	2.5	(19.9)	(43.0)	(85.2)
Deferred purchase price on sold receivables	—	(1.9)	(6.9)	(24.8)
Increase (decrease) in cash from changes in other assets and liabilities	(23.6)	0.8	(47.6)	(27.7)
Net cash provided by operating activities	62.2	58.2	52.6	4.5
CASH FLOWS FROM INVESTING ACTIVITIES:				
Acquisitions of companies, net of cash acquired	(1,828.4)	—	(1,828.4)	—
Purchases of properties, plants and equipment	(37.6)	(28.3)	(63.6)	(56.3)
Purchases of and investments in timber properties	(1.4)	(2.3)	(2.3)	(4.9)
Proceeds from the sale of properties, plants and equipment, businesses, timberland and other assets	8.7	2.5	11.0	9.9
Proceeds on insurance recoveries	—	—	0.2	—
Net cash used in investing activities	(1,858.7)	(28.1)	(1,883.1)	(51.3)
CASH FLOWS FROM FINANCING ACTIVITIES:				
Proceeds from (payments on) debt, net	1,880.3	15.5	1,941.3	64.9
Dividends paid to Greif, Inc. shareholders	(26.1)	(24.8)	(51.8)	(49.3)
Payments for extinguishment and issuance of debt	(44.1)	—	(44.1)	—
Other	(6.3)	(3.0)	(18.6)	(3.4)
Net cash provided by (used for) financing activities	1,803.8	(12.3)	1,826.8	12.2
Reclassification of cash to assets held for sale	0.4	—	—	—
Effects of exchange rates on cash	(2.4)	(3.9)	(0.7)	0.5
Net increase (decrease) in cash and cash equivalents	5.3	13.9	(4.4)	(34.1)
Cash and cash equivalents, beginning of period	84.5	94.3	94.2	142.3
Cash and cash equivalents, end of period	\$ 89.8	\$ 108.2	\$ 89.8	\$ 108.2

GREIF, INC. AND SUBSIDIARY COMPANIES
FINANCIAL HIGHLIGHTS BY SEGMENT
 UNAUDITED

<i>(in millions)</i>	Three months ended April 30,		Six months ended April 30,	
	2019	2018	2019	2018
Net sales:				
Rigid Industrial Packaging & Services	\$ 631.6	\$ 662.7	\$ 1,229.5	\$ 1,278.1
Paper Packaging & Services	497.6	213.9	714.9	417.7
Flexible Products & Services	77.0	84.1	152.1	164.1
Land Management	7.1	7.6	13.8	14.1
Total net sales	\$ 1,213.3	\$ 968.3	\$ 2,110.3	\$ 1,874.0
Gross profit:				
Rigid Industrial Packaging & Services	\$ 121.0	\$ 124.9	\$ 219.6	\$ 235.3
Paper Packaging & Services	108.3	49.9	162.2	93.2
Flexible Products & Services	16.6	17.6	34.0	32.8
Land Management	2.8	2.9	5.7	5.7
Total gross profit	\$ 248.7	\$ 195.3	\$ 421.5	\$ 367.0
Operating profit:				
Rigid Industrial Packaging & Services	\$ 47.0	\$ 47.2	\$ 70.3	\$ 78.4
Paper Packaging & Services	30.2	33.0	65.5	60.9
Flexible Products & Services	11.2	5.0	17.2	8.2
Land Management	2.2	2.5	4.8	5.7
Total operating profit	\$ 90.6	\$ 87.7	\$ 157.8	\$ 153.2
EBITDA⁽¹⁾:				
Rigid Industrial Packaging & Services	\$ 62.5	\$ 66.3	\$ 105.7	\$ 110.8
Paper Packaging & Services	65.4	41.1	109.4	77.1
Flexible Products & Services	12.8	7.4	20.7	12.2
Land Management	3.2	3.6	6.9	7.8
Total EBITDA	\$ 143.9	\$ 118.4	\$ 242.7	\$ 207.9
Adjusted EBITDA⁽¹²⁾:				
Rigid Industrial Packaging & Services	\$ 68.9	\$ 71.6	\$ 117.6	\$ 119.6
Paper Packaging & Services	82.1	41.1	128.6	77.1
Flexible Products & Services	7.7	7.4	15.6	12.5
Land Management	3.3	3.2	6.5	6.2
Total Adjusted EBITDA	\$ 162.0	\$ 123.3	\$ 268.3	\$ 215.4

⁽¹⁾EBITDA is defined as net income, plus interest expense, net, including debt extinguishment charges, plus income tax expense, plus depreciation, depletion and amortization. However, because the Company does not calculate net income by segment, this table calculates EBITDA by segment with reference to operating profit by segment, which, as demonstrated in the table of Consolidated EBITDA, is another method to achieve the same result. See the reconciliations in the table of Segment EBITDA.

⁽¹²⁾Adjusted EBITDA is defined as net income, plus interest expense, net, including debt extinguishment charges, plus income tax expense, plus depreciation, depletion and amortization expense, plus restructuring charges, plus acquisition-related costs, plus non-cash impairment charges, plus non-cash pension settlement charges, less (gain) loss on disposal of properties, plants, equipment and businesses, net.

GREIF, INC. AND SUBSIDIARY COMPANIES
FINANCIAL HIGHLIGHTS BY GEOGRAPHIC REGION
 UNAUDITED

<i>(in millions)</i>	Three months ended April 30,		Six months ended April 30,	
	2019	2018	2019	2018
Net sales:				
United States	\$ 740.2	\$ 463.5	\$ 1,197.8	\$ 896.2
Europe, Middle East and Africa	344.4	370.7	655.6	702.0
Asia Pacific and other Americas	128.7	134.1	256.9	275.8
Total net sales	\$ 1,213.3	\$ 968.3	\$ 2,110.3	\$ 1,874.0
Gross profit:				
United States	\$ 159.3	\$ 106.8	\$ 260.1	\$ 198.3
Europe, Middle East and Africa	68.4	70.8	122.7	128.8
Asia Pacific and other Americas	21.0	17.7	38.7	39.9
Total gross profit	\$ 248.7	\$ 195.3	\$ 421.5	\$ 367.0

GREIF, INC. AND SUBSIDIARY COMPANIES
GAAP TO NON-GAAP RECONCILIATION
CONSOLIDATED ADJUSTED EBITDA⁽¹³⁾
UNAUDITED

<i>(in millions)</i>	Three months ended April 30,		Six months ended April 30,	
	2019	2018	2019	2018
Net income	\$ 21.1	\$ 51.9	\$ 56.9	\$ 112.0
Plus: Interest expense, net	33.9	13.0	45.6	26.3
Plus: Debt extinguishment charges	21.9	—	21.9	—
Plus: Income tax expense	11.5	21.1	31.5	5.5
Plus: Depreciation, depletion and amortization expense	55.5	32.4	86.8	64.1
EBITDA	\$ 143.9	\$ 118.4	\$ 242.7	\$ 207.9
Net income	\$ 21.1	\$ 51.9	\$ 56.9	\$ 112.0
Plus: Interest expense, net	33.9	13.0	45.6	26.3
Plus: Debt extinguishment charges	21.9	—	21.9	—
Plus: Income tax expense	11.5	21.1	31.5	5.5
Plus: Other expense, net	2.3	2.5	2.1	10.2
Plus: Equity earnings of unconsolidated affiliates, net of tax	(0.1)	(0.8)	(0.2)	(0.8)
Operating profit	\$ 90.6	\$ 87.7	\$ 157.8	\$ 153.2
Less: Other expense, net	2.3	2.5	2.1	10.2
Less: Equity earnings of unconsolidated affiliates, net of tax	(0.1)	(0.8)	(0.2)	(0.8)
Plus: Depreciation, depletion and amortization expense	55.5	32.4	86.8	64.1
EBITDA	\$ 143.9	\$ 118.4	\$ 242.7	\$ 207.9
Plus: Restructuring charges	7.5	6.0	11.2	10.1
Plus: Acquisition-related costs	13.8	—	16.4	0.2
Plus: Non-cash asset impairment charges	—	0.4	2.1	3.3
Less: Gain on disposal of properties, plants, equipment, and businesses, net	(3.2)	(1.5)	(4.1)	(6.1)
Adjusted EBITDA	\$ 162.0	\$ 123.3	\$ 268.3	\$ 215.4

⁽¹³⁾ Adjusted EBITDA is defined as net income, plus interest expense, net, including debt extinguishment charges, plus income tax expense, plus depreciation, depletion and amortization expense, plus restructuring charges, plus acquisition-related costs, plus non-cash impairment charges, plus non-cash pension settlement charges, less (gain) loss on disposal of properties, plants, equipment and businesses, net.

GREIF, INC. AND SUBSIDIARY COMPANIES
GAAP TO NON-GAAP RECONCILIATION
SEGMENT ADJUSTED EBITDA⁽¹⁴⁾
UNAUDITED

<i>(in millions)</i>	Three months ended April 30,		Six months ended April 30,	
	2019	2018	2019	2018
Rigid Industrial Packaging & Services				
Operating profit	47.0	47.2	70.3	78.4
Less: Other expense, net	3.3	2.8	3.2	10.1
Less: Equity earnings of unconsolidated affiliates, net of tax	(0.1)	(0.8)	(0.2)	(0.8)
Plus: Depreciation and amortization expense	18.7	21.1	38.4	41.7
EBITDA	\$ 62.5	\$ 66.3	\$ 105.7	\$ 110.8
Plus: Restructuring charges	4.4	6.0	8.0	9.8
Plus: Acquisition-related costs	0.2	—	0.3	0.2
Plus: Non-cash asset impairment charges	—	0.4	2.1	3.3
Less: (Gain) loss on disposal of properties, plants, equipment, and businesses, net	1.8	(1.1)	1.5	(4.5)
Adjusted EBITDA	\$ 68.9	\$ 71.6	\$ 117.6	\$ 119.6
Paper Packaging & Services				
Operating profit	30.2	33.0	65.5	60.9
Less: Other (income) expense, net	(1.0)	0.3	(0.9)	0.5
Plus: Depreciation and amortization expense	34.2	8.4	43.0	16.7
EBITDA	\$ 65.4	\$ 41.1	\$ 109.4	\$ 77.1
Plus: Restructuring charges	3.0	—	3.1	—
Plus: Acquisition-related costs	13.6	—	16.1	—
Less: (Gain) loss on disposal of properties, plants, equipment, net	0.1	—	—	—
Adjusted EBITDA	\$ 82.1	\$ 41.1	\$ 128.6	\$ 77.1
Flexible Products & Services				
Operating profit	11.2	5.0	17.2	8.2
Less: Other (income) expense, net	—	(0.6)	(0.2)	(0.4)
Plus: Depreciation and amortization expense	1.6	1.8	3.3	3.6
EBITDA	\$ 12.8	\$ 7.4	\$ 20.7	\$ 12.2
Plus: Restructuring charges	—	—	—	0.3
Less: (Gain) loss on disposal of properties, plants, equipment and businesses, net	(5.1)	—	(5.1)	—
Adjusted EBITDA	\$ 7.7	\$ 7.4	\$ 15.6	\$ 12.5
Land Management				
Operating profit	2.2	2.5	4.8	5.7
Plus: Depreciation, depletion and amortization expense	1.0	1.1	2.1	2.1
EBITDA	\$ 3.2	\$ 3.6	\$ 6.9	\$ 7.8
Plus: Restructuring charges	0.1	—	0.1	—
Less: (Gain) loss on disposal of properties, plants, equipment, net	—	(0.4)	(0.5)	(1.6)
Adjusted EBITDA	\$ 3.3	\$ 3.2	\$ 6.5	\$ 6.2
Consolidated EBITDA	\$ 143.9	\$ 118.4	\$ 242.7	\$ 207.9
Consolidated Adjusted EBITDA	\$ 162.0	\$ 123.3	\$ 268.3	\$ 215.4

⁽¹⁴⁾ Adjusted EBITDA is defined as net income, plus interest expense, net, including debt extinguishment charges, plus income tax expense, plus depreciation, depletion and amortization expense, plus restructuring charges, plus acquisition-related costs, plus non-cash impairment charges, plus non-cash pension settlement charges, less (gain) loss on disposal of properties, plants, equipment and businesses, net. However, because the Company does not calculate net income by segment, this table calculates Adjusted EBITDA by segment with reference to operating profit by segment, which, as demonstrated in the table of Consolidated Adjusted EBITDA, is another method to achieve the same result.

GREIF, INC. AND SUBSIDIARY COMPANIES
GAAP TO NON-GAAP RECONCILIATION
ADJUSTED FREE CASH FLOW⁽¹⁵⁾
UNAUDITED

<i>(in millions)</i>	Three months ended April 30,		Six months ended April 30,	
	2019	2018	2019	2018
Net cash provided by operating activities	\$ 62.2	\$ 58.2	\$ 52.6	\$ 4.5
Cash paid for purchases of properties, plants and equipment	(37.6)	(28.3)	(63.6)	(56.3)
Free cash flow	\$ 24.6	\$ 29.9	\$ (11.0)	\$ (51.8)
Cash paid for acquisition-related costs	16.4	—	16.4	0.2
Cash paid for debt issuance costs ⁽¹⁶⁾	5.1	—	5.1	—
Adjusted free cash flow	\$ 46.1	\$ 29.9	\$ 10.5	\$ (51.6)

⁽¹⁵⁾Adjusted free cash flow is defined as net cash provided by operating activities, plus cash paid for acquisition-related costs, plus cash paid for debt issuance costs, less cash paid for purchases of properties, plants and equipment.

⁽¹⁶⁾Cash paid for debt issuance costs is defined as cash payments for debt issuance related expenses included within net cash used in operating activities.

GREIF, INC. AND SUBSIDIARY COMPANIES
GAAP TO NON-GAAP RECONCILIATION
NET INCOME, CLASS A EARNINGS PER SHARE AND TAX RATE BEFORE ADJUSTMENTS
UNAUDITED

<i>(in millions, except for per share amounts)</i>	Income before Income Tax (Benefit) Expense and Equity Earnings of Unconsolidated Affiliates, net	Income Tax (Benefit) Expense	Equity Earnings	Non- Controlling Interest	Net Income Attributable to Greif, Inc.	Diluted Class A Earnings Per Share	Tax Rate
Three months ended April 30, 2019	\$ 32.5	\$ 11.5	\$ (0.1)	\$ 7.5	\$ 13.6	\$ 0.23	35.4%
Gain on disposal of properties, plants, equipment and businesses, net	(3.2)	(0.3)	—	(2.5)	(0.4)	(0.01)	
Restructuring charges	7.5	2.1	—	0.1	5.3	0.10	
Debt extinguishment charges	21.9	5.3	—	—	16.6	0.28	
Acquisition-related costs	13.8	2.7	—	—	11.1	0.19	
Tax net benefit resulting from the Tax Reform Act	—	(1.4)	—	—	1.4	0.02	
Excluding Adjustments	<u>\$ 72.5</u>	<u>\$ 19.9</u>	<u>\$ (0.1)</u>	<u>\$ 5.1</u>	<u>\$ 47.6</u>	<u>\$ 0.81</u>	<u>27.4%</u>
Three months ended April 30, 2018	\$ 72.2	\$ 21.1	\$ (0.8)	\$ 6.8	\$ 45.1	\$ 0.77	29.2%
Gain on disposal of properties, plants, equipment and businesses, net	(1.5)	(0.4)	—	—	(1.1)	(0.02)	
Restructuring charges	6.0	1.4	—	—	4.6	0.08	
Non-cash asset impairment charges	0.4	—	—	—	0.4	0.01	
Tax net benefit resulting from the Tax Reform Act	—	4.3	—	—	(4.3)	(0.08)	
Excluding Adjustments	<u>\$ 77.1</u>	<u>\$ 26.4</u>	<u>\$ (0.8)</u>	<u>\$ 6.8</u>	<u>\$ 44.7</u>	<u>\$ 0.76</u>	<u>34.2%</u>
Six months ended April 30, 2019	\$ 88.2	\$ 31.5	\$ (0.2)	\$ 13.6	\$ 43.3	\$ 0.74	35.7%
Gain on disposal of properties, plants, equipment and businesses, net	(4.1)	(0.5)	—	(2.6)	(1.0)	(0.02)	
Restructuring charges	11.2	3.0	—	0.1	8.1	0.14	
Debt extinguishment charges	21.9	5.3	—	—	16.6	0.28	
Acquisition-related costs	16.4	2.8	—	—	13.6	0.23	
Non-cash asset impairment charges	2.1	—	—	—	2.1	0.04	
Tax net benefit resulting from the Tax Reform Act	—	(3.2)	—	—	3.2	0.05	
Excluding Special Items	<u>\$ 135.7</u>	<u>\$ 38.9</u>	<u>\$ (0.2)</u>	<u>\$ 11.1</u>	<u>\$ 85.9</u>	<u>\$ 1.46</u>	<u>28.7%</u>
Six months ended April 30, 2018	\$ 116.7	\$ 5.5	\$ (0.8)	\$ 10.4	\$ 101.6	\$ 1.73	4.7%
Gain on disposal of properties, plants, equipment and businesses, net	(6.1)	(0.7)	—	—	(5.4)	(0.09)	
Restructuring charges	10.1	1.9	—	0.2	8.0	0.14	
Acquisition-related costs	0.2	0.1	—	—	0.1	—	
Non-cash asset impairment charges	3.3	0.7	—	—	2.6	0.04	
Tax net benefit resulting from the Tax Reform Act	—	33.4	—	—	(33.4)	(0.57)	
Excluding Special Items	<u>\$ 124.2</u>	<u>\$ 40.9</u>	<u>\$ (0.8)</u>	<u>\$ 10.6</u>	<u>\$ 73.5</u>	<u>\$ 1.25</u>	<u>32.9%</u>

The impact of income tax expense and non-controlling interest on each adjustment is calculated based on tax rates and ownership percentages specific to each applicable entity.

GREIF, INC. AND SUBSIDIARY COMPANIES
GAAP TO NON-GAAP RECONCILIATION
NET SALES TO NET SALES EXCLUDING THE IMPACT OF
CURRENCY TRANSLATION
UNAUDITED

<i>(in millions)</i>	<u>Three months ended April 30,</u>		Increase in Net Sales (\$)	Increase in Net Sales (%)
	2019	2018		
Consolidated				
Net Sales	\$ 1,213.3	\$ 968.3	\$ 245.0	25.3 %
Currency Translation	39.6	N/A		
Net Sales Excluding the Impact of Currency Translation	\$ 1,252.9	\$ 968.3	\$ 284.6	29.4 %
Rigid Industrial Packaging & Services				
Net Sales	\$ 631.6	\$ 662.7	\$ (31.1)	(4.7)%
Currency Translation	33.4	N/A		
Net Sales Excluding the Impact of Currency Translation	\$ 665.0	\$ 662.7	\$ 2.3	0.3 %
Flexible Products & Services				
Net Sales	\$ 77.0	\$ 84.1	\$ (7.1)	(8.4)%
Currency Translation	6.3	N/A		
Net Sales Excluding the Impact of Currency Translation	\$ 83.3	\$ 84.1	\$ (0.8)	(1.0)%

<i>(in millions)</i>	<u>Six months ended April 30,</u>		Increase in Net Sales (\$)	Increase in Net Sales (%)
	2019	2018		
Consolidated				
Net Sales	\$ 2,110.3	\$ 1,874.0	\$ 236.3	12.6 %
Currency Translation	66.4	N/A		
Net Sales Excluding the Impact of Currency Translation	\$ 2,176.7	\$ 1,874.0	\$ 302.7	16.2 %
Rigid Industrial Packaging & Services				
Net Sales	\$ 1,229.5	\$ 1,278.1	\$ (48.6)	(3.8)%
Currency Translation	56.4	N/A		
Net Sales Excluding the Impact of Currency Translation	\$ 1,285.9	\$ 1,278.1	\$ 7.8	0.6 %
Flexible Products & Services				
Net Sales	\$ 152.1	\$ 164.1	\$ (12.0)	(7.3)%
Currency Translation	10.1	N/A		
Net Sales Excluding the Impact of Currency Translation	\$ 162.2	\$ 164.1	\$ (1.9)	(1.2)%

GREIF, INC. AND SUBSIDIARY COMPANIES
PROJECTED 2019 GUIDANCE RECONCILIATION
ADJUSTED FREE CASH FLOW
UNAUDITED

<i>(in millions)</i>	Fiscal 2019 Guidance Range	
	Scenario 1	Scenario 2
Net cash provided by operating activities	\$ 349.9	\$ 389.9
Cash paid for purchases of properties, plants and equipment	(160.0)	(180.0)
Free cash flow	\$ 189.9	\$ 209.9
Cash paid for acquisition-related costs	35.0	35.0
Cash paid for debt issuance costs	5.1	5.1
Adjusted free cash flow	\$ 230.0	\$ 250.0

GREIF, INC. AND SUBSIDIARY COMPANIES
PROJECTED 2019 KEY METRICS
UNAUDITED

<i>(in millions)</i>	Fiscal 2019 Outlook Reported at Q1	Fiscal 2019 Outlook Reported at Q2
Depreciation & amortization expense	\$195 - \$205	No change
Interest expense	\$120 - \$130	\$115 - \$120
Other expense, net	\$15 - \$20	No change
Net income attributable to noncontrolling interest	\$18 - \$22	No change
Tax rate excluding the impact of special items	28% - 32%	No change
Capital expenditures	\$170 - \$190	\$160 - \$180

Greif, Inc.
Second Quarter 2019 Earnings Results Conference Call
June 6, 2019

CORPORATE PARTICIPANTS

Peter G. Watson *Greif, Inc. - President, CEO & Director*

Lawrence Allen Hilsheimer *Greif, Inc. - Executive VP & CFO*

Matt Eichmann *Greif, Inc. - VP of IR & Corporate Communications*

David C. Lloyd *Greif, Inc. - VP, Corporate Financial Controller & Treasurer*

CONFERENCE CALL PARTICIPANTS

Adam Jesse Josephson *KeyBanc Capital Markets Inc., Research Division - Director and Senior Equity Research Analyst*

Daniel Andres Jacome *Sidoti & Company, LLC - Equity Research Analyst*

Daniel Gardener *Barings UK Ltd - Associate Director*

Gabrial Shane Hajde *Wells Fargo Securities, LLC, Research Division - Associate Analyst*

George Staphos *Bank of America Merrill Lynch - Managing Director*

Ghansham Panjabi *Robert W. Baird & Co. Incorporated, Research Division - Senior Research Analyst*

Justin Bergner *Gabelli & Company Investment Advisers, Inc - Senior Analyst*

Kurt Yinger *D.A. Davidson & Co. - Equity Research Associate*

PRESENTATION

Operator

Good day. My name is Jack and I will be your conference operator today. At this time I would like to welcome everyone to the Greif's Second Quarter 2019 Earnings Conference Call. All lines have been placed on mute to prevent any background noise. After the speakers remarks there will be a question-and-answer session. If you would like to ask a question during that time, please press star, then the number one on your telephone keypad. If you would like to withdraw your question, press the pound key. Thank you.

Matt Eichmann, you may begin your conference.

Matt Eichmann - *Greif, Inc. - VP of IR & Corporate Communications*

Thank you, Jack, and good morning everyone. Welcome to Greif's second quarter fiscal 2019 earnings conference call. Joining us on the call today are Pete Watson, Greif's President and Chief Executive Officer; and Larry Hilsheimer, Greif's Chief Financial Officer. Pete and Larry are available to answer questions at the end of today's call.

In accordance with the Regulation Fair Disclosure, we encourage you to ask questions regarding issues that you consider material because we are prohibited from discussing significant non-public items with you on an individual basis. Please limit yourself to one question and one follow-up before returning to the queue.

Please turn to slide two. As a reminder, during today's call we will make forward-looking statements involving plans, expectations and beliefs related to future events. Actual results could differ materially from those discussed. Additionally we will be referencing certain non-GAAP financial measures and reconciliation to the most directly comparable GAAP metrics is contained in the appendix of today's presentation.

And now I turn the presentation over to Pete on slide three.

Peter G. Watson - Greif, Inc. - President, CEO & Director

Thank you, Matt, and good morning everyone. I'll begin today's call by providing quarterly highlights and a review of our business segment. Then our CFO, Larry Hilsheimer will discuss our financial results and our fiscal 2019 outlook. Following the remarks we'll conduct a question-and-answer period.

Starting with our second quarter summary, we continue to make solid progress toward our strategic vision of becoming the best performing customer service company in Industrial Packaging. Our company wide customer satisfaction index score topped 90% in the second quarter for the first time since we introduced the metric.

We also completed our 8th NPS survey and registered our best ever score of 57, which is in line with top performers in the manufacturing space. We are allocating a significant part of both our human and financial capital to achieving our vision and great progress is being made.

Our second quarter adjusted EBITDA and adjusted Class A earnings per share grew roughly 31% and 7% respectively versus the prior year quarter. Our rigid business was challenged by a weak demand environment and uncertainty from trade tensions. Our flexible business performed to plan despite market softness in the Benelux, and our Paper Packaging financial results improved significantly with the addition of Caraustar, but we experienced weaker demand during the quarter.

We completed the acquisition of Caraustar Industries on February 11 and integration is well under way. We've been highly impressed by the energy of our team in identifying new synergies not previously contemplated during the due diligence process.

Please turn to slide four. Rigid Industrial Packaging & Services was challenged in the second quarter by persistent weak demand in certain global markets. Global steel drum volumes declined by roughly 4% versus the prior year quarter, while IBC volumes grew by nearly 12%.

Steel volumes were particularly strong in the Middle East, North Africa and both Southern and Eastern Europe, but more challenge in higher volume regions of West and Central Europe, APAC and the U.S. Gulf Coast due to trade uncertainty and reduced chemical import demand from China.

Global IBC volumes are strong across the entire portfolio as we continue to advance our pivot to plastic initiative, with double digit volume growth versus the prior year in North America, EMEA and APAC. RIPS second quarter sales were roughly \$30 million lower versus the prior year, however on a currency neutral basis RIPS sales grew by roughly \$2 million versus the prior year due to higher selling prices from strategic pricing decisions, partially offset by volume softness.

RIPS second quarter adjusted EBITDA was down roughly 4% versus prior year due to lower sales and partially offset by lower segment SG&A expense. Adjusted EBITDA was also negatively impacted by roughly \$4 million of FX headwinds, by a \$1.5 million bad debt write off tied to a customer bankruptcy which we expect to be recovered this year, and roughly \$3 million less favorable opportunistic sourcing than in Q2 '18.

I'll ask you to please turn to slide five. As previously mentioned we completed the acquisition of Caraustar Industries on February 11 and included the results in Paper Packaging financial results subsequent to that date. Paper's second quarter sales improved by nearly \$284 million versus the prior year, largely due to Caraustar's contribution, partially offset by softer market conditions in our containerboard business where we took roughly 27,000 tons of economic downtime during the quarter.

Second quarter adjusted-EBITDA rose by roughly \$41 million versus prior year, largely due to Caraustar's contribution, but also due to improved price cost mix. Looking ahead, we assume OCC prices of \$38 a ton for the balance of the fiscal year and as a reminder, every \$10 ton movement in OCC equates to a roughly \$1.2 million change in EBITDA per month.

I'd ask you to please turn to slide six. I want to highlight the great work our integration team is doing to uncover synergies that will expand EBITDA and drive greater efficiencies in our business. Recall that when we announced Caraustar's acquisition on December 20th, we announced that at least \$45 million in annual run rate synergies will be captured within 36 months of deal close.

Over the last several months we've uncovered additional opportunities and we now expect run rate synergies will be at least \$60 million over the next 36 months. The bulk of the incremental synergy relates to greater than anticipated freight lane savings and revenue synergies not initially contemplated during the due diligence.

Please turn to slide seven. FPS delivered solid second quarter results despite ongoing market softness in Western Europe. Segment sales were roughly 8% lower than prior year, but excluding the impact of FX, it fell only by 1%. Gross profit fell by roughly 6% versus the prior year quarter due to lower sales, partially offset by lower labor and manufacturing costs across the network. These improved efficiencies together with lower SG&A and a beneficial FX tailwind of \$2 million helped flexible to generate slightly higher adjusted EBITDA versus the prior year.

I'd like to now turn over the presentation to our Chief Financial Officer, Larry Hilsheimer.

Lawrence Allen Hilsheimer - *Greif, Inc. - Executive VP & CFO*

Thank you, Pete. Good morning everyone; please turn to slide eight. Second quarter net sales excluding the impact of foreign exchange and gross profit were more than 29% and 27% higher respectively versus the prior year quarter, primarily due to the Caraustar contribution, partially offset by softness in RIPS and our legacy Paper Packaging business.

Second quarter adjusted EBITDA rose by more than 31% versus the prior year quarter, again primarily due to Caraustar's contributions and partially offset by the RIPS business headwind that Pete discussed in his remarks.

Below the operating profit line, second quarter interest expense rose by roughly \$21 million while other expense was roughly flat to prior year. Second, our stronger adjusted-EBITDA and lower tax expense drove second quarter adjusted Class A earnings per share to \$0.81 per share.

Our adjusted tax rate during the second quarter was 27.4%. As a reminder, the application of required FIN18 reporting may cause fluctuations in our quarterly effective rates from time to time, and we continue to expect that our adjusted tax rate will range between 28% and 32% for fiscal 2019.

A few additional words on earnings: Our initial estimates of purchase price accounting adjustments for our Q1 call and guidance discussions proved to be too low. The assets we acquired were determined to have a higher value than previously estimated, which resulted in incremental inventory costs, as well as depreciation and amortization charges that impacted our quarterly earnings.

Second quarter earnings were reduced by a one-time \$9 million inventory acquisition step-up charge, \$2 million of which is incremental to our Q1 guidance and is now reflected in our anticipated full year results.

Similar to discussion on our first quarter call and unlike some other acquisitive companies, we have not adjusted this one time item out of earnings. We also encountered \$3.5 million of incremental intangible asset amortization and fixed asset depreciation during the quarter as a result of incremental valuation step-ups and shorter depreciable lives than originally contemplated. The impact of these increased valuation adjustments impact the current year, full year estimates and are captured in our revised fiscal 2019 guidance that I'll discuss shortly.

Second quarter adjusted free cash flow improved by roughly \$16 million versus the prior year quarter. Second quarter CapEx was roughly \$9 million higher versus the prior year. Improvement in free cash flow is driven primarily by improved profitability related to Caraustar and stronger working capital performance in our legacy Greif's business.

Please turn to slide nine and I'll review our fiscal 2019 guidance and key modeling assumptions.

We now expect to generate between \$3.70 and \$4 in adjusted Class A earnings per share in 2019. Our updated fiscal 2019 guidance incorporates a drag associated with the various purchase price accounting adjustments that I just mentioned, Caraustar's synergies previously discussed and lower forecasted interest expense. It also reflects the containerboard price decrease recently announced in May, offset by our updated OCC assumption of \$38 a ton for the remainder of fiscal 2019.

Final guidance incorporates the containerboard economic downtime and RIPS softness we experienced that we won't recoup this year. We assume that RIPS demand will improve slightly in the back half of the year in line with our chemical customers' expectations and based on current Ag forecasts. We also contemplate sequential improvements in PPS though with demand remaining less robust than in the prior year.

We've also tightened our fiscal free cash flow guidance range between \$230 million and \$250 million, which includes an anticipated CapEx of between \$160 million and \$180 million. CapEx has been slightly reduced as a result of poor weather and vendor related delays impacting several of our CapEx projects.

Turning to capital priorities on slide 10: Our capital priorities were updated following completion of the Caraustar acquisition. Investing in our existing businesses through appropriate maintenance projects and organic growth opportunities remains our top priority, as that is what will allow us to fund our aggressive deleveraging plan.

We have no plans to alter our existing dividend which today pays a compelling yield of roughly 5%. Given our anticipated free cash generation, we expect to return to our target leverage ratio of 2x times to 2.5x within 36 months despite the recent softness we have experienced.

With that, I'll turn the call back to Pete for his closing comments before our Q&A.

Peter G. Watson - *Greif, Inc. - President, CEO & Director*

Thank you, Larry, and please turn to slide 11. So wrapping up, it's a really busy second quarter. We closed on the Caraustar acquisition, we commenced with business integration, and identified new synergies that make the acquisition even more compelling. Our teams have responded well to the challenging market environment and are delivering a solid performance. This is a really exciting time at Greif and we look forward to sharing more about our future plans at the upcoming Investor Day in June.

Details about Investor Day can be found on our website; we encourage you to attend. Thanks for participating this morning and we appreciate your interest in Greif.

Jack, if you could please open the lines for questions.

QUESTIONS AND ANSWERS

Operator

Certainly. In order to ensure that everyone has a chance to participate, we would like to request that you limit yourself to asking one question and one follow up questions during the Q&A session. If you have further questions you may re-queue. To ask a question please press star followed by the number one on your telephone keypad. To withdraw your question press the pound key.

Your first question comes from the line of Gabe Hajde with Wells Fargo. Your line is open.

Gabrial Shane Hajde *Wells Fargo Securities, LLC, Research Division - Associate Analyst*

Good morning, gentlemen, and thanks for taking the question.

Pete Watson

Hi Gabe.

Gabrial Shane Hajde *Wells Fargo Securities, LLC, Research Division - Associate Analyst*

I wanted to ask about Caraustar and sort of outside of the newly discovered synergies. Can you just talk about how the business was performing sort of from an operational and commercial perspective? Maybe give us some insight as to what the volume environment looks like.

Peter G. Watson - *Greif, Inc. - President, CEO & Director*

Yes Gabe, we are very pleased with Caraustar and the response in the first three months that we've owned it. As we've talked about the integration, it's going very, very well. The engagement of the teams is excellent. If you look at the market, the market is pretty representative of what we've talked about overall in the U.S. Because we own - we didn't have them an entire quarter, I'll reference the calendar first quarter January through March. Partly we owned them and partly we didn't, and overall the system was about 3.8% down and when you look at our calendar - excuse me, our fiscal year from February 11 to the end of April, they are just a tad weaker than that 3.8%.

So not much different, but I will say we're pleased with the strength of the operating rates in both CRB and URB and overall we are very, very pleased with what we've seen in the first three months.

Gabrial Shane Hajde *Wells Fargo Securities, LLC, Research Division - Associate Analyst*

Alright, thanks for the detail there Pete. And then I wanted to drill down a little bit into European RIPS volumes. It sort of strikes me a little bit, as peculiar seeing up volumes just looking at some of the industrial production data that we look at over there. I've read some reports about some folks holding onto a little extra inventory just as contingency planning around Brexit. Is there any insight you can give us there?

Peter G. Watson - *Greif, Inc. - President, CEO & Director*

Yeah, so when you look at EMEAs RIPS line and I'll talk first about steel, because steel is our largest product line, in RIPS, but also more heavily weighted in Europe and EMEA. The big challenge is Western Europe, predominantly around Benelux as we've talked about it. That's typically an export market for our customers and that has been very weak for the past two quarters and had a lot of impact in Central Europe, particularly in Germany was weak as you've noted and everything you've read.

But where we saw really good strength was in Eastern Europe, included is Russia. That demand is very good and we are up 6% in that region. The Middle East really, especially around Saudi Arabia was up 14% and I think that's a testament to the joint - the operation that we have supporting our joint venture in the Middle East in Jubail, Saudi Arabia and we had really good improved Ag markets in Southern Europe, particular around this upcoming conical and tomato season, they are up 9%.

So we're really bullish on that region of the world and the other really positive comment was in the IBC growth. We had double digit growth in our entire IBC portfolio and Europe certainly has a large piece of that and it's part of our growth strategy and how we offer a wider range of diverse products to our existing customers and that's again critical in terms of how we offer IBCs to our global customers.

Operator

Your next question comes from the line of Adam Josephson with KeyBanc. Your line is open.

Adam Jesse Josephson *KeyBanc Capital Markets Inc., Research Division - Director and Senior Equity Research Analyst*

Pete and Larry, good morning, and thanks for taking my question.

Peter G. Watson - *Greif, Inc. - President, CEO & Director*

Hey Adam, how are you doing?

Adam Jesse Josephson *KeyBanc Capital Markets Inc., Research Division - Director and Senior Equity Research Analyst*

Hey, I'm fine Pete, thanks for asking. Hope the same goes for you. Just one follow-up to Gabe's question about Caraustar. So I think you said Caraustar's volume was down 38 in calendar 1Q and something more than that in your fiscal quarter. So I assume it was down more than 4% in the quarter in which you own them, but that you are pleased with the operating rates. Can you help us with what the operating rates were in that business? Were they sub- 90% - just a little - I mean I would think with volumes down in excess of 4% it would be hard for operating rates to be much higher than 90% or so?

Peter G. Watson - *Greif, Inc. - President, CEO & Director*

Yes, so the operating rates and I'll talk about CRB and URB, because that's the prominent substrate in the mill systems. So CRB is very strong. I believe it's over 96% and we ran at good capacities there and URB operating rates, and I'm quoting RISI statistics, the most recent that I've seen was about 94%. So those industry rates remain strong and the second quarter when I referenced was 4% as a boxboard system that we're down. So slightly worse than it was in calendar Q1 Adam.

Adam Jesse Josephson *KeyBanc Capital Markets Inc., Research Division - Director and Senior Equity Research Analyst*

Okay, thanks Pete. And just on a containerboard side, obviously you took the 27,000 tons of market downtime. When was the last time you had to take economic downtime in that business? When in the quarter did you take the downtime, was it the beginning, the end or was it evenly spread throughout. And then are you assuming anymore containerboard economic downtime in the latter two quarters of the year, why or why not? Thanks so much Pete.

Peter G. Watson - Greif, Inc. - President, CEO & Director

So I've been here 20 years and this is the most economic downtime we've ever taken. In regard to during the quarter, it was really spread out throughout the quarter; it wasn't heavily weighted toward the end of the beginning.

And then in regard to our forecast, the only downtime we are projecting in the second half, we took regularly scheduled maintenance downtime in our Riverville operation in May and it was seven days on our liner board machine, 11 days on our semi-chem medium machine and that was really the upgrade and automate technology in our back end of our machine. We will also have scheduled fourth quarter regular maintenance downtime at another containerboard mill at that time, but there is no economic downtime projected or forecasted today in our containerboard system other than maintenance downtime.

Operator

Your next question comes from a line of Ghansham Panjabi with Baird. Your line is open.

Ghansham Panjabi Robert W. Baird & Co. Incorporated, Research Division - Senior Research Analyst

Hey guys, good morning.

Peter G. Watson - Greif, Inc. - President, CEO & Director

Good morning Ghansham.

Ghansham Panjabi Robert W. Baird & Co. Incorporated, Research Division - Senior Research Analyst

So I guess first off on RIPS, obviously volumes have been impacted to some extent due to tariffs especially in the U.S., we now have incremental tariffs with both China and possibly Mexico. How have these two dynamics sort of shaped your assumptions for the back half of '19? In other words, how should we think about volumes across the various regions for RIPS for the rest of the year? I know you mentioned, you are following your customer's plans, but I'm not sure how updated they are relative to the sequence of recent events on tariffs. Thanks.

Peter G. Watson - Greif, Inc. - President, CEO & Director

Ghansham, I'll make a few comments and let Larry add some color to it. So as you said, our Gulf Coast in the U.S. is a little over 40% of our steel drum production in the U.S. and that's a big export market for our customers, so that's been really - hampered us.

And around the world, Benelux is also a large export market for our customers and that is also close to 40% of the European steel demand. So big impact there, and then China obviously has had collateral damage as well in that regard.

So in regard to the second half, the only change from our volumes, from what we experienced in Q2 is around our Ag season in Europe. We expect that to be very favorable and that is going to create a little bit higher overall steel drum demand by 2% as we're projecting going forward.

Again as I mentioned, Eastern Europe and Saudi Arabia and Southern Europe continue to do well. So aside from the Ag markets in Europe, we are basically saying we're going to be even or similar to what we did going forward.

I will tell you some of our customers in the chemical side are much more optimistic in the calendar second half and I think a lot of that depends on how far trade progresses going forward. Larry, any other comments you'd like to make?

Lawrence Allen Hilsheimer - Greif, Inc. - Executive VP & CFO

Yeah, the only thing I would add is - and this is just supplementing what Pete said. You know we are expecting a really solid second half from EMEA based on what we've learned about what's going on in the Ag markets. But also as Pete mentioned, things just continue to be really strong in Eastern Europe and in Saudi in particular. Some of the other Southern European markets are good and even supplemented by Ag.

So we're expecting the EMEA volumes to be very strong in the second half, offsetting further weakness in the U.S. which is really standard, almost exclusively around the Gulf Coast and is tied into what we're hearing from our chemical customers. And so when we built out our guidance range for the remainder of the year, we took what our team forecast and then for the lower end of our

guidance range we built some additional softness and in case things don't recover in the part of our year that falls in the second half fiscal of the chemical companies, so we think we built that cushion in.

APAC, we've continued to show the drop year-over-year that relates to the shutdown of our Ningbo plant there, so they are doing relatively well. And Latin America we are really pleased with the improvement in operations that we're seeing with the new leadership we have down there. So volumes in the second half of the year there were projecting slightly up as we're also hearing good news in the Ag markets in South America.

Ghansham Panjabi *Robert W. Baird & Co. Incorporated, Research Division - Senior Research Analyst*

Okay, and I guess just as a follow up, you know and specific to RIPS once again. You know even with volumes being sort of weak in the second quarter on a year-over-year basis, margins were basically flat with 2Q of last year. Was that driven by raw material cost being lower, freight cost, mix? Can you just give us some color as to the bridge on operating profit or EBITDA basis, specific to RIPS. Thanks so much.

Lawrence Allen Hilsheimer - *Greif, Inc. - Executive VP & CFO*

Sure. Yes, on an aggregate basis you know there are a lot of moving parts, but it's primarily driven by pricing actions that we've taken on things other than the raw materials. You might recall that in the first quarter call I mentioned that a steep drop in cold rolled steel cost in December on the index that was going to create a little margin squeeze in the U.S., we did have that, we did though have a success on driving some supplemental price increases that helped us manage against that margin squeeze a bit and had some help on some transport spot benefits.

So, on an overall basis it was really just sort of hand-to-hand combat on managing the price cost squeeze. Steel costs are relatively consistent with all of our forecasts going into the quarter, and it was really just managing the other elements of our pricing discussions with our customers.

Matt Eichmann - *Greif, Inc. - VP of IR & Corporate Communications*

And Ghansham clearly right, so last quarter we talked about some of the actions we are taking to move down variable costs and some to take out what we are doing there. So I think you are seeing some of that play through as well too.

Peter G. Watson - *Greif, Inc. - President, CEO & Director*

Yeah, thanks Matt.

Operator

Your next question comes from the line of George Staphos with Bank of American Merrill Lynch. Your line is open.

George Staphos *Bank of America Merrill Lynch - Managing Director*

Hi everyone, good morning. Thanks for the details. Guys I just wanted to come back to the question on RIPS volumes and just point of clarification. So if we think about it, directionally you expect EMEA to be up, North America to be down, APAC to be down and Latin America to be up. And I don't know if you were commenting in aggregate what you expect for RIPS volumes for the back half, but if you had a view on that, I would take that in your confirmation of what I just said and your guidance and I have a quick follow on.

Peter G. Watson - *Greif, Inc. - President, CEO & Director*

Yeah, George, on an overall basis we expect that steel volumes in the second half of the year will be up about 2.5% unit wise. Plastic we expect to be up, you know 1% to 2% and IBC is up you know high single to low double digits.

George Staphos *Bank of America Merrill Lynch - Managing Director*

Okay, fair enough. And Larry, if you can go back to Carastar and I guess congratulations of the performance on that so far. Where did you find the incremental revenue synergy, you know that's interesting, congratulations on that, revenue synergies though tend to be the most ethereal and difficult to capture, at least from our vantage point, so where are you finding the confidence if I heard you correctly on the revenue synergy.

And then also if you could comment part two of that Caraustar question, can you remind us what the one-off costs that you took in earnings in this quarter were? Thank you.

Lawrence Allen Hilsheimer - Greif, Inc. - Executive VP & CFO

Yeah, the one off cost, let me address that quickly, because that's simple, that's \$9 million, an inventory mark-up at the valuation date. So we bought assets, so it's accreted as if we bought the inventory at market value. So it flips through in the first quarter. A lot of companies exclude that and then adjust it back, we just felt like that was, you know you can always get criticized for those things. Maybe we'll get criticized because we didn't, but it's a \$9 million item. Sure would have been nice to run that through, it would have been nice pop in earnings. But that will come back next year and Pete wanted to comment on the other part.

Peter G. Watson - Greif, Inc. - President, CEO & Director

Yeah, the revenue synergies are really internal. So it's not that we expect to get external revenues. So it's things that we are buying internal within Paper Packaging or the Rigid Packaging business or Flexible Packing business that we can internally supply to ourselves. Example, corrugated that Caraustar buys in their business, we can either supply it through our plant in North Carolina or trade tons for corrugated supply.

Things like in offset trade, top sheets going to our consumer products group business. We have an adhesive plant as part of our tube and core business that there is opportunity to supply adhesives to our corrugated plants and our fiber drum plants.

We are experimenting with some of the liner out of one of the mills in Caraustar that is supplying, to enhance our fiber drum business. So it's all internally based. We feel very positive and confident about the opportunities and the teams are working very well together to try to make sure those happen.

Lawrence Allen Hilsheimer - Greif, Inc. - Executive VP & CFO

Yeah, and these are just things that happen when you are in that really limited due diligence period; and yeah you might remember, we had a pretty short period, particularly when you consider holidays from when we announced the deal to when we closed, since there weren't any anti-trust issues. So we didn't have time to really vet all these revenue opportunities and our teams have been doing a really great job of discovering them, because it's across the entire enterprise not just the Paper business.

Operator

Again, if you would like to ask a questions, please press the star and number one on your keypad. Your next question comes from the line of Justin Bergner with G. Research. Your line is open.

Justin Bergner Gabelli & Company Investment Advisers, Inc - Senior Analyst

Good morning Pete, good morning Larry. Thanks for taking my questions.

Peter G. Watson - Greif, Inc. - President, CEO & Director

Hi Justin.

Justin Bergner Gabelli & Company Investment Advisers, Inc - Senior Analyst

I have a couple of clarification questions. On those revenue synergies, so those are really sort of cost synergies associated with sourcing internally that will show up as sort of inter-segment sales prospectively; is that how we should think about them?

Lawrence Allen Hilsheimer - Greif, Inc. - Executive VP & CFO

Well, I guess you can look at it either way Justin. These are things that other companies were selling into us that we are now selling to ourselves. So I guess you can look at it on either side of that equation.

Justin Bergner Gabelli & Company Investment Advisers, Inc - Senior Analyst

Okay, that's helpful and then on the I guess add backs for Paper Packaging associated with restructuring charges and acquisition related costs to your adjusted EBITDA, were those all associated with Caraustar or were any of them associated with the legacy or incumbent Paper Packaging business.

Peter G. Watson - Greif, Inc. - President, CEO & Director

All of those that we adjusted out were related to the transaction. Now some of the debt extinguishment costs related to you know debt instrument that was in existence that we you know paid off, you know our bond debt or other lines, but everything ties back to the Caraustar acquisition.

Justin Bergner Gabelli & Company Investment Advisers, Inc - Senior Analyst

Okay, that's helpful. And on the Caraustar operating rates, if they were 96% and 94% this quarter with the systems sort of down 4% does that mean that if we were to, you know look back a year they were in the high 90s, the operating rates for both parts of the Caraustar business.

Lawrence Allen Hilsheimer - Greif, Inc. - Executive VP & CFO

Yeah Justin, so the operating rates I quoted were from RISI and you're correct, last year the operating rates were probably 97% to 100% for parts of 2018 you are correct.

Operator

Your next question comes from a line of Kurt Yinger with Davidson. Your line is open.

Kurt Yinger D.A. Davidson & Co. - Equity Research Associate

Thanks. Good morning Pete, Larry and Matt.

Peter G. Watson - Greif, Inc. - President, CEO & Director

Hi Kurt.

Kurt Yinger D.A. Davidson & Co. - Equity Research Associate

Just taking a step back and looking at RIPS, obviously there's a lot of well-advertised challenges there as it relates to volumes, but how much do you think sort of is your growth lagging due to maybe under indexing the plastics versus steel. And how are you thinking about going forward, maybe moving the portfolio more towards plastic? Maybe better approximate sort of the overall market growth.

Peter G. Watson - Greif, Inc. - President, CEO & Director

Yeah, that's a really good point and as you know the steel portfolio is a little bit more to 55% of our total product offering in RIPS and that's a slow growth businesses, it generates a lot of cash in that, it's an important offering to our customers and as you know we have a very broad products offering and it's important for us to be a strong player and a major number one market share in that region.

But our focus there on how do we optimize that system? How do we drive more efficiency to drive out cost to serve our customers, but the plastic is our pivot to growth and we talked about that on Investor Day, we'll continue to talk about that in the Investor Day in June. We've executed I think very well on our IBC strategies; we've been growing double digit growth.

We're also executing on improving some technologies and adding capacity in certain markets that our customers are aligned to. It's a very important part of our strategy to continue to offer a broader portfolio of products and we have the largest footprint, global footprint in industrial packaging, so it's important for us to broaden. Right now we're roughly 22% to 23% of plastics.

So again, our ultimate goal is to drive that to a higher level and have a more balanced RIPS portfolio. So the growth rates in plastics are single digit. Globally our IBC in low to mid teens and single digits in plastic, so that's exactly what our strategy is and we're really looking forward to explaining that in greater detail in Investor Day in June.

Lawrence Allen Hilsheimer - Greif, Inc. - Executive VP & CFO

Yeah Kurt, I'll just supplement that, and we will get into more of this at the Investor Day, but I think one of the things that's gotten lost in the shuffle over the last couple of years because you've had a lot of volatility in steel prices and you've had obviously the impacts of tariffs, but we also, we've shuttered in the last four years 51 plants or operations. The vast majority of that had to do

with steel drum plants. It had with it \$400 million plus of revenue. Maybe \$100 million or so shifted into other operations and the rest of it we walked away from.

We also walked away from a lot of contractual business that was not profitable. So you know there's I think - there's a very valid point that, 'Gee! You haven't grown this business,' but we've replaced all of that with more profitable business. So we'll spend more time on that, but while we've been shifting to plastic we've also been trying to clean up the portfolio.

Kurt Yinger *D.A. Davidson & Co. - Equity Research Associate*

Right, okay thanks. No, that's helpful color. And just secondly on the housekeeping front, looking forward how should we think about the cash sort of costs related to the acquisition, looking into 2020 kind of compared to the \$35 million that you've incorporated and adjusted free cash flow guide for this year?

Lawrence Allen Hilsheimer *- Greif, Inc. - Executive VP & CFO*

Kurt, I'm not following your question. I mean we had one-time costs associated with the transaction. We have some accounting, you know non-cash costs on depreciation and amortization that are increases, but in terms of actual out of pocket costs from cash, you know we will have some use of working capital, although we think that's a big opportunity because the legacy Carastar business really didn't focus on managing working capital very well and we've got to heighten focus on that.

And then David and his team in treasury did a great job of actually you know locking in at fixed rates lower than we expected on our interest costs so that you know our annual interest expense cash cost will be less than what we had originally forecast.

David, what was that? How much is the difference on that?

David C. Lloyd *Greif, Inc. - CAO, VP, Corporate Financial Controller & Treasurer*

From the original model its \$23 million.

Lawrence Allen Hilsheimer *- Greif, Inc. - Executive VP & CFO*

Yeah, \$23 million annually. You might remember we have a little bit of double up this year where with just the process of cashing out the 19 bonds that some of that will fall off and goes into that as well.

Operator

Your next question comes from the line of the Dan Jacome with Sidoti. Your line is open.

Daniel Andres Jacome Sidoti & Company, LLC - Equity Research Analyst

Hi, good morning.

Peter G. Watson *- Greif, Inc. - President, CEO & Director*

Hey Dan.

Daniel Andres Jacome Sidoti & Company, LLC - Equity Research Analyst

So just staying on RIPS, sorry if I missed it. On the last call you talked about the industry moving at least temporarily to a bulk shipping - bulk container and some sort of substitution threat on the - I think it was the steel drum. Did you see that this quarter? I'm assuming you saw some of it. I'm just trying to figure out a direction if you saw that, call it problem or headwind increase or worsen quarter-to-quarter.

Peter G. Watson *- Greif, Inc. - President, CEO & Director*

Yeah, I think that we talked about in the U.S. predominately the Gulf coast where it's a big export market and which has been impacted by trade and to move product, it's more efficient in country sometimes to ship in bulk shipping, which is tankers or rail cars, whatever. So we continue to see the same trend. I wouldn't say it's getting any less or worse Dan, it's about the same.

Daniel Andres Jacome Sidoti & Company, LLC - Equity Research Analyst

About the same. Well, how sustainable do you think that temporary substitution is? Could it continue or do you think that this is something just given, you know the big change in global trade flows that this is kind of more like a one off for this year.

Peter G. Watson - *Greif, Inc. - President, CEO & Director*

I'd say customers would prefer to ship in bulk because its more cost effective, but depending on what the customers need in lot size, specialty products relative to their sector would go in a small packaging which is drums and then certainly if the trade tariffs change, that alleviates and opens up markets where drums are more utilized. So I think the trade in the U.S. basis and the Gulf coast will be a big driver to steel drum buying in the U.S.

Lawrence Allen Hilsheimer - *Greif, Inc. - Executive VP & CFO*

Yeah Dan, I'll just supplement. You know as we said, yes some of our guidance assumptions ties into what we're hearing and reading from a lot of the chemical companies about their views on the second half of the year and a lot of which assumes a trade agreement with China ends up being reached.

I think the broader question is, what are the long range implications on supply chains that have been you know sort of restructured as a result of this, you know but the nice advantage for us is, some of what that means is they end up buying from other places that we sell from. We're seeing significant growth out of our Saudi operation and that was built to ship into Asia and predominately China.

So you know I do think a big driver of the decrease in demand is the dramatic drop in auto production in China and the impact that has on importing chemicals into the country and you know hopefully if that turns around we see a rebound in volumes and steel.

Operator

Your next question comes from the line of Daniel Gardener with Barings. Your line is open.

Daniel Gardener *Barings UK Ltd - Associate Director*

Hey guys, good morning.

Peter G. Watson - *Greif, Inc. - President, CEO & Director*

Good morning.

Daniel Gardener *Barings UK Ltd - Associate Director*

Just a very quick one for me; it looks like you made some successful moves in terms of you know SG&A cost reductions, variable cost reductions in the quarter. I was just wondering whether you could give us a little bit more detail on what that consisted of.

Lawrence Allen Hilsheimer - *Greif, Inc. - Executive VP & CFO*

Yeah, I mean we've been focused on managing costs for quite some time as we've seen you know economic weakness and so we've done some consolidation of plants and we've continued on our journey on back office improvements as we've rolled out the implementation of our ERP system.

That's said, you know the addition of our Caraustar group provides us further opportunities to streamline and take out cost as the SG&A piece of our PPS business is way higher than it has been historically.

Now Caraustar is a different model and we won't be able to get to the levels that we were in that business, but we do believe there's opportunities to continue to streamline that business, particularly after we get the ERP system implemented in there. But more specifically to your question, yes, we took as specific actions on streamlining back office and consolidating a few operations.

Daniel Gardener *Barings UK Ltd - Associate Director*

Okay, that was quite helpful. That's all from me.

Operator

Your next question comes from the line of Adam Josephson with KeyBanc. Your line is open.

Adam Jesse Josephson *KeyBanc Capital Markets Inc., Research Division - Director and Senior Equity Research Analyst*

Hey, Larry and Matt, thanks again for taking my questions. Just one on your OCC assumption, Larry. So your assuming 38 for the remainder of the year, so for the last six months. You would - obviously you know what it was in May.

If I look at June, the national average price is down to 25 now, so again I don't know how your price compares to the national average, but it would seem as if you've built in still quite a bit of cushion as far as OCC is.

I don't know if you're expecting OCC to go up for the balance of the year or not, so hoping you could help me with that. And then if you did mark-to-market OCC for what it actually was in May for you and then what it just went down by yesterday, what would the number be compared to the 38 that you are assuming.

Lawrence Allen Hilsheimer - *Greif, Inc. - Executive VP & CFO*

Yes, so good question Adam, thanks for it. So just to give some color, in the first quarter guidance we talked about assuming 65 for the rest of the year. We experienced 57 on average across our portfolio in the second quarter. In May we were down to 38. You know our - that national average does include all the little commissions and premiums you pay to get it to your plant and all that kind of stuff.

So ours is - based on that 38 we did not incorporate yesterday's \$5 decrease into our range, so if you play that out, that would be another \$0.035 -- \$0.03 to \$0.04 for the rest of the year. That's sort of you know, not built into our guidance range. Hopefully that's helpful.

Adam Jesse Josephson *KeyBanc Capital Markets Inc., Research Division - Director and Senior Equity Research Analyst*

Perfect! Just a couple of other ones Larry; the pro forma leverage at quarter end, can you give us that and then what you expected it to be down by at year end?

Lawrence Allen Hilsheimer - *Greif, Inc. - Executive VP & CFO*

Yeah, it's - it was 365 at the end of the quarter. I didn't look - Dave, you know what pro forma is?

Peter G. Watson - *Greif, Inc. - President, CEO & Director*

We expect it to - hoping to drive the ball on 3.5.

Lawrence Allen Hilsheimer - *Greif, Inc. - Executive VP & CFO*

Yeah, 3.5 and like I said Adam, we are extremely confident. Very hard to emphasize how extremely confident we are that we will be below - within our 2x to 2.5x in the 36 months.

Adam Jesse Josephson *KeyBanc Capital Markets Inc., Research Division - Director and Senior Equity Research Analyst*

And Larry just on the earnings bridge, the guidance bridge, so I know you raised by \$0.05, interest expense came down by basically the same. So operationally guidance didn't change, but within that obviously OCC was called a \$0.20 positive, Carastar synergies were a \$0.15 positive; that's \$0.35 that that was offset by \$0.35 of other operational stuff. Can you just help us with how much was each of the lower containerboard prices, lower containerboard volume, that acquisition accounting changes, etcetera.

Lawrence Allen Hilsheimer - *Greif, Inc. - Executive VP & CFO*

Let me walk through our bridge with you and so if you just put at the top of your page, the \$3.60 to \$4 that we rolled out at Q1 and on RIPS to go volumes on the low end, take off \$0.15 for worst case and \$0.10 on the best case, interest expenses is you know \$0.06 on both ends.

PPS, for the economic downtime that we already occurred, you know that's \$0.13, that's a done deal across the board. And on PPS, on our synergy capture, we put a range on it, so you know it maybe \$0.20 to \$0.15. I put it on the low end on the \$0.20 and the \$0.15 on the top just to you know - because I have a little conservatism in myself on the high end.

And then for PPS, on the OCC we reflected the \$0.68 or the \$0.38 from the \$0.65, so that's about you know \$18 million, \$19 million a year. But then we have the price declines, so that's about 3 and then we just took some - volume impacts across the entire portfolio to reflect what we've been seeing in our businesses and that we put in about just shy of \$10 million.

So again on the low end, a \$0.12 increase, on the high end a \$0.02 increase, and then the inventory step up was a you know \$0.02 decrease, because that was up from the \$0.07 we estimated at Q1 to Q2. So you put all those together and you now walk through all that later in more detail, but if you missed any of it, but it takes you to the \$3.70 to \$4 if you put all those things together.

Operator

Your next question comes from a line of George Staphos with Bank of American Merrill Lynch. Your line is open.

George Staphos *Bank of America Merrill Lynch - Managing Director*

Thanks very much for taking the follow-on guys. I guess the first question I had and then these are you know bigger picture now. Relative to what we've seen in the last you know four to six quarters across you know the Paper Business and across industrial, and I know we'll hear a lot about this at the Investor Day.

Larry and Pete, how are you managing the business perhaps differently than would have been the case you know say early '18 or end of '17. Are there anything that you're doing particularly more acutely or with more focus across those two businesses and would have been the case prior or currently?

Lawrence Allen Hilsheimer - *Greif, Inc. - Executive VP & CFO*

Yes, so I wouldn't say we're managing the business any differently. You have to add the integration of the acquisition in Caraustar and the complexities that involves in managing the paper business, because there is scheduling planning correlation between their mills and the legacy mills. So other than the integration, I think we're managing the business as we normally do.

We drive very heavily on performance management, very metric driven in how lead the business, very strong focus on Greif 's business system fundamentals and operational excellence, commercial excellence and pricing discipline.

We continue to look at our portfolio and look at opportunities to how we can create more efficiency in our network. So other than Caraustar creating opportunities in our Paper Packaging business, there's not a lot of differences.

The only issue I would say is so our focus is how do we pay down debt rapidly. It may miss some opportunities, bigger opportunities that we could have done otherwise. But we are real happy with what we did with Caraustar and we don't think that's has any impact on how we will long term move our strategy trying to diversify our RIPS portfolio with plastic initiatives and continue to drive opportunities to create more integration in our Paper Packaging system to our mills.

Lawrence Allen Hilsheimer - *Greif, Inc. - Executive VP & CFO*

Yeah, the only thing I would supplement that with George is really a heightened focus on managing our cost, our manufacturing costs through our GBS system and you know our SG&A cost. I mean for the past six to eight months we've been talking to our business and finance leaders about obviously there's something going on in the industrial economy, so we need to be on top of managing our costs as well as we can.

George Staphos *Bank of America Merrill Lynch - Managing Director*

Yeah, and that's where I was going with the question. I would imagine you'd be doing - you'd be even tighter on costs, even tighter on working capital, even tighter on receivables because something seems to be happening in terms of what's been, you know a very uneven volume outlook, not just for you obviously, but across the rest the business. If you have anything else to add there I would take it.

And then relatedly, you know if I look back on the RIPS model long term and Larry I think you said you, between the plant shutdowns and/or divestitures it's been roughly \$400 million of revenue, but you've been able to keep most of that profitability.

When I look at EBITDA going back to 2010, there's been a fairly sizeable drop off, roughly \$100 million in RIPS between what you are reporting in you know 2010, 2011 and the current rate. How much of that is the effect of the plant shut and the divestiture program? How much if any is just the evolving mix change in your business? Are you losing profit dollars when you shift out of

steel to IBC? Anything else that you have in that and why it bottoms here and hopefully improves from here going forward would be helpful? Thanks guys and good luck in the quarter and we'll see you in the couple of weeks.

Lawrence Allen Hilsheimer - *Greif, Inc. - Executive VP & CFO*

Yeah, and George to tell you, I will spend more time looking back. To be frank, I haven't looked back in 2010 or '11. I mean I got here in 2014 and we've been trying to fix the thing since and the numbers that I quoted you relate to what we've done in the last four years since we announced the transformation and you know I'll just go back and say you know our operating profit is gone from \$266 to \$308 to \$335 to \$391 to you know whatever it's going to be this year, is a lot higher.

So I feel pretty darn good about what we've done. We've shuttered a lot of stuff that didn't make profit, but 'll get some answers to that question as we go into Investor Day, Matt you can remind us, we'll go back and try to figure out the answer to that. My comment was related to serve our starting point on transformation and what we've been trying to get done since then.

You know relative to your add-on to your prior question, you're absolutely right. I mean we've told our - I wrote my board report for our board meeting this week and I said, I quoted the old Buffalo Springfield song where they said, 'There's something happening here, what it is it ain't exactly clear.' You know, unemployment is at lowest rates ever, GDP numbers looking good, you know consumer confidence up and yet industrial production is sinking, PMI indexes are down you know and so what we are encouraging our teams is hey, we got to have all the levers ready to pull.

I mean in some segments of our business in certain geographies its already like you're in a recession. But then we got others, they're knocking it out of the park and so we're trying to be nimble and react to the markets that we play in and try to make the right decisions in a way that is smart and not just a meat cleaver across the organization that would cut the legs out of the places that are doing well.

So we're just trying to manage the fundamentals the way that we think you should, and take advantage of the opportunities we can and manage through the weaknesses where we have to.

Operator

Your next question comes from a line of Justin Bergner with G. Research. Your line is open.

Justin Bergner *Gabelli & Company Investment Advisers, Inc - Senior Analyst*

Thanks for the follow ups. First question is somewhat out of the box. You know given the dramatic decline in OCC prices and these sensitivity of your business to OCC, is there any way that you could find market participant, to be a counter party to allow you to you know buy OCC on a forward basis, so as to de-risk the debt pay down from the Carastar acquisition.

Lawrence Allen Hilsheimer - *Greif, Inc. - Executive VP & CFO*

Yeah, it's an interesting thought, although remember Justin we are in the OCC business also. I mean you know we bought that as part of the Carastar systems. So we can manage through that. I mean right now you've got a situation where the pricing on OCC is so low that you are having a bunch of stuff dumped into landfills, which is you know not the greatest scenario. So we don't see - first of all, this stuff is big bulk, so you don't store it. There really isn't a futures market for it, so you'd be - you're probably eat your advantage away in storage, but yeah it's interesting, we'll think about it more. Thanks for the thought.

Justin Bergner *Gabelli & Company Investment Advisers, Inc - Senior Analyst*

Okay, great. And then the second follow up was just in regards to the bridge; two things came at me a bit fast. The Carastar synergy capture of \$0.15 to \$0.20, was that not in the prior guide to any extent.

Lawrence Allen Hilsheimer - *Greif, Inc. - Executive VP & CFO*

No, it wasn't, we hadn't put anything into that bridge, probably just the miss on our part.

Justin Bergner *Gabelli & Company Investment Advisers, Inc - Senior Analyst*

Okay, and then you mentioned volume declines at the tail end of your bridge statement, was that the economic downtime for PPS of the \$0.13 or was that a different part of the bridge?

Lawrence Allen Hilsheimer - Greif, Inc. - Executive VP & CFO

Let me supplement my prior comment on why we didn't add synergies in. We didn't put any in, because you know you might recall when we announced the deal we talked about recapturing \$15 million in the first 12 months, \$15 million in the second 12 months, \$15 million in the third. While we know that we would have some executive departures very quickly, we also knew there would be some dis-synergy things on offsets of you know various comp changes for people internally who are taking management roles, that kind of thing, and many of those things, it was just uncertain how fast we could get any the synergies in.

As our teams aggressively got going we've obviously gained a lot more confidence about what they can deliver this year and we're very pleased. So it was a conscious decision to not do it, so my statement about a miss was not appropriate; my team would be very insulted.

So on the second piece Justin, the PPS economic downtime was - is obviously a done deal for what occurred and that is the \$0.13 per share impact from that 27,000 tons at 400 ton of value add. The volume impact that I talked about was across our system, you know our CorrChoice and our new system for Carastar along the lines of you know, like the 4% that we had in the time that we owned Carastar in our second quarter. Just sort of projecting out for the rest of the year what we expect to get across our box board and our CorrChoice network for the rest of the year and we estimate that to be \$10 million down relative to what we had built into the guidance at the end of the first quarter.

Operator

Your next question comes from a line of Dan Jacome with Sidoti. Your line is open.

Daniel Andres Jacome Sidoti & Company, LLC - Equity Research Analyst

Thanks for the follow-up; just a quick one on Carastar. I'm trying to drill down a little further into some of the products. I know when you announce the transaction in December, you talked about the growth trajectories or assumed volume trends for some of the portfolio.

I think you didn't assume much if any growth for tube and core, but you know it if you are at liberty to give us some more color, what are assuming for protected packaging and then perhaps folding carton. Thanks.

Peter G. Watson - Greif, Inc. - President, CEO & Director

So you're talking about downstream converting operations in Carastar?

Daniel Andres Jacome Sidoti & Company, LLC - Equity Research Analyst

Yes, yes.

Peter G. Watson - Greif, Inc. - President, CEO & Director

And so you get really two businesses, Industrial Packaging Group which is predominantly tubes and cores and some protective packaging. In our forecast we are projecting at a similar rate that we saw in calendar Q1 and fiscal Q2 and the CRB folding carton business is similar as well. So the mill side is on the same path, so we are really forecasting similar rates as we talked about for Q1 and Q2.

Lawrence Allen Hilsheimer - Greif, Inc. - Executive VP & CFO

Yes, and Dan you might recall we said you know production overall for our box board business was 4% down in the second quarter, so that's a rate assumption.

Daniel Andres Jacome Sidoti & Company, LLC - Equity Research Analyst

What was folding carton and protected packing down in the quarter. They are like the similar...

Peter G. Watson - Greif, Inc. - President, CEO & Director

Yeah, we don't get into all that.

Daniel Andres Jacome Sidoti & Company, LLC - Equity Research Analyst

Yeah, you are giving us a blended rate. Yeah, you are giving us a blended rate. Where was it? Was there any growth in the portfolio at all?

Peter G. Watson - Greif, Inc. - President, CEO & Director

Just for competitive reasons Dan we're not going to go down into the product line.

Operator

We have time for one final question. Your final question comes from the line of Adam Josephson with KeyBanc. Your line is open.

Adam Jesse Josephson KeyBanc Capital Markets Inc., Research Division - Director and Senior Equity Research Analyst

Pete, thanks so much for taking my follow-up. Just last one Caraustar. So Caraustar was down about 4% volume wise in the quarter. Your core volume was also down 4%. Would you say Caraustar is any more or less economically sensitive than the legacy portfolio and if it's not, any less economically sensitive. I guess just help me again understand the diversification benefits of owning Caraustar along with containerboard and steel drums.

Peter G. Watson - Greif, Inc. - President, CEO & Director

Yes, let's just talk about the tubes and core business because it's the largest downstream. So it is a very diverse segmentation or customer segmentation very diverse. Two segments that have particularly hurt the tube and core business, the paper business as a paper mill core is certainly one of the products lines that they supply and construction. Those two industries, we know why the cores and paper mills are down, obviously for reasons we discussed and you've talked about it in your publications.

The construction with wet weather in the U.S. has been slowed. Those are two key reasons why that business is little lower. But I think when you look at the rationale Caraustar you got an integrated system of uncoated and coated recycled box board which has very strong industry dynamics and then we have integrated downstream products that we can add value in niche markets and we feel that it's really parallel to our containerboard core choice model. They are just different products and different substrates.

Lawrence Allen Hilsheimer - Greif, Inc. - Executive VP & CFO

And Adam supplementing that, I mean the end markets that Caraustar serves are very, very broad. I mean you know how many skews did it have, do you remember that Matt, how many skews we said in had in different - 14,000 and its spread across a whole plethora of different end markets; consumer, industrial, that, so its way more diversified than our general portfolio.

Adam Jesse Josephson KeyBanc Capital Markets Inc., Research Division - Director and Senior Equity Research Analyst

Thanks Larry. I appreciate it.

Operator

This concludes the Q&A period. I would now like to turn it back over to Matt Eichmann for closing remarks.

Matt Eichmann - Greif, Inc. - VP of IR & Corporate Communications

Well, thanks Jack. We appreciate everybody's time today and look forward to seeing everybody at Investor Day later in June. Details for the event can be found on our website at www.Greif.com. Thanks a lot and have a great weekend ahead!

Operator

This concludes the Greif's second quarter 2019 earnings conference call. We thank you for your participation. You may now disconnect.