



Graphic Packaging Holding Company, headquartered in Atlanta, Georgia, is committed to providing consumer packaging that makes a world of difference. The Company is a leading provider of paper-based packaging solutions for a wide variety of products to food, beverage, foodservice, and other consumer products companies. The Company operates on a global basis, is one of the largest producers of folding cartons and paper-based foodservice products in the United States, and holds leading market positions in solid bleached sulfate paperboard, coated unbleached kraft paperboard and coated recycled paperboard. The Company's customers include many of the world's most widely-recognized companies and brands.

Financial Highlights			
Year Ended December 31 (in millions except for per share data)	2019	2018	2017
Income Statement Data			
Net Sales	\$ 6,160.1	\$ 6,029.4	\$ 4,405.6
Cost of Sales	5,067.5	5,077.0	3,696.1
Selling, General, Administrative	511.8	472.1	347.5
Income from Operations	534.1	458.2	327.9
Interest Expense, Net	140.6	123.7	89.7
Net Income Attributable to Graphic Packaging Holding Company	206.8	221.1	300.2
Weighted Average Number of Basic Shares Outstanding	294.1	309.5	311.1
Weighted Average Number of Diluted Shares Outstanding	294.8	310.1	311.9
Net Income Per Share Attributable to GPHC - Diluted	0.70	0.71	0.96
Balance Sheet Data			
Cash and Cash Equivalents	\$ 152.9	\$ 70.5	\$ 67.4
Total Assets	7,289.9	7,059.2	4,863.0
Total Debt	2,860.3	2,957.1	2,274.5
Total Equity	2,058.0	2,018.5	1,291.9

Message from the President and Chief Executive Officer

Dear Fellow Stockholders,

I am pleased to share Graphic Packaging's 2019 financial results and progress made on our Vision 2025 goals. It was an outstanding year for our company, our employees and our stockholders. We successfully exceeded the financial targets established at the beginning of the year. We generated significant cash flow, invested in our integrated packaging platform and our people, all while providing notable returns to stockholders through dividend distributions, share repurchases and share price appreciation.

2019 CONSOLIDATED RESULTS

- Net Sales of \$6.2 billion improved 2% from 2018
- Adjusted EBITDA⁽¹⁾ of \$1.03 billion increased 6% from 2018
- Adjusted EPS $^{(1)}$ of \$0.87 improved 7% from 2018
- Adjusted Cash Flow⁽¹⁾ of \$528 million increased 13% from 2018



(1) The calculation of Adjusted EBITDA, Adjusted Cash Flow, Adjusted EPS and Net Debt and a reconciliation to GAAP measures can be found in the Company's Fourth Quarter and Full Year 2019 Earnings Release which is available on www.graphicpkg.com.



Graphic Packaging converting facility in Monroe, Louisiana

2019 results were driven by \$131 million of higher pricing and \$74 million in productivity improvements, which more than offset commodity input cost and labor and benefits inflation. Importantly, we began to see real net organic volume growth materialize in the business in the second half of the year. This pivot to net organic volume growth is driven by our customers' focus on packaging solutions that are sustainable, coupled with our outstanding new product development capabilities.

Sustainability is one of the strongest trends in the packaging industry today. Given the significant sustainability characteristics of paperboard, we are uniquely positioned to capture new opportunities with our global fiber-based packaging platform. We have a long history of environmental and social responsibility practices at the Company and we continue to improve our manufacturing processes.

INNOVATION IN PACKAGING SOLUTIONS

The KeelClip[™] food and beverage packaging solution that we announced during 2019 is gaining traction. This innovative solution offers sustainability advantages and merchandising benefits compared to other packaging alternatives. We began shipping our proprietary KeelClip machinery systems in the first quarter of 2020 and will be rolling out solutions globally for the next several years. This new, paper-based packaging solution, engineered and designed in-house, reflects our commitment to develop practical packaging solutions that are environmentally friendly.

Our global team of engineers, designers and marketers work closely with our customers to support their critical business objectives. Customers benefit from Graphic Packaging's scale, integrated operations and our ongoing investments in innovation, automation and quality improvement.

"Given the significant sustainability characteristics of paperboard, we are uniquely positioned to capture new opportunities with our global fiber-based packaging platform."





CONTINUED INVESTMENT BACK INTO THE BUSINESS

During 2019, we announced a transformational \$600 million investment in Kalamazoo, Michigan that will result in cost and quality advantages for years to come. The new world-class Coated Recycled Board (CRB) machine will have a positive environmental impact by reducing greenhouse gases, water usage and purchased energy. The last major investment in the CRB industry occurred in 1991 and was Graphic Packaging's K1 machine in Kalamazoo, Michigan. Our new investment strengthens our leadership across the industry and will yield quality and efficiency enhancements. We expect to generate \$100 million in incremental EBITDA once the new paper machine is fully ramped in 2022.

Two additional strategic investments we made in 2019 include our state-of-the-art Monroe, Louisiana converting facility and the Sneek, Netherlands converting facility in Europe. These facilities provide a global platform to serve our beverage customers worldwide. We believe these strategically located, highly flexible folding carton facilities translate into distinct benefits for our customers, including accelerated speed to market and service consistency. In addition, the Monroe facility sits within seven miles of our West Monroe paperboard mill, our largest mill in North America, offering meaningful logistics cost benefits. We win business and enjoy long-term partnerships with our customers as they recognize our commitment to product quality and innovation in new product development. The strategic investments we make each year in our integrated manufacturing platform position us well as a leader in the paperboard packaging industry.

"The strategic investments we make each year in our integrated manufacturing platform position us well as a leader in the paperboard packaging industry."





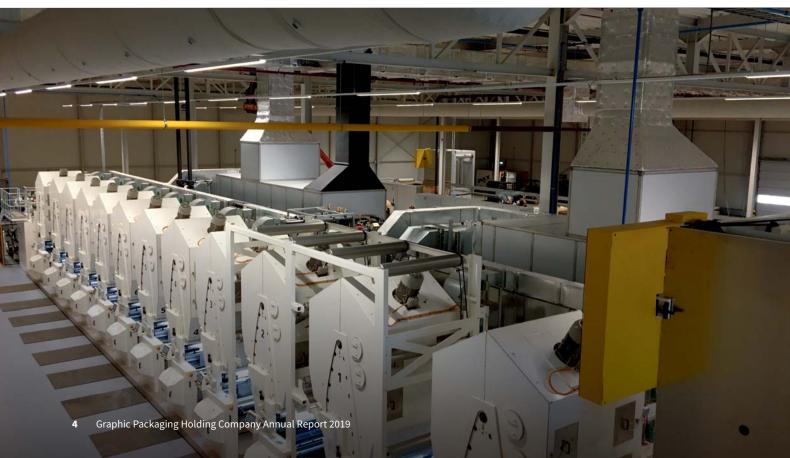
STRENGTHENING CORE BUSINESS AND INCREASING INTEGRATION WITH STRATEGIC ACQUISITIONS

Our strong financial model provides the flexibility to deploy a balanced approach to capital allocation that includes the significant capital we invest back into our business and we deploy in the execution of strategic, tuck-under acquisitions. We target tuck-under acquisitions that strengthen our core business, offer expansion into growing markets and increase paperboard integration rates.

We completed the acquisition of Artistic Carton Company in August 2019. The acquisition added two converting facilities and approximately 70,000 tons of CRB capacity in the Midwest. The transaction provided compelling optimization and growth opportunities for our paperboard mill and converting platform in North America, including expansion and diversification into new markets.

In 2020, we continue our successful track record of strategic acquisitions. So far this year we have completed the acquisition of a folding carton facility in Omaha, Nebraska from Quad/Graphics, Inc., and we have announced our intent to acquire seven converting facilities (known as the Consumer Packaging Group) across the U.S. from Greif, Inc. Our new facility in Omaha is strategically located close to many existing food, beverage and industrial customers and allows us to further optimize our business mix. Adding the Consumer Packaging Group facilities to the platform will enhance service capabilities to growing mid-sized consumer goods and food service customers and provide opportunity for increased optimization across our network. The paperboard consumption of these newly acquired facilities will meaningfully increase our paperboard integration rate over time from 68% to the low-70% range.

Graphic Packaging converting facility in Sneek, The Netherlands





CAPITAL RETURN

In addition to the share price appreciation stockholders realized in 2019, we also returned \$242 million to stakeholders through dividends, distributions and share repurchases. We will continue to execute our balanced approach to capital allocation in 2020 and beyond.

VISION 2025

With 9 mills and 68 converting facilities worldwide, Graphic Packaging is the largest, integrated paperboard packaging solutions provider in the world. We are growing with the best customers in the best markets, and lead in the paperboard substrates we participate with #1 market share in CRB and Coated Unbleached Kraft (CUK) paperboard, and #2 market share in Solid Bleached Sulfate (SBS) paperboard in the U.S. We are extending our leadership position through action, as we are investing in our platform and people, increasing paperboard integration rates and driving innovation in packaging solutions.

With the introduction of our Vision 2025, we committed to significant EBITDA, cash flow and return growth over the next 6 years. Keys to achievement include continued productivity-driven margin improvement, net organic volume growth and successful integration of targeted acquisitions. We are off to a solid start in 2020 as we work toward our Vision 2025 goals. We have completed one acquisition and announced a second that combined are expected to generate \$27 million in post-synergy annualized EBITDA, and importantly, we see 100 to 200 basis points of net organic volume growth for the year driven by known customer conversions to our paperboard solutions. In addition, we expect \$65 to \$75 million in net operating performance improvement during the year. Finally, we continue to execute on our transformational CRB project in Kalamazoo, Michigan and are on track to be fully ramped in 2022.

At Graphic Packaging, our packaging solutions are made primarily from renewable wood fiber, and most of our paperboard packaging and food service products can be recycled today. We intend to leverage our industry-leading sustainability profile and continue to reduce our impact on the environment through our own operations and

"With the introduction of our Vision 2025, we committed to significant EBITDA, cash flow and return growth over the next 6 years."



through innovative paperboard solutions. As part of our Vision 2025, we challenged our team to achieve significant improvements. In the next few years, we intend to reduce greenhouse gas emissions, non-renewable energy usage, and mill water effluents by 15%, and reduce the use of low-density polyethylene (LDPE) by 40%. In addition, we have established a 100% recyclability goal for all Graphic Packaging products long-term. We are committed to continuous improvement to benefit the communities in which we live and work, and we will provide updates on milestones achieved in our annual sustainability reports.

Our employees are an important asset and play a significant role in achieving our vision. Accordingly, we are focused on ensuring we have the right talent in the right roles at the right time. Our talent acquisition, succession, development, and diversity and inclusion strategies are critical components of the multi-year plan we have for our people. We will continue to invest in capability development in areas that serve as a competitive advantage and enable us to successfully achieve our growth and profitability goals.

2019 was a pivotal year. We drove significant profitability improvement and outperformed in our core markets. We saw net organic volume growth materialize in the second half of the year and we made strategic investments to position the Company for continued growth and success. Our focus is on the four pillars that comprise our Vision 2025: partners, profit, planet and our people. We believe we will deliver substantial stockholder value as we grow profitably and further invest to expand our leadership position.

I want to thank our customers for their business, our more than 18,000 Graphic Packaging employees for their continued hard work and dedication, and our stockholders for their trust. I look forward to updating you again on progress made as we realize our Vision.

Thank you for your attention,

dles P. Don

Michael P. Doss

President and Chief Executive Officer February 27, 2020 "With 9 mills and 68 converting facilities worldwide, Graphic Packaging is the largest, integrated paperboard packaging solutions provider in the world."

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Form 10-K

✓ ANNUAL REPORT PURS	SUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF	F 1934
For the fiscal year ended D	December 31, 2019		
	or		
TRANSITION REPORT I □ 1934	PURSUANT TO SECTION 13 OF	R 15(d) OF THE SECURITIES EXCHANGE AC	T OF
For the transition period for	rom to		
CO	OMMISSION FILE NUMBER: 00	01-33988	
Graphic Pa	ackaging Hold	ing Company	
(Exac	ct name of registrant as specified in	its charter)	
Delaware		26-0405422	
(State or other jurisdiction of incorporation or	organization)	(I.R.S. employer identification no.)	
1500 Riveredge Parkway, Suite 1	00		
Atlanta , Georgia		30328	
(Address of principal executive office	ces)	(Zip Code)	
	(770) 240-7200		
	egistrant's telephone number, including a s registered pursuant to Section 1		
<u>Title of Each Class</u> Common Stock, \$0.01 par value per share	Trading Symbol(s) GPK	Name of Each Exchange on Which Registered New York Stock Exchange	
Securitie	s registered pursuant to Section 1	2(g) of the Act:	
	None	(6)	
Indicate by check mark if the registrant is a well-know	n seasoned issuer, as defined in Rule 405 of	the Securities Act. Yes ☑ No □	
Indicate by check mark if the registrant is not required	to file reports pursuant to Section 13 or Sect	ion 15(d) of the Act. Yes \square No \square	
Indicate by check mark whether the registrant (1) has preceding 12 months (or for such shorter period that the 90 days. Yes \boxtimes No \square	filed all reports required to be filed by Secti registrant was required to file such reports),	on 13 or 15(d) of the Securities Exchange Act of 1934 during the and (2) has been subject to such filing requirements for the pas	e st
Indicate by check mark whether the registrant has subsubmitted and posted pursuant to Rule 405 of Regulation post such files). Yes \boxtimes No \square	omitted electronically and posted on its corp S-T during the preceding 12 months (or for	orate Web site, if any, every Interactive Data File required to be such shorter period that the registrant was required to submit and	e d
		not contained herein, and will not be contained, to the best of the III of this Form 10-K or any amendment to this Form 10-K. $\ \Box$	е
Indicate by check mark whether the registrant is a lar growth company. See the definitions of "large accelerated Exchange Act. (Check one):	rge accelerated filer, an accelerated filer, a n filer," "accelerated filer," "smaller reporting	on-accelerated filer, a smaller reporting company or an emerging company" and "emerging growth company" in Rule 12b-2 of the	g e
Large accelerated filer $\ \Box$	Accelerated filer	☐ Smaller reporting company ☐	
Non-accelerated filer \Box (Do n	ot check if a smaller reporting company)	Emerging growth company \Box	
If an emerging growth company, indicate by check ma financial accounting standards provided pursuant to Section		extended transition period for complying with any new or revised	d
Indicate by check mark whether the registrant is a she	.,	Act). Yes □ No ☑	
The aggregate market value of voting and non-voting of			
approprie manner raise of voting and non-voting c	equity meta of non unmideo at sunc	- ·, - · · · · · · · · · · · · · · · · ·	

DOCUMENTS INCORPORATED BY REFERENCE:

As of February 7, 2020 there were approximately 290,324,561 shares of the registrant's Common Stock, \$0.01 par value per share outstanding.

Portions of the registrant's definitive Proxy Statement for the 2020 Annual Meeting of Stockholders are incorporated by reference into Part III of this Annual Report on Form 10-K.

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INFORMATION CONCERNING FORWARD-LOOKING STATEMENTS

Certain statements regarding the expectations of Graphic Packaging Holding Company ("GPHC" and, together with its subsidiaries, the "Company"), including, but not limited to, the deductibility of goodwill for tax purposes, the availability of net operating losses to offset U.S. federal income taxes and the timing related to the Company's future U.S. federal income tax payments, the anticipated reduction of International Paper Company's investment in Graphic Packaging International Partners, LLC, reclassification of loss on derivative instruments, termination of the U.S. pension plan and charges related thereto, charges associated with CRB mill exit activities, capital investment, depreciation and amortization, interest expense, pension plan contributions and post-retirement health care benefit payments in this report constitute "forward-looking statements" as defined in the Private Securities Litigation Reform Act of 1995. Such statements are based on currently available operating, financial and competitive information and are subject to various risks and uncertainties that could cause actual results to differ materially from the Company's historical experience and its present expectations. These risks and uncertainties include, but are not limited to, inflation of and volatility in raw material and energy costs, changes in consumer buying habits and product preferences, competition with other paperboard manufacturers and converters, product substitution, the Company's ability to implement its business strategies, including strategic acquisitions, the Company's ability to successfully integrate acquisitions, productivity initiatives and cost reduction plans, the Company's debt level, currency movements and other risks of conducting business internationally, and the impact of regulatory and litigation matters, including those that could impact the Company's ability to utilize its net operating losses to offset taxable income and those that impact the Company's ability to protect and use its intellectual property. Additional information regarding these and other risks is contained in Part I, Item 1A., Risk Factors. Undue reliance should not be placed on forward-looking statements, as such statements speak only as of the date on which they are made and the Company undertakes no obligation to update such statements, except as may be required by law.

PART I

ITEM 1. BUSINESS

Overview

Graphic Packaging Holding Company ("GPHC" and, together with its subsidiaries, the "Company") is committed to providing consumer packaging that makes a world of difference. The Company is a leading provider of paper-based packaging solutions for a wide variety of products to food, beverage, foodservice and other consumer products companies. The Company operates on a global basis, is one of the largest producers of folding cartons in the United States ("U.S.") and holds leading market positions in coated-recycled paperboard ("CRB"), coated unbleached kraft paperboard ("CUK") and solid bleached sulfate paperboard ("SBS").

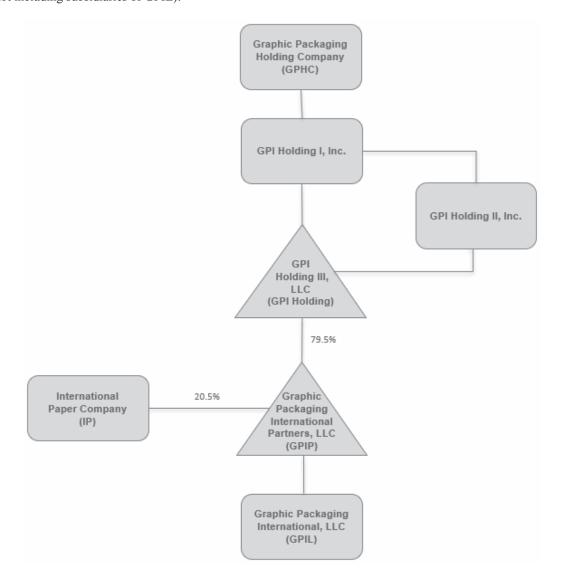
The Company's customers include many of the world's most widely recognized companies and brands with prominent market positions in beverage, food, foodservice and other consumer products. The Company strives to provide its customers with packaging solutions designed to deliver marketing and performance benefits at a competitive cost by capitalizing on its low-cost paperboard mills and converting facilities, its proprietary carton and packaging designs, and its commitment to quality and service.

On January 1, 2018, GPHC, a Delaware corporation, International Paper Company, a New York corporation ("IP"), Graphic Packaging International Partners, LLC, a Delaware limited liability company formerly known as Gazelle Newco LLC and a wholly owned subsidiary of the Company ("GPIP"), and Graphic Packaging International, LLC, a Delaware limited liability company formerly known as Graphic Packaging International, Inc. and a direct subsidiary of GPIP ("GPIL"), completed a series of transactions pursuant to an agreement dated October 23, 2017, among the foregoing parties (the "Transaction Agreement"). Pursuant to the Transaction Agreement (i) a wholly owned subsidiary of the Company transferred its ownership interest in GPIL to GPIP; (ii) IP transferred its North America Consumer Packaging ("NACP") business to GPIP, which was then subsequently transferred to GPIL; (iii) GPIP issued membership interests to IP, and IP was admitted as a member of GPIP; and (iv) GPIL assumed certain indebtedness of IP (the "NACP Combination").

GPI Holding III, LLC, an indirect wholly-owned subsidiary of the Company ("GPI Holding"), is the managing member of GPIP.

At the closing of the NACP Combination, GPIP issued 309,715,624 common units or 79.5% of the membership interests in GPIP to GPI Holding and 79,911,591 common units or 20.5% of the membership interests in GPIP to IP. Subject to certain restrictions, the common units held by IP are exchangeable into shares of common stock of GPHC or cash.

The following diagram illustrates the organization of the Company immediately subsequent to the transactions described above (not including subsidiaries of GPIL):



During 2019 and 2018, GPIP repurchased 20.8 million partnership units from GPI Holding, which increased IP's ownership interest in GPIP to 21.6% at December 31, 2019. The Company used the proceeds from these repurchases to repurchase 20.8 million shares of its common stock.

On January 28, 2020, the Company announced that IP notified the Company of its intent to begin the process of reducing its ownership interest in GPIP. Per the agreement between the parties, on January 29, 2020, GPIP purchased 15.1 million partnership units from IP for \$250 million. As a result, IP's ownership interest in GPIP decreased from 21.6% to 18.3%.

Unless otherwise negotiated by the parties, IP's next opportunity to exchange their partnership units is 180 days from the purchase date and is limited to the lesser of \$250 million or 25% of the units owned. IP will have further opportunities to exchange their partnership units 180 days after each exchange date. The Company may choose to satisfy these exchanges using shares of its common stock, cash, or a combination thereof.

Acquisitions and Dispositions

Over the past five years, the Company has successfully completed over ten acquisitions and expects to pursue strategic acquisition opportunities in the future as part of its overall growth strategy.

2019

On August 1, 2019, the Company acquired substantially all the assets of Artistic Carton Company ("Artistic"), a diversified producer of folding cartons and CRB. The acquisition included two converting facilities located in Auburn, Indiana and Elgin, Illinois (included in the Americas Paperboard Packaging reportable segment) and one CRB mill located in White Pigeon, Michigan (included in the Paperboard Mills reportable segment).

2018

On September 30, 2018, the Company acquired substantially all the assets of the foodservice business of Letica Corporation, a subsidiary of RPC Group PLC ("Letica Foodservice"), a producer of paperboard-based cold and hot cups and cartons. The acquisition included two facilities located in Clarksville, Tennessee and Pittston, Pennsylvania. Letica Foodservice assets are included in the Americas Paperboard Packaging reportable segment.

On August 31, 2018, the Company sold its previously closed CRB mill site in Santa Clara, California.

On June 12, 2018, the Company acquired substantially all the assets of PFP, LLC and its related entity, PFP Dallas Converting, LLC (collectively, "PFP"), a converter focused on the production of paperboard based air filter frames. The acquisition included two facilities located in Lebanon, Tennessee and Lancaster, Texas. PFP assets are included in the Americas Paperboard Packaging reportable segment.

As mentioned above, on January 1, 2018, the Company completed the NACP Combination. The NACP business produces SBS paperboard and paper-based foodservice products. The NACP business included two SBS mills located in Augusta, Georgia and Texarkana, Texas (included in Paperboard Mills reportable segment), three converting facilities in the U.S. (included in the Americas Paperboard Packaging reportable segment) and one in the United Kingdom ("U.K.") (included in the Europe Paperboard Packaging reportable segment).

PFP and Letica Foodservice are referred to collectively as the "2018 Acquisitions."

2017

On December 1, 2017, the Company acquired the assets of Seydaco Packaging Corp. and its affiliates, National Carton and Coating Co., and Groupe Ecco Boites Pliantes Ltée (collectively, "Seydaco"), a folding carton producer focused on the foodservice, food, personal care, and household goods markets. The acquisition included three folding carton facilities located in Mississauga, Ontario, St.-Hyacinthe, Québec, and Xenia, Ohio.

On December 1, 2017, the Company closed its coated recycled paperboard mill in Santa Clara, California. This decision was made as a result of a thorough assessment of the facility's manufacturing capabilities and associated costs in the context of the Company's overall mill operating capabilities and cost structure.

On October 4, 2017, the Company acquired Norgraft Packaging, S.A. ("Norgraft"), a leading folding carton producer in Spain focused on the food and household goods markets. The acquisition included two folding carton facilities located in Miliaño and Requejada, Spain.

On July 10, 2017, the Company acquired substantially all the assets of Carton Craft Corporation and its affiliate, Lithocraft, Inc. (collectively, "Carton Craft"). The acquisition included two folding carton facilities located in New Albany, Indiana, focused on the production of paperboard-based air filter frames and folding cartons.

The Seydaco, Norgraft, and Carton Craft transactions are referred to collectively as the "2017 Acquisitions." Seydaco and Carton Craft are included in the Americas Paperboard Packaging Segment. Norgraft is included in the Europe Paperboard Packaging Segment.

Capital Allocation Plan

On January 28, 2019, the Company's board of directors authorized an additional share repurchase program to allow the Company to purchase up to \$500 million of the Company's issued and outstanding shares of common stock through open market purchases, privately negotiated transactions and Rule 10b5-1 plans (the "2019 share repurchase program"). Two previous \$250 million share repurchase programs were authorized on January 10, 2017 and February 4, 2015 (the "2017 share repurchase program" and the "2015 share repurchase program," respectively).

The following presents the Company's share repurchases for the years ended December 31, 2019, 2018, and 2017:

Amount repurchased in millions	amount ourchased	Number of Shares Repurchased	Avera Price		
2019	\$ 127.9	10,191,257 ^(a)	\$	12.55	
2018	\$ 120.0	10,566,144	\$	11.35	
2017	\$ 58.4	4,462,263 ^(b)	\$	13.08	

⁽a) Includes 7,400,171 shares under the 2017 share repurchase program thereby completing that program.

At December 31, 2019, the Company had approximately \$462 million of share repurchase authority remaining under the 2019 share repurchase program.

During 2019 and 2018, the Company paid cash dividends of \$88.7 million and \$93.1 million, respectively.

Products

The Company reports its results in three reportable segments as follows:

Paperboard Mills includes the nine North American paperboard mills which produce primarily CRB, CUK, and SBS, which is primarily consumed internally to produce paperboard packaging for the Americas and Europe Paperboard Packaging segments. The remaining paperboard is sold externally to a wide variety of paperboard packaging converters and brokers.

Americas Paperboard Packaging includes paperboard packaging, primarily folding cartons, sold primarily to Consumer Packaged Goods ("CPG") companies, and cups, lids and food containers sold primarily to foodservice companies and quick-service restaurants ("OSR"), all serving the food, beverage, and consumer product markets in the Americas.

Europe Paperboard Packaging includes paperboard packaging, primarily folding cartons, sold primarily to CPG companies serving the food, beverage and consumer product markets in Europe.

The Company operates in three geographic areas: the Americas, Europe and Asia Pacific.

For reportable segment and geographic area information for each of the last three fiscal years, see Note 16 in the Notes to Consolidated Financial Statements included herein under "Item 8. Financial Statements and Supplementary Data."

Paperboard Packaging

The Company's paperboard packaging products deliver brand, marketing and performance benefits at a competitive cost. The Company supplies paperboard cartons, carriers and containers designed to protect and hold products while providing:

- convenience through ease of carrying, storage, delivery, dispensing of product and food preparation for consumers;
- a smooth surface printed with high-resolution, multi-color graphic images that help improve brand awareness and visibility of products on store shelves; and
- durability, stiffness and wet and dry tear strength; leak, abrasion and heat resistance; barrier protection from moisture, oxygen, oils and greases, as well as enhanced microwave heating performance.

⁽b) Includes 1,440,697 shares under the 2015 share repurchase program thereby completing that program.

The Company provides a wide range of paperboard packaging solutions for the following end-use markets:

- beverage, including beer, soft drinks, energy drinks, teas, water and juices;
- food, including cereal, desserts, frozen, refrigerated and microwavable foods and pet foods;
- prepared food and drinks, including snacks, quick-serve food and drinks for restaurants and food service providers;
- household products, including dishwasher and laundry detergent, health care and beauty aids, and tissues and papers; and
- · air filter frames.

The Company's packaging applications meet the needs of its customers for:

Strength Packaging. The Company's products provide sturdiness to meet a variety of packaging needs, including tear and wet strength, puncture resistance, durability and compression strength (providing stacking strength to meet store display packaging requirements).

Promotional Packaging. The Company offers a broad range of promotional packaging options that help differentiate its customers' products in the marketplace. These promotional enhancements improve brand awareness and visibility on store shelves.

Convenience Packaging. These packaging solutions improve package usage and food preparation

- beverage multiple-packaging multi-packs for beer, soft drinks, energy drinks, teas, water and juices;
- active microwave technologies substrates that improve the heating and browning of foods in the microwave; and
- easy opening and closing features dispensing features, pour spouts and sealable liners.

Barrier Packaging. The Company provides packages that protect against moisture, temperature (hot and cold), grease, oil, oxygen, sunlight, insects and other potential product-damaging factors.

Paperboard Mills and Folding Carton Facilities

The Company produces paperboard at its mills; prints, cuts, folds, and glues ("converts") the paperboard into folding cartons and containers at its converting plants; and designs and manufactures specialized, proprietary packaging machines that package bottles and cans and, to a lesser extent, non-beverage consumer products. The Company also installs its packaging machines at customer plants and provides support, service and advanced performance monitoring of the machines.

The Company offers a variety of laminated, coated and printed packaging structures that are produced from its CRB, CUK and SBS mills, as well as other grades of paperboard that are purchased from third-party suppliers.

Below is the production at each of the Company's paperboard mills during 2019:

Location	Product	# of Machines	2019 Net Tons Produced
West Monroe, LA	CUK	2	910,759
Macon, GA	CUK	2	708,496
Kalamazoo, MI	CRB	2	493,130
Battle Creek, MI	CRB	2	210,673
Middletown, OH	CRB	1	169,475
East Angus, Québec	CRB	1	97,921
White Pigeon, MI (a)	CRB	1	28,025
Texarkana, TX	SBS	2	607,330
Augusta, GA	SBS	2	583,147
West Monroe, LA	Corrugated Medium	1	121,929

⁽a) Indicates net tons produced from August to December.

The Company consumes most of its coated board output in its converting operations, which is an integral part of the customer value proposition. In 2019, approximately 68% of combined mill sales of CRB, CUK and SBS was consumed internally.

CRB Production. The Company is the largest North American producer of CRB. CRB is manufactured entirely from recycled fibers, primarily old corrugated containers ("OCC"), doubled-lined kraft cuttings from corrugated box plants ("DLK"), old newspapers ("ONP"), and box cuttings. The recycled fibers are re-pulped, formed on paper machines, and clay-coated to provide an excellent printing surface for superior quality graphics and appearance characteristics.

CUK Production. The Company is the largest of four worldwide producers of CUK. CUK is manufactured from pine-based wood fiber and is a specialized high-quality grade of coated paperboard with excellent wet and dry tear strength characteristics and printability for high resolution graphics that make it particularly well-suited for a variety of packaging applications. Both wood and recycled fibers are pulped, formed on paper machines, and clay-coated to provide an excellent printing surface for superior quality graphics and appearance characteristics.

SBS Production. The Company is one of the largest North American producers of SBS. SBS is manufactured from bleached pine and hardwood-based wood fiber and is the highest quality paperboard substrate with excellent wet and dry strength characteristics and superior printability for high-end packaging. Both wood and recycled fibers are pulped, formed on paper machines, and clay-coated to provide an excellent printing surface for superior quality graphics and appearance characteristics. SBS is also coated with polyethylene resin for wet strength liquid and food packaging end uses.

Corrugated Medium. The Company manufactures corrugated medium for internal use and sale in the open market. Corrugated medium is combined with linerboard to make corrugated containers.

The Company converts CRB, CUK and SBS, as well as other grades of paperboard, into cartons and containers at converting plants the Company operates in various locations globally, including a converting plant associated with the Company's joint venture in Japan, contract converters and at licensees outside the U.S. The converting plants print, cut, fold and glue paperboard into cartons and containers designed to meet customer specifications.

Joint Venture

The Company, through its GPIL subsidiary, is a party to a Japanese joint venture, Rengo Riverwood Packaging, Ltd. in which it holds a 50% ownership interest. The joint venture agreement covers CUK supply, use of proprietary carton designs and marketing and distribution of packaging systems.

Marketing and Distribution

The Company markets its products principally to multinational beverage, food, QSR, and other well-recognized consumer product companies. The beverage companies include Anheuser-Busch, Inc., MillerCoors LLC, PepsiCo, Inc. and The Coca-Cola Company, among others. Consumer product customers include Kraft Heinz Company, General Mills, Inc., Nestlé USA, Inc., Kellogg Company, HAVI Global Solutions, LLC and Kimberly-Clark Corporation, among others. QSR customers include McDonald's, Wendy's, Panda Express, Dairy Queen, Chipotle, Panera and Kentucky Fried Chicken, among others. The Company also sells paperboard in the open market to independent and integrated paperboard converters.

Distribution of the Company's principal products is primarily accomplished through sales offices in the U.S., Australia, Brazil, China, France, Germany, Italy, Japan, Mexico, Spain, the Netherlands and the United Kingdom, and, to a lesser degree, through broker arrangements with third parties.

During 2019 and 2018, the Company did not have any one customer that represented 10% or more of its net sales.

Competition

Although a relatively small number of large competitors hold a significant portion of the paperboard packaging market, the Company's business is subject to strong competition. The Company and WestRock Company ("WestRock") are the two major CUK producers in the U.S. Internationally, The Klabin Company in Brazil and Stora Enso in Sweden produce similar grades of paperboard.

In non-beverage consumer packaging and foodservice, the Company's paperboard competes with WestRock CUK, as well as CRB and SBS from numerous competitors, and, internationally, folding boxboard and white-lined chip. There are a large number of producers in the paperboard markets. Suppliers of paperboard compete primarily on the basis of price, strength and printability of their paperboard, quality and service.

In beverage packaging, cartons made from CUK compete with substitutes such as plastics and corrugated packaging for packaging glass or plastic bottles, cans and other primary containers. Although plastics and corrugated packaging may be priced lower than CUK, the Company believes that cartons made from CUK offer advantages over these materials in areas such as distribution, brand awareness, carton designs, package performance, package line speed, environmental friendliness and design flexibility.

Raw Materials

The paperboard packaging produced by the Company comes from pine and hardwood trees and recycled fibers. Pine pulpwood, hardwood pulp, paper and recycled fibers (including DLK, OCC and ONP) and energy used in the manufacture of paperboard, as well as poly sheeting, plastic resins and various chemicals used in the coating of paperboard, represent the largest components of the Company's variable costs of paperboard production.

For the West Monroe, LA, Macon, GA, Texarkana, TX, and Augusta, GA mills, the Company relies on private landowners and the open market for all of its pine and hardwood pulp and recycled fiber requirements, supplemented by clippings that are obtained from its converting operations. The Company believes that adequate supplies from both private landowners and open market fiber sellers currently are available in close proximity to meet its fiber needs at these mills.

The paperboard grades produced at the Kalamazoo, MI, Battle Creek, MI, Middletown, OH, East Angus, Quebec and White Pigeon, MI mills are made from 100% recycled fiber. The Company procures its recycled fiber from external suppliers and internal converting operations. The market price of each of the various recycled fiber grades fluctuates with supply and demand. The Company's internal recycled fiber procurement function enables the Company to pay lower prices for its recycled fiber needs given the Company's highly fragmented supplier base. The Company believes there are adequate supplies of recycled fiber to serve its mills.

In North America, the Company also converts a variety of other paperboard grades, in addition to paperboard that is supplied to its converting operations from its own mills. The Company purchases such paperboard requirements, including additional CRB and SBS, from outside vendors. The majority of external paperboard purchases are acquired through long-term arrangements with other major industry suppliers. The Company's European converting plants consume CUK supplied from the Company's mills and also convert other paperboard grades such as white-lined chip and folding box board purchased from external suppliers.

Energy

Energy, including natural gas, fuel oil and electricity, represents a significant portion of the Company's manufacturing costs. The Company has entered into contracts designed to manage risks associated with future variability in cash flows and price risk related to future energy cost increases for a portion of its natural gas requirements at its U.S. mills. The Company's hedging program for natural gas is discussed in Note 10 in the Notes to Consolidated Financial Statements included herein under "Item 8., Financial Statements and Supplementary Data."

Backlog

Orders from the Company's principal customers are manufactured and shipped with minimal lead time. The Company did not have a material amount relating to backlog orders at December 31, 2019 or 2018.

Seasonality

The Company's net sales, income from operations and cash flows from operations are subject to moderate seasonality, with demand usually increasing in the late spring through early fall due to increases in demand for beverage and food products.

Research and Development

The Company's research and development team works directly with its sales, marketing and consumer insights personnel to understand long-term consumer and retailer trends and create relevant new packaging. These innovative solutions provide customers with differentiated packaging to meet customer needs. The Company's development efforts include, but are not limited to, extending the shelf life of customers' products; reducing production and waste costs; enhancing the heat-managing characteristics of food packaging; improving the sturdiness and compression strength of packaging to meet store display needs; and refining packaging appearance through new printing techniques and materials.

Sustainability represents one of the strongest trends in the packaging industry and the Company focuses on developing more sustainable and eco-friendly manufacturing processes and products. The Company's strategy is to combine sustainability with innovation to create new packaging solutions for its customers.

For more information on research and development expenses see Note 1 in the Notes to Consolidated Financial Statements included herein under "Item 8., Financial Statements and Supplementary Data."

Patents and Trademarks

As of December 31, 2019, the Company had a large patent portfolio, presently owning, controlling or holding rights to more than 2,400 U.S. and foreign patents, with more than 450 U.S. and foreign patent applications currently pending. The Company's patent portfolio consists primarily of patents relating to packaging machinery, manufacturing methods, structural carton designs, active microwave packaging technology and barrier protection packaging. These patents and processes are significant to the Company's operations and are supported by trademarks such as Fridge VendorTM, IntegraPakTM, Keel ClipTM, MicroFlex-QTM, MicroRiteTM, Quilt WaveTM, Qwik CrispTM, Tite-PakTM, and Z-FluteTM. The Company takes significant steps to protect its intellectual property and proprietary rights.

Culture and Employees

The Company's corporate vision — Inspired packaging. A world of difference. — and values of integrity, respect, accountability, relationships and teamwork guide employee behavior, expectations and relations. The Company's ongoing efforts to build a high-performance culture and improve the manner in which work is done across the Company includes a significant focus on continuous improvement utilizing processes like Lean Sigma and Six Sigma.

As of December 31, 2019, the Company had approximately 18,000 employees worldwide, of which approximately 41% were represented by labor unions and covered by collective bargaining agreements or covered by works councils in Europe. As of December 31, 2019, 422 of the Company's employees were working under expired contracts, which are currently being negotiated, and 1,813 were covered under collective bargaining agreements that expire within one year. The Company considers its employee relations to be satisfactory.

Environmental Matters

The Company is subject to a broad range of foreign, federal, state and local environmental regulations and employs a team of professionals in order to maintain compliance at each of its facilities. In 2019, the Company spent approximately \$7 million of capital on projects to maintain compliance with environmental laws, regulations and the Company's permits granted thereunder. In 2020, 2021, and 2022, the Company estimates it will spend approximately \$10 million, \$25 million and \$35 million, respectively, for such projects, primarily the waste water treatment system upgrades at the Augusta, Georgia and Texarkana, Texas mills. For additional information on such regulation and compliance, see "Environmental Matters" in "Item 7., Management's Discussion and Analysis of Financial Condition and Results of Operations" and Note 14 in the Notes to Consolidated Financial Statements included herein under "Item 8., Financial Statements and Supplementary Data."

Available Information

The Company's website is located at http://www.graphicpkg.com. The Company makes available, free of charge through its website, its Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as soon as reasonably practicable after such materials are electronically filed or furnished to the Securities and Exchange Commission (the "SEC"). The Company also makes certain investor presentations and access to analyst conference calls available through its website. The information contained or incorporated into the Company's website is not a part of this Annual Report on Form 10-K.

The SEC maintains an Internet website that contains reports, proxy and information statements, and other information regarding issuers like the Company that file electronically with the SEC at http://www.SEC.gov.

ITEM 1A. RISK FACTORS

The following risks could affect (and in some cases have affected) the Company's actual results and could cause such results to differ materially from estimates or expectations reflected in certain forward-looking statements:

The Company's financial results could be adversely impacted if there are significant increases in prices for raw materials, energy, transportation and other necessary supplies, and the Company is unable to raise prices, or improve productivity to reduce costs.

Limitations on the availability of, and increases in, the costs of raw materials, including secondary fiber, petroleum-based materials, energy, wood, transportation and other necessary goods and services, could have an adverse effect on the Company's financial results. Because negotiated sales contracts and the market largely determine the pricing for its products, the Company is at times limited in its ability to raise prices and pass through to its customers any inflationary or other cost increases that the Company may incur.

The Company uses productivity improvements to reduce costs and offset inflation. These include global continuous improvement initiatives that use statistical process control to help design and manage many types of activities, including production and maintenance. The Company's ability to realize anticipated savings from these improvements is subject to significant operational, economic and competitive uncertainties and contingencies, many of which are beyond the Company's control. If the Company cannot successfully implement cost savings plans, it may not be able to continue to compete successfully against other manufacturers. In addition, any failure to generate the anticipated efficiencies and savings could adversely affect the Company's financial results.

Changes in consumer buying habits and preferences for products could have an effect on our sales volumes.

Changing consumer dietary habits and preferences have slowed sales growth for many of the food and beverage products the Company packages. If these trends continue, the Company's financial results could be adversely affected.

Competition and product substitution could have an adverse effect on the Company's financial results.

The Company competes with other paperboard manufacturers and carton converters, both domestically and internationally. The Company's products compete with those made from other manufacturers' CUK, as well as SBS and CRB, and other board substrates. Substitute products include plastic, shrink film and corrugated containers. In addition, while the Company has long-term relationships with many of its customers, the underlying contracts may be re-bid or renegotiated from time to time, and the Company may not be successful in renewing such contracts on favorable terms or at all. The Company works to maintain market share through efficiency, product innovations and strategic sourcing to its customers; however, pricing and other competitive pressures may occasionally result in the loss of a customer relationship.

The Company's future growth and financial results could be adversely impacted if the Company is unable to identify strategic acquisitions and to successfully integrate the acquired businesses.

The Company has made a significant number of acquisitions in recent years, including the NACP Combination, and expects to make additional strategic acquisitions in the future as part of its overall growth strategy. The Company's ability to continue to make strategic acquisitions from time to time and to integrate the acquired businesses successfully, including obtaining anticipated cost savings or synergies and expected operating results within a reasonable period of time, is an important factor in the Company's future growth. If the Company is unable to properly estimate, account for and realize the expected revenue and cash flow growth and other benefits from its acquisitions, the Company may be required to spend additional time or money on integration efforts that would otherwise have been spent on the development and expansion of its business.

The Company may not be able to develop and introduce new products and adequately protect its intellectual property and proprietary rights, which could harm its future success and competitive position.

The Company works to increase market share and profitability through product innovation and the introduction of new products. The inability to develop new or better products that satisfy customer and consumer preferences in a timely manner may impact the Company's competitive position.

The Company's future success and competitive position also depends, in part, upon its ability to obtain and maintain protection for certain proprietary carton and packaging machine technologies used in its value-added products, particularly those incorporating the Fridge Vendor, IntegraPak, Keel Clip, MicroFlex-Q, MicroRite, Quilt Wave, Qwik Crisp, Tite-Pak, and Z-Flute technologies. Failure to protect the Company's existing intellectual property rights may result in the loss of valuable technologies or may require it to license other companies' intellectual property rights. It is possible that any of the patents owned by the Company may be invalidated, rendered unenforceable, circumvented, challenged or licensed to others or any of its pending or future patent applications may not be issued within the scope of the claims sought by the Company, if at all. Further, others may develop technologies that are similar or superior to the Company's technologies, duplicate its technologies or design around its patents, and steps taken by the Company to protect its technologies may not prevent misappropriation of such technologies.

The Company's capital spending may not achieve the desired benefits, which could adversely impact future financial results.

The Company invests significant amounts of cash on capital projects each year which have expected returns to the Company. The Company's ability to execute on these projects in order to achieve planned outcomes, including obtaining expected returns and strategic long-term goals within a reasonable period of time, is an important factor in the Company's financial results and commitments to the market. As these investments start up, the Company may experience unanticipated business disruptions and not achieve the desired benefits or timelines. In addition, the Company's acquisitions may require more capital than expected to achieve synergies or expected operating results. Additional spending and unachieved benefits may adversely affect the Company's cash flow and results of operations.

The Company may face a shortage of a skilled workforce at its facilities.

The Company's ability to maintain or expand its business depends on attracting, training and retaining a skilled workforce. Changing demographics and workforce trends may result in a loss of knowledge and skills as experienced workers retire. Failure to attract and retain a skilled workforce may result in operational inefficiencies or require additional capital investments to reduce reliance on labor, which may adversely impact the Company's results.

The Company could experience material disruptions at our facilities.

Although the Company takes appropriate measures to minimize the risk and effect of material disruptions to the business conducted at our facilities, natural disasters such as hurricanes, tornadoes, floods and fires, as well as other unexpected disruptions such as the unavailability of critical raw materials, power outages and equipment failures can reduce production and increase manufacturing costs. These types of disruptions could materially adversely affect our earnings, depending upon the duration of the disruption and our ability to shift business to other facilities or find other sources of materials or energy. Any losses due to these events may not be covered by our existing insurance policies or may be subject to certain deductibles. In addition, given the Company's integrated supply chain, managing board supply and properly planning for mill outages and downtime must be integrated with the converting plants forecast. Any inability to do so could adversely affect the Company's financial results.

The Company is subject to the risks of doing business in foreign countries.

The Company has converting plants and one paper mill in 11 countries outside of the U.S. and sells its products worldwide. For 2019, before intercompany eliminations, net sales from operations outside of the U.S. represented approximately 20% of the Company's net sales. The Company's revenues from foreign sales fluctuate with changes in foreign currency exchange rates. The Company pursues a currency hedging program in order to reduce the impact of foreign currency exchange fluctuations on financial results. In addition, at December 31, 2019, approximately 17% of the Company's total assets were denominated in currencies other than the U.S. dollar.

The Company is also subject to the following significant risks associated with operating in foreign countries:

- Compliance with and enforcement of environmental, health and safety and labor laws and other regulations
 of the foreign countries in which the Company operates;
- Export compliance;
- Imposition or increase of withholding and other taxes on remittances and other payments by foreign subsidiaries; and
- Imposition of new or increases in capital investment requirements and other financing requirements by foreign governments.

In addition to these general risks, uncertainties surrounding the United Kingdom's pending withdrawal from the European Union (commonly referred to as "Brexit") could adversely affect our U.K. business, including potentially the Company's relationships with customers, suppliers and employees. The effects of Brexit will depend on the agreements, if any, the U.K. makes to retain access to European markets either during a transition period or more permanently.

The Company's information technology systems could suffer interruptions, failures or breaches and our business operations could be disrupted adversely affecting results of operations and the Company's reputation.

The Company's information technology systems, some of which are dependent on services provided by third parties, serve an important role in the operation of the business. These systems could be damaged or cease to function properly due to any number of causes, such as catastrophic events, power outages, security breaches, computer viruses or cyber-based attacks. The Company has contingency plans in place to prevent or mitigate the impact of these events, however, if they are not effective on a timely basis, business interruptions could occur which may adversely impact results of operations.

The Company has been, and likely will continue to be, subject to computer hacking, acts of vandalism or theft, malware, computer viruses or other malicious codes, phishing, employee error or malfeasance, catastrophes, unforeseen events or other cyber-attacks. To date, the Company has seen no material impact on our business or operations from these attacks or events. Any future significant compromise or breach of data security, whether external or internal, or misuse of customer, associate, supplier or Company data, could result in significant costs, lost sales, fines, lawsuits, and damage to the Company's reputation. However, the ever-evolving threats mean the Company and its third-party service providers and vendors must continually evaluate and adapt their respective systems and processes and overall security environment, as well as those of any companies acquired. There is no guarantee that these measures will be adequate to safeguard against all data security breaches, system compromises or misuses of data. In addition, as the regulatory environment related to information security, data collection and use, and privacy becomes increasingly rigorous, with new and constantly changing requirements applicable to the Company's business. Compliance with such requirements could also result in additional costs.

The Company is subject to environmental, health and safety laws and regulations, and costs to comply with such laws and regulations, or any liability or obligation imposed under new laws or regulations, could negatively impact its financial condition and results of operations.

The Company is subject to a broad range of foreign, federal, state and local environmental, health and safety laws and regulations, including those governing discharges to air, soil and water, the management, treatment and disposal of hazardous substances, the investigation and remediation of contamination resulting from releases of hazardous substances, and the health and safety of employees. The Company cannot currently assess the impact that future emission standards, climate control initiatives and enforcement practices will have on the Company's operations and capital expenditure requirements. Environmental liabilities and obligations may result in significant costs, which could negatively impact the Company's financial position, results of operations or cash flows. See Note 14 in the Notes to Consolidated Financial Statements included herein under "Item 8., Financial Statements and Supplementary Data."

The Company's indebtedness may adversely affect its financial condition and its ability to react to changes in its business.

As of December 31, 2019, the Company had an aggregate principal amount of \$2,872.8 million of outstanding debt.

Because of the Company's debt level, a portion of its cash flows from operations is dedicated to payments on indebtedness and the Company's ability to obtain additional financing for working capital, capital expenditures, acquisitions or general corporate purposes may be restricted in the future.

Additionally, the Company's Amended and Restated Credit Agreement, Term Loan Credit Agreement and the indentures governing the 4.75% Senior Notes due 2021, 4.875% Senior Notes due 2022, 4.125% Senior Notes due 2024 and 4.75% Senior Notes due 2027 (the "Indentures") may prohibit or restrict, among other things, the disposal of assets, the incurrence of additional indebtedness (including guarantees), the incurrence of liens, payment of dividends, share repurchases, the making of acquisitions and other investments and certain other types of transactions. These restrictions could limit the Company's flexibility to respond to changing market conditions and competitive pressures. The debt obligations and restrictions may also leave the Company more vulnerable to a downturn in general economic conditions or its business, or unable to carry out capital expenditures that are necessary or important to its growth strategy and productivity improvement programs.

As of December 31, 2019, approximately 34% of the Company's debt is subject to variable rates of interest and exposes the Company to increased debt service obligations in the event of increased market interest rates.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 2. **PROPERTIES**

Headquarters

The Company leases its principal executive offices in Atlanta, GA.

Operating Facilities

A listing of the principal properties owned or leased and operated by the Company is set forth below. The Company's buildings are adequate and suitable for the business of the Company and have sufficient capacity to meet current requirements. The Company also leases certain smaller facilities, warehouses and office space throughout the U.S. and in foreign countries from time to time.

Location	Related Products or Use of Facility
Mills:	
Augusta, GA	SBS
Battle Creek, MI	CRB
East Angus, Québec	CRB
Kalamazoo, MI	CRB
Macon, GA	CUK
Middletown, OH	CRB
Texarkana, TX	SBS
West Monroe, LA	CUK; Corrugated Medium; Research and Development
White Pigeon, MI	CRB
Other:	
Atlanta, GA ^(a)	Headquarters, Research and Development, Packaging Machinery and Design
Concord, NH ^(a)	Research and Development, Design Center
Crosby, MN	Packaging Machinery Engineering, Design and Manufacturing
Louisville, CO ^(a)	Research and Development
Menomonee Falls, WI	Foodservice Rebuild Center

North American Converting Plants:

Atlanta, GA^(a) Monterrey, Mexico^(a)
Auburn, IN New Albany, IN^(b)
Carol Stream, IL Newton, IA

 $\begin{array}{lll} \text{Centralia, IL} & \text{North Portland, OR} \\ \text{Charlotte, NC} & \text{Oroville, CA}^{(a)} \\ \text{Clarksville, TN} & \text{Pacific, MO} \\ \text{Cobourg, Ontario}^{(a)} & \text{Perry, GA} \end{array}$

 $\begin{array}{ll} \text{Elgin, IL} & \text{Pittston, PA} \\ \text{Elk Grove, IL}^{(a)(b)} & \text{Prosperity, SC} \\ \text{Fort Smith, AR}^{(b)} & \text{Queretaro, Mexico}^{(a)} \end{array}$

Gordonsville, TN^(a)
Gresham, OR^(a)
Hamel, MN

Queretaro, Mexical Shelbyville, IL
Solon, OH
Staunton, VA

Irvine, CASt.-Hyacinthe, Québec(a)Kalamazoo, MITijuana, Mexico(a)Kendallville, INTuscaloosa, ALKenton, OHVancouver, WA(a)Lancaster, TXValley Forge, PA

Lawrenceburg, TN Visalia, CA
Lebanon, TN ^(a) Wayne, NJ
Lumberton, NC Wausau, WI

Marion, OH West Monroe, LA^(b)

Mississauga, Ontario^{(a)(b)} Xenia, OH^(a)

Mitchell, SD Winnipeg, Manitoba

Monroe, LA (a)

Note:

International Converting Plants:

Auckland, New Zealand^(a)
Bremen, Germany^(a)
Bristol, United Kingdom
Coalville, United Kingdom^(a)
Gateshead, United Kingdom^(a)
Hoogerheide, Netherlands

Newcastle Upon Tyne, United Kingdom^(a)

Igualada, Spain

Jundiai, Sao Paulo, Brazil Leeds, United Kingdom Masnieres, France^(a) Melbourne, Australia^(a)

Miliaño, Spain
Portlaoise, Ireland^(a)
Requejada, Spain
Sneek, Netherlands
Sydney, Australia^(a)

Winsford, United Kingdom (a)

⁽a) Leased facility.

⁽b) Multiple facilities in this location.

ITEM 3. LEGAL PROCEEDINGS

The Company is a party to a number of lawsuits arising in the ordinary conduct of its business. Although the timing and outcome of these lawsuits cannot be predicted with certainty, the Company does not believe that disposition of these lawsuits will have a material adverse effect on the Company's consolidated financial position, results of operations or cash flows. See Note 14 in the Notes to Consolidated Financial Statements included herein under "Item 8., Financial Statements and Supplementary Data."

ITEM 4. MINE SAFETY DISCLOSURES

Not Applicable.

EXECUTIVE OFFICERS OF THE REGISTRANT

Pursuant to General Instruction G.(3) of Form 10-K, the following list is included as an unnumbered item in Part I of this Report in lieu of being included in the definitive proxy statement that will be filed within 120 days after December 31, 2019.

Michael P. Doss, 53, is the President and Chief Executive Officer of Graphic Packaging Holding Company. Prior to January 1, 2016, Mr. Doss held the position of President and Chief Operating Officer from May 20, 2015 through December 31, 2015 and Chief Operating Officer from January 1, 2014 until May 19, 2015. Prior to these positions he served as the Executive Vice President, Commercial Operations of Graphic Packaging Holding Company. Prior to this Mr. Doss held the position of Senior Vice President, Consumer Packaging Division. Prior to March 2008, he had served as Senior Vice President, Consumer Products Packaging of Graphic Packaging Corporation since September 2006. From July 2000 until September 2006, he was the Vice President of Operations, Universal Packaging Division. Mr. Doss was Director of Web Systems for the Universal Packaging Division prior to his promotion to Vice President of Operations. Since joining Graphic Packaging International Corporation in 1990, Mr. Doss has held positions of increasing management responsibility, including Plant Manager at the Gordonsville, TN and Wausau, WI plants.

Stephen R. Scherger, 55, is the Executive Vice President and Chief Financial Officer of Graphic Packaging Holding Company. From October 1, 2014 through December 31, 2014, Mr. Scherger was the Senior Vice President – Finance. From April 2012 through September 2014, Mr. Scherger served as Senior Vice President, Consumer Packaging Division. Mr. Scherger joined Graphic Packaging Holding Company in April of 2012 from MeadWestvaco Corporation, where he served as President, Beverage and Consumer Electronics. Mr. Scherger was with MeadWestvaco Corporation from 1986 to 2012 and held positions including Vice President, Corporate Strategy; Vice President and General Manager, Beverage Packaging; Vice President and Chief Financial Officer, Papers Group, Vice President Asia Pacific and Latin America, Beverage Packaging, Chief Financial Officer Beverage Packaging and other executive-level positions.

Michael Farrell, 53, became the Executive Vice President, Mills Division of Graphic Packaging Holding Company in September 2018. Prior to that, he served as the Senior Vice President, Supply Chain from January to September 2018. Prior to January 2018, Mr. Farrell served as Vice President, Recycled Board Mills of Graphic Packaging International, LLC and its predecessor companies ("GPI") from January 1, 2013; and Senior Manufacturing Manager of GPI from October 28, 2009 until December 31, 2012. From December 11, 2008 until October 27, 2009, Mr. Farrell was the Manufacturing Manager of the West Monroe, Louisiana mill and from September 1, 2006 until December 10, 2008 he was the General Manager of the Middletown, Ohio mill of GPI.

Lauren S. Tashma, 53, is the Executive Vice President, General Counsel and Secretary of Graphic Packaging Holding Company. She joined the Company in February 2014. Previously, Ms. Tashma served as Senior Vice President, General Counsel and Secretary of Fortune Brands Home & Security, Inc., where she led the legal, compliance and EHS functions. Prior to that, Ms. Tashma had various roles with Fortune Brands, Inc., including Vice President and Associate General Counsel.

Stacey Valy Panayiotou, 47, is the Executive Vice President, Human Resources of Graphic Packaging Holding Company. She joined the Company on April 22, 2019 from The Coca-Cola Company, where she held a variety of senior HR leadership roles, including Global Vice President of Talent and Development and Vice President, HR, Europe, Middle East & Africa, which consisted of over 120 countries. Prior to her global talent position, Ms. Panayiotou served as Vice President of Talent and Development, Organizational Effectiveness and Diversity and Inclusion and Learning for the Coca-Cola North America Group. Prior to that, she was Vice President of HR for the West business unit of Coca-Cola Enterprises, Inc. (CCE) and worked in corporate HR with The Coca-Cola Company. She also led the organization development function for Pactiv Corporation. Ms. Panayiotou was with The Coca-Cola Company from February 2006 through April 2019.

Hilde Van Moeseke, 49, is the Senior Vice President, Finance Americas, effective January 1, 2020, of Graphic Packaging Holding Company. From July 2017 to December 2019, Ms. Van Moeseke served as an executive officer as Senior Vice President and President, Europe, Middle East and Africa of Graphic Packaging Holding Company. From January 2017 to July 1, 2017, Ms. Van Moeseke served as Vice President, Finance Europe and Interim EMEA Leader of Graphic Packaging International, Inc. From July 2015 until January 2017, Ms. Van Moeseke was the Vice President, Finance Europe of Graphic Packaging International, Inc. Ms. Van Moeseke joined the Company in January 2014 as Director Controlling and was promoted to Director, Finance Europe in July 2014. Prior to January 2014, Ms. Van Moeseke held the position of Group Controller, Project Management, Shared Service Center and Accounting at Azelis Corporate Services S.A. for two years. She has also worked for the Walt Disney Company in Europe for six years in the positions of Director Finance and Controllership, Director Regional Studio Controllership, Regional Studio Controllership and Senior Manager. Ms. Van Moeseke has also served as a member of the Board of Directors for the European Carton Makers Association since September 2018.

Joseph P. Yost, 52, is the Executive Vice President, and President, Americas of Graphic Packaging Holding Company. Prior to January 5, 2017, Mr. Yost served as Senior Vice President, Global Beverage and Europe from September 1, 2015 to January 4, 2017, Senior Vice President, Europe from March 1, 2014 to August 31, 2015 and Senior Vice President, European Chief Integration Officer/Chief Financial Officer from February 2013 until February 2014. From 2009 until February 2013, Mr. Yost was the Senior Vice President, Supply Chain of Graphic Packaging Holding Company. From 2006 to 2009, he served as Vice President, Operations Support – Consumer Packaging for Graphic Packaging International, Inc. Mr. Yost has also served in the following positions: Director, Finance and Centralized Services from 2003 to 2006 with Graphic Packaging International, Inc. and from 2000 to 2003 with Graphic Packaging Corporation; Manager, Operations Planning and Analysis – Consumer Products Division from 1999 to 2000 with Graphic Packaging Corporation; and other management positions from 1997 to 1999 with Fort James Corporation.

PART II

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

GPHC's common stock is traded on the New York Stock Exchange under the symbol "GPK." The historical range of the high and low sales price per share and dividend per share declared in each quarter of 2019 and 2018 are as follows:

	Common Stock Market Price					
	High		Low		ividends Declared	
2019						
First Quarter	\$	13.19	\$	10.54	\$ 0.075	
Second Quarter		14.34		12.41	0.075	
Third Quarter		15.43		12.62	0.075	
Fourth Quarter		16.95		14.06	0.075	
2018						
First Quarter	\$	16.74	\$	14.33	\$ 0.075	
Second Quarter		16.61		13.61	0.075	
Third Quarter		15.22		13.71	0.075	
Fourth Quarter		14.15		10.04	0.075	

During 2019 and 2018, GPHC paid cash dividends of \$88.7 million and \$93.1 million, respectively.

The following presents the Company's share repurchases for the years ended December 31, 2019, 2018, and 2017:

Amount repurchased in millions	Amount Repurchased	Number of Shares Repurchased	verage Price
2019	\$ 127.9	10,191,257 ^(a)	\$ 12.55
2018	\$ 120.0	10,566,144	\$ 11.35
2017	\$ 58.4	4,462,263 ^(b)	\$ 13.08

⁽a) Includes 7,400,171 shares repurchased under the 2017 share repurchase program, thereby completing that program.

During the fourth quarter of 2019, the Company did not repurchase any shares of its common stock. At December 31, 2019, the Company had approximately \$462 million of share repurchase authority remaining under the 2019 share repurchase program.

On June 25, 2019, GPIL completed a private offering of \$300 million aggregate principal amount of its 4.75% senior unsecured notes due 2027 (the "Senior Notes"). The Senior Notes were sold in a private placement in reliance on Rule 144A and Regulation S under the Securities Exchange Act, as amended. The offering was completed pursuant to a purchase agreement between the Company, GPIL and Field Container Queretaro (USA), L.L.C. and BofA Securities, Inc. as representative of the initial purchasers. The Company received net proceeds of the offering of approximately \$295 million, after deducting the initial purchasers' discount and other transaction costs. The net proceeds of the offering were used to repay a portion of the outstanding borrowings under GPIL's revolving credit facility under its senior secured credit facility.

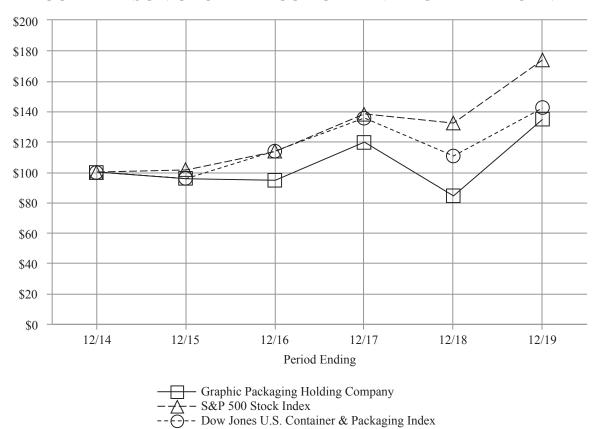
On February 4, 2020, there were 1,133 stockholders of record and approximately 36,849 beneficial holders of GPHC's common stock.

⁽b) Includes 1,440,697 shares repurchased under the 2015 share repurchase program, thereby completing that program.

Total Return to Stockholders

The following graph compares the total returns (assuming reinvestment of dividends) of the common stock of Graphic Packaging Holding Company, the Standard & Poor's ("S&P") 500 Stock Index and the Dow Jones ("DJ") U.S. Container & Packaging Index. The graph assumes \$100 invested on December 31, 2014 in GPHC's common stock and each of the indices. The stock price performance on the following graph is not necessarily indicative of future stock price performance.

COMPARISON OF 5 YEAR CUMULATIVE TOTAL RETURN



	12/31/2014	12/31/2015	2/31/2015 12/31/2016		12/31/2018	12/31/2019
Graphic Packaging Holding Company	\$ 100.00	\$ 95.57	\$ 94.58	\$ 119.71	\$ 84.28	\$ 134.71
S&P 500 Stock Index	100.00	101.38	113.51	138.29	132.23	173.86
Dow Jones U.S. Container & Packaging Index	100.00	95.69	113.93	135.60	110.58	142.19

ITEM 6. SELECTED FINANCIAL DATA

The selected consolidated financial data set forth below should be read in conjunction with "Item 7., Management's Discussion and Analysis of Financial Condition and Results of Operations" and the Consolidated Financial Statements of the Company and the Notes to Consolidated Financial Statements included herein under "Item 8., Financial Statements and Supplementary Data."

	Year Ended December 31,									
In millions, except per share amounts		2019		2018		2017		2016		2015
Statement of Operations Data:										
Net Sales	\$	6,160.1	\$	6,029.4	\$	4,405.6	\$	4,301.0	\$	4,163.4
Income from Operations		534.1		458.2		327.9		407.4		430.1
Net Income		278.1		294.0		300.2		228.0		230.1
Net Income Attributable to Noncontrolling Interests		(71.3)		(72.9))	_		_		_
Net Income Attributable to Graphic Packaging Holding Company		206.8		221.1		300.2		228.0		230.1
Net Income Attributable to Graphic Packaging Holding Company Per Share Basis:										
Basic	\$	0.70	\$	0.71	\$	0.97	\$	0.71	\$	0.70
Diluted	\$	0.70	\$	0.71	\$	0.96	\$	0.71	\$	0.70
Balance Sheet Data:										
(as of period end)										
Cash and Cash Equivalents	\$	152.9	\$	70.5	\$	67.4	\$	59.1	\$	54.9
Total Assets		7,289.9		7,059.2		4,863.0		4,603.4		4,256.1
Total Debt		2,860.3		2,957.1		2,274.5		2,151.9		1,875.5
Total Equity		2,058.0		2,018.5		1,291.9		1,056.5		1,101.7
Additional Data:										
					_		_		_	
Depreciation and Amortization	\$	447.2	\$	430.6	\$	330.3	\$	299.3	\$	280.5
Capital Spending, including Packaging Machinery		352.9		395.2		260.1		294.6		244.1
Dividends Declared per Share		0.30		0.30		0.30		0.225		0.20

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

INTRODUCTION

This management's discussion and analysis of financial conditions and results of operations is intended to provide investors with an understanding of the Company's past performance, financial condition and prospects. The following will be discussed and analyzed:

Overview of Business

Overview of 2019 Results

Results of Operations

Financial Condition, Liquidity and Capital Resources

Critical Accounting Policies

New Accounting Standards

Business Outlook

OVERVIEW OF BUSINESS

The Company's objective is to strengthen its position as a leading provider of paper-based packaging solutions. To achieve this objective, the Company offers customers its paperboard, cartons, cups, lids, foodservice containers and packaging machines, either as an integrated solution or separately. Cartons, carriers and containers are designed to protect and hold products. Product offerings include a variety of laminated, coated and printed packaging structures that are produced from the Company's CRB, CUK, and SBS. Innovative designs and combinations of paperboard, films, foils, metallization, holographics and embossing are customized to the individual needs of the customers.

The Company is implementing strategies (i) to expand market share in its current markets and to identify and penetrate new markets; (ii) to capitalize on the Company's customer relationships, business competencies, and mills and folding carton assets; (iii) to develop and market innovative, sustainable products and applications that benefit from the consumer-led sustainability trends; and (iv) to continue to reduce costs by focusing on operational improvements. The Company's ability to fully implement its strategies and achieve its objectives may be influenced by a variety of factors, many of which are beyond its control, such as inflation of raw material and other costs, which the Company cannot always pass through to its customers, and the effect of overcapacity in the worldwide paperboard packaging industry.

Significant Factors That Impact the Company's Business and Results of Operations

Impact of Inflation/Deflation. The Company's cost of sales consists primarily of energy (including natural gas, fuel oil and electricity), pine and hardwood fiber, chemicals, secondary fibers, purchased paperboard, aluminum foil, ink, plastic films and resins, depreciation expense and labor. Costs increased year over year by \$79.1 million in 2019 and increased year over year by \$73.6 million in 2018. The higher costs in 2019 were due to labor and benefit costs (\$40.4 million), wood (\$39.6 million), external board (\$12.1 million), partially offset by lower secondary fiber cost (\$10.5 million), and other costs, net (\$2.5 million).

Because the price of natural gas experiences significant volatility, the Company has entered into contracts designed to manage risks associated with future variability in cash flows caused by changes in the price of natural gas. The Company has entered into natural gas swap contracts to hedge prices for a portion of its expected usage for 2020 and 2021. Since negotiated sales contracts and the market largely determine the pricing for its products, the Company is at times limited in its ability to raise prices and pass through to its customers any inflationary or other cost increases that the Company may incur.

Commitment to Cost Reduction. In light of continuing margin pressure throughout the packaging industry, the Company has programs in place that are designed to reduce costs, improve productivity and increase profitability. The Company utilizes a global continuous improvement initiative that uses statistical process control to help design and manage many types of activities, including production and maintenance. This includes a Six Sigma process focused on reducing variable and fixed manufacturing and administrative costs. The Company has expanded the continuous improvement initiative to include the deployment of Lean Sigma principles into manufacturing and supply chain services.

The Company's ability to continue to successfully implement its business strategies and to realize anticipated savings and operating efficiencies is subject to significant business, economic and competitive uncertainties and contingencies, many of which are beyond the Company's control. If the Company cannot successfully implement the strategic cost reductions or other cost savings plans it may not be able to continue to compete successfully against other manufacturers. In addition, any failure to generate the anticipated efficiencies and savings could adversely affect the Company's financial results.

Competition and Market Factors. As some products can be packaged in different types of materials, the Company's sales are affected by competition from other manufacturers' CRB, CUK, SBS, folding box board, and recycled clay-coated news. Additional substitute products also include plastic, shrink film and corrugated containers. In addition, while the Company has long-term relationships with many of its customers, the underlying contracts may be re-bid or renegotiated from time to time, and the Company may not be successful in renewing on favorable terms or at all. The Company works to maintain market share through efficiency, product innovation and strategic sourcing to its customers; however, pricing and other competitive pressures may occasionally result in the loss of a customer relationship.

In addition, the Company's sales historically are driven by consumer buying habits in the markets its customers serve. Changes in consumer dietary habits and preferences, increases in the costs of living, unemployment rates, access to credit markets, as well as other macroeconomic factors, may negatively affect consumer spending behavior. New product introductions and promotional activity by the Company's customers and the Company's introduction of new packaging products also impact its sales.

Debt Obligations. The Company had an aggregate principal amount of \$2,872.8 million of outstanding debt obligations as of December 31, 2019. This debt has consequences for the Company, as it requires a portion of cash flow from operations to be used for the payment of principal and interest, exposes the Company to the risk of increased interest rates and may restrict the Company's ability to obtain additional financing. Covenants in the Company's Amended and Restated Credit Agreement, the Term Loan Credit Agreement and Indentures may, among other things, restrict the ability of the Company to dispose of assets, incur guarantee obligations, prepay other indebtedness, repurchase stock, pay dividends, make other restricted payments and make acquisitions or other investments. The Amended and Restated Credit Agreement and the Term Loan Credit Agreement also require compliance with a maximum consolidated leverage ratio and a minimum consolidated interest coverage ratio. The Company's ability to comply in future periods with the financial covenants will depend on its ongoing financial and operating performance, which in turn will be subject to many other factors, many of which are beyond the Company's control. See "Covenant Restrictions" in "Financial Condition, Liquidity and Capital Resources" for additional information regarding the Company's debt obligations.

The debt and the restrictions under the Amended and Restated Credit Agreement, the Term Loan Credit Agreement and the Indentures could limit the Company's flexibility to respond to changing market conditions and competitive pressures. The outstanding debt obligations and the restrictions may also leave the Company more vulnerable to a downturn in general economic conditions or its business, or unable to carry out capital expenditures that are necessary or important to its growth strategy and productivity improvement programs.

OVERVIEW OF RESULTS

This management's discussion and analysis contains an analysis of Net Sales, Income from Operations and other information relevant to an understanding of the Company's results of operations. On a consolidated basis:

- Net Sales in 2019 increased by \$130.7 million or 2.2%, to \$6,160.1 million from \$6,029.4 million in 2018 due to higher selling prices and the Artistic and 2018 Acquisitions discussed below, partially offset by unfavorable foreign currency exchange rates.
- Income from Operations in 2019 increased by \$75.9 million or 16.6%, to \$534.1 million from \$458.2 million in 2018 due to the higher selling prices, cost savings through continuous improvement programs, benefits from completed capital projects, and the Augusta, Georgia mill outage in 2018. These increases were partially offset by higher inflation, start-up costs associated with the Monroe, Louisiana folding carton facility, the gain on the sale of Santa Clara in 2018, increased incentive costs and unfavorable foreign currency exchange rates.

Acquisitions and Dispositions

- On August 1, 2019, the Company acquired substantially all the assets of Artistic, a diversified producer of folding cartons and CRB. The acquisition included two converting facilities located in Auburn, Indiana and Elgin, Illinois (included in the Americas Paperboard Packaging reportable segment) and one CRB mill located in White Pigeon, Michigan (included in the Paperboard Mills reportable segment).
- During 2018, the Company completed the NACP Combination and the 2018 Acquisitions which included PFP and Letica Foodservice, and sold its previously closed CRB mill site in Santa Clara, California.
- During 2017, the Company completed the 2017 Acquisitions which included Seydaco, Norgraft and Carton Craft.

Capital Allocations

- During 2019, the Company repurchased 10.2 million shares of its outstanding common stock, or approximately \$127.9 million, at an average price of \$12.55 per share. At December 31, 2019, the Company had approximately \$462 million available for additional repurchases under the 2019 share repurchase program.
- During 2019, GPHC declared cash dividends of \$87.7 million and paid cash dividends of \$88.7 million.

RESULTS OF OPERATIONS

	Year Ended December 31,				
In millions		2019	2018	2017	
Net Sales	\$	6,160.1 \$	6,029.4 \$	4,405.6	
Income from Operations	\$	534.1 \$	458.2 \$	327.9	
Nonoperating Pension and Postretirement Benefit (Expense) Income		(39.5)	14.9	14.8	
Interest Expense, Net		(140.6)	(123.7)	(89.7)	
Loss on Modification or Extinguishment of Debt		_	(1.9)	_	
Income before Income Taxes and Equity Income of Unconsolidated Entity	\$	354.0 \$	347.5 \$	253.0	
Income Tax (Expense) Benefit		(76.3)	(54.7)	45.5	
Income before Equity Income of Unconsolidated Entity	\$	277.7 \$	292.8 \$	298.5	
Equity Income of Unconsolidated Entity		0.4	1.2	1.7	
Net Income	\$	278.1 \$	294.0 \$	300.2	

2019 COMPARED WITH 2018

Net Sales

The components of the change in Net Sales are as follows:

	 Year Ended December 31,							
	Variances							
In millions	2018	Price	Volume/Mix	Foreign Exchange	2019	Increase	Percent Change	
Consolidated	\$ 6,029.4	\$ 131.2	\$ 50.2	\$ (50.7) \$	6,160.1	\$ 130.7	2.2 %	

The Company's Net Sales in 2019 increased by \$130.7 million or 2.2%, to \$6,160.1 million from \$6,029.4 million for the same period in 2018, due to higher selling prices and Net Sales of approximately \$115 million from the Artistic and 2018 Acquisitions. These increases were partially offset by modestly lower converting volumes in the first half of the year and unfavorable foreign currency exchange rates, primarily the Euro, British Pound and Australian dollar. The higher selling prices are the results of announced price increases which benefit from inflationary pass throughs in the converting business as well as open market sales. Core converting volumes were down, in dry and frozen foods and dairy products, partially offset by higher global beverage volumes and new product introductions.

Income from Operations

The components of the change in Income from Operations are as follows:

		Year Ended December 31,								
		Variances								
In millions	2018	Price	Volume/ Mix	Inflation	Foreign Exchange	Other (a)	2019	In	crease	Percent Change
Consolidated	\$458.2	\$ 131.2	\$ (31.2)	\$ (79.1)	\$ (6.2)	\$ 61.2	\$534.1	\$	75.9	16.6 %

⁽a) Includes the Company's cost reduction initiatives, expenses related to acquisitions and integration activities, exit activities, gain on sale of assets and shutdown and other special charges.

The Company's Income from Operations for 2019 increased \$75.9 million or 16.6%, to \$534.1 million from \$458.2 million for the same period in 2018 due to the higher selling prices, cost savings through continuous improvement programs, the Augusta, Georgia mill outage in 2018 (approximately \$52 million), and benefits from completed capital projects and synergies. These increases were partially offset by higher inflation, product mix, the gain on the sale of the Santa Clara mill site in 2018, costs to dispose of idle and abandoned assets, costs associated with exit activities, start-up costs associated with the Monroe, Louisiana folding carton facility, increased incentive costs and unfavorable foreign currency exchange rates. Inflation for 2019 increased due to labor and benefit costs (\$40.4 million), wood (\$39.6 million), external board (\$12.1 million), partially offset by lower secondary fiber cost (\$10.5 million), and other costs, net (\$2.5 million).

Nonoperating Pension and Postretirement Benefit

Nonoperating Pension and Postretirement Benefit was an expense of \$39.5 million in 2019 versus income of \$14.9 million in 2018. The increase in expense was due to a settlement charge of \$39.2 million associated with lump sum payments, as well as lower expected return on assets and higher interest costs.

Interest Expense, Net

Interest Expense, Net increased by \$16.9 million to \$140.6 million in 2019 from \$123.7 million in 2018. Interest Expense, Net increased due primarily to higher average debt balances slightly offset by lower average interest rates as compared to the prior year. As of December 31, 2019, approximately 34% of the Company's total debt was subject to floating interest rates.

Income Tax Expense

During 2019, the Company recognized Income Tax Expense of \$76.3 million on Income before Income Taxes and Equity Income of Unconsolidated Entity of \$354.0 million. During 2018, the Company recognized Income Tax Expense of \$54.7 million on Income before Income Taxes and Equity Income of Unconsolidated Entity of \$347.5 million. The effective tax rate for 2019 is different than the statutory rate primarily due to the tax effect of income attributable to noncontrolling interests as well as the mix and levels of earnings between foreign and domestic tax jurisdictions. In addition, during 2019, the Company recorded discrete expense of \$4.8 million for a valuation allowance against the net deferred tax assets of the Company's subsidiary in Australia. The effective tax rate in 2019 is higher than the effective tax rate in 2018 primarily due to the valuation allowance as compared to 2018. During 2018, the Company released its valuation allowance against the net deferred tax assets of its French subsidiary and recorded discrete benefits related to the true up of the effects of the Tax Cuts and Jobs Act enacted in 2017.

The Company has available net operating losses ("NOLs") of approximately \$32 million for U.S. federal income tax purposes which may be used to offset future taxable income. Based on these NOLs, other tax attributes, tax benefits associated with planned capital projects, and the anticipated reduction in International Paper's investment in GPIP, the Company does not expect to be a meaningful U.S. federal cash taxpayer until 2024.

Equity Income of Unconsolidated Entity

Equity Income of Unconsolidated Entity was \$0.4 million in 2019 and \$1.2 million in 2018 and is related to the Company's equity investment through its GPIL subsidiary, in the joint venture, Rengo Riverwood Packaging, Ltd.

2018 COMPARED WITH 2017

Net Sales

The components of the change in Net Sales are as follows:

		Year	r Ended Decemb	per 31,			
	_		Variances				
In millions	2017	Price	Volume/Mix	Foreign Exchange	2018	Increase	Percent Change
Consolidated	\$ 4,405.6	52.9	\$ 1,551.8	\$ 19.1	\$ 6,029.4	\$ 1,623.8	36.9 %

The Company's Net Sales in 2018 increased by \$1,623.8 million, or 36.9% to \$6,029.4 million from \$4,405.6 million in 2017 due to Net Sales of \$1,547.9 million from the NACP Combination and the 2017 Acquisitions and the 2018 Acquisitions, higher selling prices and favorable currency exchange rates, primarily the Euro and the British Pound. These increases were offset by lower open market volumes as the Company internalized more paperboard due to the shutdown of the Santa Clara mill site in the fourth quarter of 2017. Core volumes were stable due to new product introductions offset by lower beverage volumes. The higher selling prices are the result of announced price increases which benefit open market sales as well as inflationary pass throughs in the converting businesses.

Income from Operations

The components of the change in Income from Operations are as follows:

		Year Ended December 31,										
				_								
In millions	2017	Price	Volume/ Mix ^(a)	Inflation	Foreign Exchange	Other ^(b)	2018	Increase	Percent Change			
Consolidated	\$ 327.9	\$ 52.9	\$ 38.2	\$ (73.6)	\$ 1.5	\$ 111.3	\$ 458.2	\$ 130.3	39.7 %			

⁽a) Includes expenses related to the Augusta, Georgia mill outage and inflation for the NACP Combination of approximately \$26 million.

The Company's Income from Operations for 2018 increased \$130.3 million or 39.7%, to \$458.2 million from \$327.9 million for the same period in 2017 due to the NACP Combination, the 2017 Acquisitions and the 2018 Acquisitions, the higher selling prices, a gain of \$37.1 million from the sale of the Santa Clara mill, cost savings through continuous improvement and other programs and the impact related to planned downtime taken in 2017 to upgrade a paper machine in West Monroe, Louisiana. These increases were partially offset by inflation, the Augusta, Georgia mill outage (approximately \$52 million), expenses related to the NACP Combination and integration activities and higher incentive compensation costs. Inflation for 2018 increased due to freight (\$25.9 million), labor and benefit costs (\$20.9 million), chemicals (\$19.4 million), external board (\$17.7 million), and other costs, net (\$4.2 million), partially offset by lower secondary fiber cost (\$14.5 million).

Interest Expense, Net

Interest Expense, Net increased by \$34.0 million to \$123.7 million in 2018 from \$89.7 million in 2017. Interest Expense, Net increased due primarily to higher average debt balances and interest rates as compared to the prior year. As of December 31, 2018, approximately 41% of the Company's total debt was subject to floating interest rates.

Income Tax Expense

During 2018, the Company recognized Income Tax Expense of \$54.7 million on Income before Income Taxes and Equity Income of Unconsolidated Entity of \$347.5 million. During 2017, the Company recognized Income Tax Benefit of \$45.5 million on Income before Income Taxes and Equity Income of Unconsolidated Entity of \$253.0 million. The effective tax rate for 2018 is lower than the statutory rate primarily due to the tax effect of domestic income attributable to noncontrolling interests as well as the mix and levels of earnings between foreign and domestic tax jurisdictions. In addition, during 2018, the Company recorded discrete benefits of approximately \$4 million, \$11 million and \$2 million associated with the indirect impacts of the NACP Combination, an adjustment due to the estimated tax effects of the Tax Cuts and Jobs Act (the "Act") and the release of a valuation allowance against the net deferred tax assets of the Company's wholly-owned subsidiary in France, respectively.

Equity Income of Unconsolidated Entity

Equity Income of Unconsolidated Entity was \$1.2 million in 2018 and \$1.7 million in 2017 and is related to the Company's equity investment through its GPIL subsidiary in the joint venture, Rengo Riverwood Packaging, Ltd.

⁽b) Includes the Company's cost reduction initiatives and expenses related to business combinations, gain on sale of assets, and shutdown and other special charges.

Segment Reporting

The Company has three reportable segments as follows:

Paperboard Mills includes the nine North American paperboard mills which produce primarily CRB, CUK, and SBS, which is primarily consumed internally to produce paperboard packaging for the Americas and Europe Paperboard Packaging segments. The remaining paperboard is sold externally to a wide variety of paperboard packaging converters and brokers. The Paperboard Mills segment Net Sales represent the sale of paperboard only to external customers. The effect of intercompany transfers to the paperboard packaging segments has been eliminated from the Paperboard Mills segment to reflect the economics of the integration of these segments.

Americas Paperboard Packaging includes paperboard packaging folding cartons and cups, lids, and food containers sold primarily to consumer packaged goods, quick-service restaurants and foodservice companies serving the food, beverage, and consumer product markets in the Americas.

Europe Paperboard Packaging includes paperboard packaging, primarily folding cartons, sold primarily to consumer packaged goods companies serving the food, beverage and consumer product markets in Europe.

The Company allocates certain mill and corporate costs to the reportable segments to appropriately represent the economics of these segments. The Corporate and Other caption includes the Pacific Rim and Australia operating segments and unallocated corporate and one-time costs.

These segments are evaluated by the chief operating decision maker based primarily on Income from Operations, as adjusted for depreciation and amortization. The accounting policies of the reportable segments are the same as those described in Note 1 in the Notes to Consolidated Financial Statements included herein under "Item 8. Financial Statements and Supplementary Data."

	Year Ended December 31,						
In millions		2019	2018	2017			
NET SALES:							
Paperboard Mills	\$	1,094.8 \$	1,078.1 \$	399.7			
Americas Paperboard Packaging		4,233.7	4,098.3	3,245.1			
Europe Paperboard Packaging		689.3	695.9	593.5			
Corporate/Other/Eliminations ^(a)		142.3	157.1	167.3			
Total	\$	6,160.1 \$	6,029.4 \$	4,405.6			
INCOME (LOSS) FROM OPERATIONS:							
Paperboard Mills ^(b)	\$	33.1 \$	30.6 \$	(35.0)			
Americas Paperboard Packaging		477.7	420.1	358.2			
Europe Paperboard Packaging		60.3	46.1	37.3			
Corporate and Other ^(c)		(37.0)	(38.6)	(32.6)			
Total	\$	534.1 \$	458.2 \$	327.9			

⁽a) Includes revenue from contracts with customers for the Australia and Pacific Rim operating segments.

2019 COMPARED WITH 2018

Paperboard Mills - Net Sales increased from prior year due to higher selling prices and higher open market volume of SBS and CRB, due to the White Pigeon Mill acquired as part of the Artistic acquisition, partially offset by lower open market volume for CUK. The Company also internalized more CUK and SBS paperboard.

⁽b) Includes accelerated depreciation related to exit activities in 2019, excludes \$29.6 million related to the Augusta, Georgia mill outage in 2018 and includes accelerated depreciation related to shutdown of the Santa Clara mill in 2017.

⁽c) Includes expenses related to business combinations, exit activities, idle and abandoned assets, gain on sale of assets and shutdown and other special charges.

Income from Operations increased due to the higher selling prices and productivity improvements, including benefits from capital projects. These increases were partially offset by product mix, inflation, accelerated depreciation related to exit activities and modest market downtime taken for SBS. The higher inflation was primarily due to wood and labor and benefits, partially offset by lower prices for secondary fiber and energy.

Americas Paperboard Packaging - Net Sales increased due to higher selling prices and the Artistic and 2018 Acquisitions, partially offset by modestly lower converting volumes in the first half of the year. Certain consumer products, primarily dry and frozen foods and dairy products, experienced decreased volume, which was partially offset by increased volume from new product introductions. Beverage volumes rose across all categories except big beer.

Income from Operations increased due to the higher selling prices and productivity improvements partially offset by higher inflation and start-up costs associated with the Monroe, Louisiana folding carton facility. The higher inflation was primarily for labor and benefits and external board.

Europe Paperboard Packaging - Net Sales decreased slightly as unfavorable foreign currency exchange rates were partially offset by increased beverage, consumer product and convenience volumes and higher selling prices. The higher volumes reflect the increase in multi-pack beverage and a shift from plastics into paperboard solutions.

Income from Operations increased due to the higher selling prices, the improved volumes and cost savings through continuous improvement programs, partially offset by inflation, primarily labor and benefits and external board, unfavorable foreign currency exchange rates and higher outsourcing costs.

2018 COMPARED WITH 2017

Paperboard Mills - Net sales increased due to the NACP Combination and increased selling prices, partially offset by lower open market volume of CRB and CUK as the Company internalized more paperboard due to the closure of the Santa Clara Mill in the fourth quarter of 2017. During 2018, the Company announced a series of price increases related to its CRB, CUK and SBS open market paperboard.

Income from Operations increased due to the NACP Combination, the impact of the 2017 maintenance cold outage in West Monroe, Louisiana, productivity improvements and the higher selling prices, partially offset by the Augusta, Georgia mill outage, and higher inflation. Inflation increased primarily for chemicals, freight and labor and benefits, partially offset by lower secondary fiber and energy costs.

Americas Paperboard Packaging - Net sales increased due to the NACP Combination, the 2017 Acquisitions and the 2018 Acquisitions, higher selling prices and new product introductions, partially offset by lower volume for beverage and certain consumer products. The higher selling prices are inflationary pass throughs related to announced paperboard price increases.

Income from Operations increased due to the NACP Combination, the 2017 Acquisitions and the 2018 Acquisitions, the higher selling prices and cost savings through continuous improvement programs, partially offset by higher inflation, primarily for freight, labor and benefits and external board.

Europe Paperboard Packaging - Net Sales increased due to the Norgraft acquisition and NACP Combination, favorable foreign currency exchange rates, increased volumes for beverage, consumer and convenience products and higher selling prices. The higher selling prices are related to board inflationary pass throughs.

Income from Operations increased due to the same factors increasing Net Sales as well as, continuous improvement and other cost savings programs, partially offset by higher inflation, primarily external paperboard.

FINANCIAL CONDITION, LIQUIDITY AND CAPITAL RESOURCES

The Company broadly defines liquidity as its ability to generate sufficient funds from both internal and external sources to meet its obligations and commitments. In addition, liquidity includes the ability to obtain appropriate debt and equity financing and to convert into cash those assets that are no longer required to meet existing strategic and financial objectives. Therefore, liquidity cannot be considered separately from capital resources that consist of current or potentially available funds for use in achieving long-range business objectives and meeting debt service commitments.

Cash Flows

	,	Years Ended December 31,					
In millions		2019	2018				
Net Cash Provided by (Used in) Operating Activities	\$	665.8 \$	(373.8)				
Net Cash (Used in) Provided by Investing Activities	\$	(224.3) \$	689.1				
Net Cash Used In Financing Activities	\$	(360.8) \$	(310.7)				

Effective January 1, 2018, the Company adopted ASU No. 2016-15, Statement of Cash Flows (Topic 230); Classification of Certain Cash Receipts and Cash Payments, which required the Company to classify consideration received for beneficial interest obtained for transferring trade receivables as investing activities instead of operating activities.

Net cash provided by operating activities in 2019 totaled \$665.8 million, compared to \$373.8 million used in operating activities in 2018. The increase was due primarily to the restructuring of certain of the Company's accounts receivable sale and securitization programs. Pension contributions in 2019 and 2018 were \$11.3 million and \$5.8 million, respectively.

Net cash used in investing activities in 2019 totaled \$224.3 million, compared to \$689.1 million provided by investing activities in 2018. Capital spending was \$352.9 million and \$395.2 million in 2019 and 2018, respectively. In 2019, the Company paid the remaining \$2.0 million for the Letica acquisition and paid \$52.5 million for the Artistic acquisition, including the working capital true-up. Net beneficial interest decreased as a result of the restructuring of certain of the Company's accounts receivable sale and securitization programs. In the prior year, the Company paid \$89.4 million, net of cash acquired, for the 2018 Acquisitions. The Company also received cash from the sale of assets of \$49.4 million in 2018. Net cash receipts related to the accounts receivable securitization and sale programs were \$187.7 million and \$1,131.2 million in 2019 and 2018, respectively.

Net cash used in financing activities in 2019 totaled \$360.8 million, compared to \$310.7 million in 2018. Current year activities include a debt offering of \$300 million aggregate principal amount of 4.75% senior notes due 2027. The Company used the net proceeds to repay a portion of its outstanding borrowings under its senior secured revolving credit facility. Additionally, the Company made borrowings under revolving credit facilities primarily for capital spending, repurchase of common stock of \$128.8 million and payments on debt of \$36.5 million. The Company also paid dividends and distributions of \$112.7 million and withheld \$4.1 million of restricted stock units to satisfy tax withholding obligations related to the payout of restricted stock units. In the prior year, the Company had net borrowings under revolving credit facilities of \$89.4 million, primarily for the 2018 Acquisitions, pension contributions of \$5.8 million, and payments on debt of \$152.4 million. The Company also paid dividends of \$93.1 million and distributions to the GPIL Partner of \$17.9 million, repurchased \$119.1 million of its common stock, and withheld \$4.3 million of restricted stock units to satisfy tax withholding payments related to the payout of restricted stock units.

Liquidity and Capital Resources

The Company's liquidity needs arise primarily from the funding of its capital expenditures, debt service on its indebtedness, ongoing operating costs, working capital, share repurchases and dividend payments. Principal and interest payments under the term loan facilities and the revolving credit facilities, together with principal and interest payments on the Company's 4.75% Senior Notes due 2021, 4.875% Senior Notes due 2022, 4.125% Senior Notes due 2024 and 4.75% Senior Notes due 2027 (the "Notes"), represent liquidity requirements for the Company. Based upon current levels of operations, anticipated cost savings and expectations as to future growth, the Company believes that cash generated from operations, together with amounts available under its revolving credit facilities and other available financing sources, will be adequate to permit the Company to meet its debt service obligations, necessary capital expenditure program requirements and ongoing operating costs and working capital needs, although no assurance can be given in this regard. The Company's future financial and operating performance, ability to service or refinance its debt and ability to comply with the covenants and restrictions contained in its debt agreements (see "Covenant Restrictions" below) will be subject to future economic conditions, including conditions in the credit markets, and to financial, business and other factors, many of which are beyond the Company's control, and will be substantially dependent on the selling prices and demand for the Company's products, raw material and energy costs, and the Company's ability to successfully implement its overall business and profitability strategies.

As of December 31, 2019, the Company had approximately \$32 million of NOLs for U.S. federal income tax purposes. These NOLs generally may be used by the Company to offset taxable income earned in subsequent taxable years.

Accounts receivable are stated at the amount owed by the customer, net of an allowance for estimated uncollectible accounts, returns and allowances, and cash discounts. The allowance for doubtful accounts is estimated based on historical experience, current economic conditions and the creditworthiness of customers. Receivables are charged to the allowance when determined to be no longer collectible.

The Company has entered into agreements to sell, on a revolving basis, certain trade accounts receivable to third party financial institutions. Transfers under these agreements meet the requirements to be accounted for as sales in accordance with the *Transfers and Servicing* topic of the Financial Accounting Standards Board ("FASB") Accounting Standards Codification (the "Codification"). The loss on sale is not material and is included in Other Expense, Net line item on the Consolidated Statement of Operations. The following table summarizes the activity under these programs for the year ended December 31, 2019 and 2018, respectively:

		Year Ended December 31,							
In millions		2019	2018						
Receivables Sold and Derecognized	\$	2,654.2 \$	3,314.8						
Proceeds Collected on Behalf of Financial Institutions		2,254.9	3,153.4						
Net Proceeds Received From (Paid to) Financial Institutions		66.5	13.4						
Deferred Purchase Price at December 31 ^(a)		0.7	66.9						
Pledged Receivables at December 31		177.5	43.0						

⁽a) Included in Other Current Assets and represents a beneficial interest in the receivables sold to the financial institutions, which is a Level 3 fair value measure.

The Company has also entered into various factoring and supply chain financing arrangements which also qualify for sale accounting in accordance with the *Transfers and Servicing* topic of the FASB Codification. For the years ended December 31, 2019 and 2018, the Company sold receivables of approximately \$238 million and \$119 million, respectively, related to these factoring arrangements.

Receivables sold under all programs subject to continuing involvement, which consist principally of collection services, were approximately \$562 million and \$559 million as of December 31, 2019 and 2018, respectively.

Covenant Restrictions

Covenants contained in the Amended and Restated Credit Agreement, the Term Loan Credit Agreement (collectively, the "Credit Agreement") and the Indentures may, among other things, limit the ability to incur additional indebtedness, restrict the ability of the Company to dispose of assets, incur guarantee obligations, prepay other indebtedness, repurchase shares, pay dividends and make other restricted payments, create liens, make equity or debt investments, make acquisitions, modify terms of the indentures under which the Notes are issued, engage in mergers or consolidations, change the business conducted by the Company and its subsidiaries, and engage in certain transactions with affiliates. Such restrictions, together with disruptions in the credit markets, could limit the Company's ability to respond to changing market conditions, fund its capital spending program, provide for unexpected capital investments or take advantage of business opportunities.

Under the terms of the Credit Agreement, the Company must comply with a maximum Consolidated Total Leverage Ratio covenant and a minimum Consolidated Interest Expense Ratio covenant. The Third Amended and Restated Credit Agreement, which contains the definitions of these covenants, was filed as an exhibit to the Company's Form 8-K filed on January 2, 2018.

The Credit Agreement requires that the Company maintain a maximum Consolidated Total Leverage Ratio of less than 4.25 to 1.00. At December 31, 2019, the Company was in compliance with such covenant and the ratio was 2.50 to 1.00.

The Company must also comply with a minimum Consolidated Interest Expense Ratio of 3.00 to 1.00. At December 31, 2019, the Company was in compliance with such covenant and the ratio was 7.78 to 1.00.

As of December 31, 2019, the Company's credit was rated BB+ by Standard & Poor's and Ba1 by Moody's Investor Services. Standard & Poor's and Moody's Investor Services' ratings on the Company included a stable outlook.

Capital Investment

The Company's capital investments in 2019 were \$359.1 million (\$352.9 million was paid), compared to \$409.2 million (\$395.2 million was paid) in 2018. During 2019, the Company had capital spending of \$307.8 million for improving process capabilities, \$29.3 million for capital spares and \$22.0 million for manufacturing packaging machinery.

Environmental Matters

Some of the Company's current and former facilities are the subject of environmental investigations and remediations resulting from historical operations and the release of hazardous substances or other constituents. Some current and former facilities have a history of industrial usage for which investigation and remediation obligations may be imposed in the future or for which indemnification claims may be asserted against the Company. Also, closures or sales of facilities may necessitate further investigation and may result in remediation at those facilities. The Company has established reserves for those facilities or issues where liability is probable and the costs are reasonably estimable.

For further discussion of the Company's environmental matters, see Note 14 in the Notes to Consolidated Financial Statements included herein under "Item 8., Financial Statements and Supplementary Data."

Contractual Obligations and Commitments

A summary of our contractual obligations and commitments as of December 31, 2019 is as follows:

	Payments Due by Period									
In millions		Total		ess than 1 Year	1	-3 Years	3	3-5 Years		Years
Debt Obligations	\$	2,738.6	\$	45.8	\$	617.6	\$	1,771.6	\$	303.6
Operating Leases		225.6		60.8		87.0		47.1		30.7
Finance Leases		220.3		12.5		24.8		24.8		158.2
Interest Payable		513.1		137.0		221.4		63.4		91.3
Purchase Obligations ^(a)		221.2		57.8		49.5		36.8		77.1
Total Contractual Obligations ^(b)	\$	3,918.8	\$	313.9	\$	1,000.3	\$	1,943.7	\$	660.9

⁽a) Purchase obligations primarily consist of commitments for the purchase of fiber and chip processing.

International Operations

For 2019, before intercompany eliminations, net sales from operations outside of the U.S. represented approximately 20% of the Company's net sales. The Company's revenues from export sales fluctuate with changes in foreign currency exchange rates. At December 31, 2019, approximately 17% of the Company's total assets were denominated in currencies other than the U.S. dollar. The Company has significant operations in countries that use the euro, British pound sterling, the Australian dollar, the Canadian dollar, the Mexico peso or the Japanese yen as their functional currencies. The effect of changes in the U.S. dollar exchange rate against these currencies produced a net currency translation adjustment gain of \$12.4 million, which was recorded in Other Comprehensive (Loss) Income for the year ended December 31, 2019. The magnitude and direction of this adjustment in the future depends on the relationship of the U.S. dollar to other currencies. The Company pursues a currency hedging program in order to reduce the impact of foreign currency exchange fluctuations on financial results. See "Financial Instruments" below.

Financial Instruments

The Company pursues a currency hedging program which utilizes derivatives to reduce the impact of foreign currency exchange fluctuations on its consolidated financial results. Under this program, the Company has entered into forward exchange contracts in the normal course of business to hedge certain foreign currency denominated transactions. Realized and unrealized gains and losses on these forward contracts are included in the measurement of the basis of the related foreign currency transaction when recorded. The Company also pursues a hedging program that utilizes derivatives designed to manage risks associated with future variability in cash flows and price risk related to future energy cost increases. Under this program, the Company has entered into natural gas swap contracts to hedge a portion of its forecasted natural gas usage for 2020 and 2021. Realized gains and losses on these contracts are included in the financial results concurrently with the recognition of the commodity consumed. In addition, the Company uses interest rate swaps to manage interest rate risks on future interest payments caused by interest rate changes on its variable rate term loan facility. The Company does not hold or issue financial instruments for trading purposes. See "Item 7A., Quantitative and Qualitative Disclosure About Market Risk."

CRITICAL ACCOUNTING POLICIES

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities at the date of the financial statements and the reported amounts of net sales and expenses during the reporting period. Actual results could differ from these estimates, and changes in these estimates are recorded when known. The critical accounting policies used by management in the preparation of the Company's consolidated financial statements are those that are important both to the presentation of the Company's financial condition and results of operations and require significant judgments by management with regard to estimates used. The critical judgments by management relate to pension benefits, retained insurable risks, future cash flows associated with impairment testing for goodwill and long-lived assets, and deferred income taxes.

⁽b) Certain amounts included in this table are based on management's estimates and assumptions about these obligations. Because these estimates and assumptions are necessarily subjective, the obligations the Company will actually pay in the future periods may vary from those reflected in the table.

• Pension Benefits

The Company sponsors defined benefit pension plans (the "Plans") for eligible employees in North America and certain international locations. The funding policy for the U.S. qualified defined benefit plans is to, at a minimum, contribute assets as required by the Internal Revenue Code Section 412. Nonqualified defined benefit U.S. plans providing benefits in excess of limitations imposed by the U.S. income tax code are not funded.

The Company's pension expense for defined benefit pension plans was \$54.9 million in 2019 compared to \$3.3 million in 2018. The 2019 expense includes a \$39.2 million charge associated with lump-sum settlements with certain participants. Pension expense is calculated based upon a number of actuarial assumptions applied to each of the defined benefit plans. The weighted average expected long-term rate of return on pension fund assets used to calculate pension expense was 4.74% and 4.86% in 2019 and 2018, respectively. The expected long-term rate of return on pension assets was determined based on several factors, including historical rates of return, input from our pension investment consultants and projected long-term returns of broad equity and bond indices. The Company evaluates its long-term rate of return assumptions annually and adjusts them as necessary.

The Company determined pension expense using both the fair value of assets and a calculated value that averages gains and losses over a period of years. Investment gains or losses represent the difference between the expected and actual return on assets. As of December 31, 2019, the net actuarial loss was \$279.9 million. These net losses may increase future pension expense if not offset by (i) actual investment returns that exceed the assumed investment returns, or (ii) other factors, including reduced pension liabilities arising from higher discount rates used to calculate pension obligations, or (iii) other actuarial gains, including whether such accumulated actuarial losses at each measurement date exceed the "corridor" determined under the *Compensation* — *Retirement Benefits* topic of the FASB Codification. The actuarial loss is amortized over the average remaining life expectancy period of employees expected to receive benefits. In January 2020, following the purchase of a group annuity to transfer the benefit obligation to an insurance company, the Company expects the remaining actuarial loss to be approximately \$90 million.

The discount rate used to determine the present value of future pension obligations at December 31, 2019 was based on a yield curve constructed from a portfolio of high-quality corporate debt securities with maturities ranging from 1 year to 30 years. Each year's expected future benefit payments were discounted to their present value at the spot yield curve rate thereby generating the overall discount rate for the Company's pension obligations. The weighted average discount rate used to determine the pension obligations was 2.69% and 4.14% in 2019 and 2018, respectively.

The Company's pension expense is estimated to be approximately \$164 million (includes approximately \$150 million in settlement charges) in 2020. The estimate is based on a weighted average expected long-term rate of return of 4.12%, a weighted average discount rate of 2.69% and other assumptions. Pension expense beyond 2020 will depend on future investment performance, the Company's contribution to the plans, changes in discount rates and other factors related to covered employees in the plans.

If the discount rate assumptions for the Company's U.S. plans were reduced by 0.25%, pension expense would increase by approximately \$1 million and the December 31, 2019 projected benefit obligation would increase approximately \$28 million.

The fair value of assets in the Company's plans was \$1,172.4 million at December 31, 2019 and \$1,186.5 million at December 31, 2018. The projected benefit obligations exceed the fair value of plan assets by \$83.0 million and \$58.7 million as of December 31, 2019 and 2018, respectively. The accumulated benefit obligation ("ABO") exceeded plan assets by \$77.4 million at the end of 2019. At the end of 2018, the ABO exceeded the fair value of plan assets by \$53.7 million.

• Retained Insurable Risks

The Company is self-insured for certain losses relating to workers' compensation claims and employee medical and dental benefits. Provisions for expected losses are recorded based on the Company's estimates, on an undiscounted basis, of the aggregate liabilities for known claims and estimated claims incurred but not reported. The Company has purchased stop-loss coverage or insurance with deductibles in order to limit its exposure to significant claims. The Company also has an extensive safety program in place to minimize its exposure to workers' compensation claims. Self-insured losses are accrued based upon estimates of the aggregate uninsured claims incurred using certain actuarial assumptions, loss development factors followed in the insurance industry and historical experience.

• Goodwill

The Company evaluates goodwill for potential impairment annually as of October 1, as well as whenever events or changes in circumstances suggest that the fair value of a reporting unit may no longer exceed its carrying amount. Potential impairment of goodwill is measured at the reporting unit level by comparing the reporting unit's carrying amount, including goodwill, to the estimated fair value of the reporting unit. As of October 1, 2019, the Company had seven reporting units, five of which had goodwill.

Periodically, the Company may perform a qualitative impairment analysis of goodwill associated with each of its reporting units to determine if it is more likely than not that the carrying value of a reporting unit exceeded its fair value. If the results of the qualitative analysis of any of the reporting units is inconclusive, or if significant changes in the business have occurred since the last quantitative impairment assessment, the Company will perform a quantitative analysis for those reporting units.

As of October 1, 2019, the Company performed a quantitative impairment test. The quantitative analysis involves calculating the fair value of each reporting unit by utilizing a discounted cash flow analysis based on the Company's business plans, discounted using a weighted average cost of capital and market indicators of terminal year cash flows based upon a multiple of earnings before interest, taxes, depreciation and amortization ("EBITDA").

Estimating the fair value of the reporting unit involves uncertainties as it requires management to consider a number of factors, including but not limited to, future operating results, business plans, economic projections of revenues and operating margins, estimated future cash flows, and market data and analysis, including market capitalization. Fair value determinations are sensitive to changes in the factors described above. There are inherent uncertainties related to these factors and judgments used to estimate reporting unit fair value and the related analysis of potential goodwill impairment.

The variability of the assumptions that management uses to perform the goodwill impairment test depends on a number of conditions, including uncertainty about future events and cash flows. Accordingly, the Company's accounting estimates may materially change from period to period due to changing market factors. If the Company had used other assumptions and estimates or if different conditions occur in future periods, future operating results and cash flows could be materially impacted, and judgments and conclusions about the recoverability of goodwill could change. The assumptions used in the goodwill impairment testing process could also be adversely impacted by certain of the risks discussed in "Item 1A., Risk Factors" and thus could result in future goodwill impairment charges.

The Company performed its annual goodwill impairment tests as of October 1, 2019. The Company concluded that all reporting units with goodwill have a fair value that exceeds their carrying value, and thus goodwill was not impaired. The discount rate used for each reporting unit ranged from 7.5% to 8.0%, and we utilized an EBITDA multiple of 8.5 times to calculate terminal period cash flows. The Foodservice and Australia reporting units had fair values that exceed their respective carrying values by 32% and 17%, respectively, whereas all other reporting units exceeded by more than 50%. If we had concluded that it was appropriate to increase the discount rate we used by 100 basis points to estimate the fair value of our respective reporting units, the fair value of each reporting unit would have continued to exceed its carrying amount. The Foodservice and Australia reporting units had goodwill totaling \$43.0 million and \$14.4 million, respectively. The Company does not believe it is likely that there will be material changes in the assumptions or estimates used to calculate the reporting unit fair values.

• Recovery of Long-Lived Assets

The Company evaluates the recovery of its long-lived assets by analyzing operating results and considering significant events or changes in the business environment that may have triggered impairment. The Company reviews long-lived assets (including property, plant and equipment and intangible assets) for impairment whenever events or changes in circumstances indicate that the carrying amount of such long-lived assets may not be fully recoverable by undiscounted cash flows. Measurement of the impairment loss, if any, is based on the fair value of the asset, which is determined by an income, cost or market approach.

• Deferred Income Taxes and Potential Assessments

According to the *Income Taxes* topic of the FASB Codification, a valuation allowance is required to be established or maintained when, based on currently available information and other factors, it is more likely than not that all or a portion of a deferred tax asset will not be realized. The FASB Codification provides important factors in determining whether a deferred tax asset will be realized, including whether there has been sufficient taxable income in recent years and whether sufficient income can reasonably be expected in future years in order to utilize the deferred tax asset. The Company has evaluated the need to maintain a valuation allowance for deferred tax assets based on its assessment of whether it is more likely than not that deferred tax benefits would be realized through the generation of future taxable income. Appropriate consideration was given to all available evidence, both positive and negative, in assessing the need for a valuation allowance. In determining whether a valuation allowance is required, many factors are considered, including the specific taxing jurisdiction, the carryforward period, reversals of existing taxable temporary differences, cumulative pretax book earnings, income tax strategies and forecasted earnings for the entities in each jurisdiction.

As of December 31, 2019, the Company has recorded a valuation allowance of \$41.1 million against its net deferred tax assets in certain foreign jurisdictions and against domestic deferred tax assets related to certain federal tax credit carryforwards, certain state net operating loss carryforwards and certain state tax credit carryforwards. As of December 31, 2018, a total valuation allowance of \$36.3 million was recorded.

As of December 31, 2019, the Company has only provided for deferred U.S. income taxes attributable to future withholding tax expense related to the Company's equity investment in the joint venture, Rengo Riverwood Packaging, Ltd. During 2019, the Company changed its assertion related to certain earnings of its Canadian subsidiary, Graphic Packaging International Canada, ULC. The Company continues to assert that it is permanently reinvested in the cumulative earnings of its Canadian subsidiary in excess of the amount of cash that is on-hand and available for distribution after consideration of working capital needs and other debt settlement, however, with respect to the excess cash on hand, the Company asserts that it is not permanently reinvested. Due to the deemed taxation of all post-1986 earnings and profits required by the Act, as well as the amount of paid up capital available in Canada from which the Company can distribute earnings without incurring withholding tax, the Company has determined that no deferred tax liability should be recorded related to the outside basis difference of approximately \$31.6 million.

The Company has not provided for deferred U.S. income taxes on approximately \$35 million of its undistributed earnings in international subsidiaries because of the Company's intention to indefinitely reinvest these earnings outside the U.S. The Company's assertion remains unchanged, despite the deemed taxation of all post-1986 earnings and profits required by the Act. The determination of the amount of the unrecognized deferred U.S. income tax liability (primarily withholding tax in certain jurisdictions and some state tax) on the unremitted earnings or any other associated outside basis difference is not practicable because of the complexities associated with the calculation.

The Company has elected to recognize global intangible low-taxed income ("GILTI") as period cost as incurred, therefore there are no deferred taxes recognized for basis differences that are expected to impact the amount of the GILTI inclusion upon reversal.

NEW ACCOUNTING STANDARDS

For a discussion of recent accounting pronouncements impacting the Company, see Note 1 in the Notes to Consolidated Financial Statements included herein under "Item 8., Financial Statements and Supplementary Data."

BUSINESS OUTLOOK

Total capital investment for 2020 is expected to be in the range of \$600 million to \$625 million.

The Company also expects the following in 2020, subject to finalization of acquisition accounting for the Artistic acquisition:

- Depreciation and amortization expense between \$455 million and \$465 million, excluding approximately \$5 million of pension amortization and \$20 million of accelerated depreciation related to exit activities.
- Pension plan contributions between \$10 million and \$20 million.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURE ABOUT MARKET RISK

The Company does not trade or use derivative instruments with the objective of earning financial gains on interest or currency rates, nor does it use leveraged instruments or instruments where there are no underlying exposures identified.

Interest Rates

The Company is exposed to changes in interest rates, primarily as a result of its short-term and long-term debt, which include both fixed and floating rate debt. The Company uses interest rate swap agreements effectively to fix the LIBOR rate on certain variable rate borrowings. At December 31, 2019, the Company had active interest rate swap agreements with a notional amount of \$500 million with \$150 million expiring on January 1, 2020 and the remaining in October 2020 and 2022.

The table below sets forth interest rate sensitivity information related to the Company's debt.

Long-Term Debt Principal Amount by Maturity-Average Interest Rate

	_	Expected Maturity Date													
In millions		2020		2021		2022		2023		2024	Т	hereafter		Total	Fair Value
Total Debt															
Fixed Rate	\$	_	\$	425.5	\$	0.5	\$	250.4	\$	300.4	\$	303.6	\$	1,280.4	\$1,340.1
Average Interest Rate		%)	4.75%	Ó	1.82%	Ó	4.87%)	4.12%	ò	4.71%	o		
Variable Rate	\$	36.5	\$	63.9	\$	127.7	\$	1,220.8	\$	_	\$		\$	1,448.9	\$1,448.5
	Ll	BOR + Spread	. –	IBOR + Spread		BOR + Spread		LIBOR + Spread		_		_		_	_

Total Interest Rate Swaps-Notional Amount by Expiration-Average Swap Rate

	_	Expected Maturity Date											
In millions		2020	2021	2022	2023	2024	Thereafter	Total					
Notional	\$	300.0 \$	— \$	200.0 \$	— \$	<u> </u>	s — \$	500.0					
Average Pay Rate		2.31%	%	2.87 %	%	%	%						
Average Receive Rate		LIBOR	_	LIBOR	_	_	_	_					

Foreign Exchange Rates

The Company enters into forward exchange contracts to effectively hedge substantially all receivables resulting from transactions denominated in foreign currencies. The purpose of these forward exchange contracts is to protect the Company from the risk that the eventual functional currency cash flows resulting from the collection of these receivables will be adversely affected by changes in exchange rates. At December 31, 2019, multiple foreign currency forward exchange contracts existed, with maturities ranging up to three months. Those forward currency exchange contracts outstanding at December 31, 2019, when aggregated and measured in U.S. dollars at December 31, 2019 contractual rates, had net notional amounts totaling \$77.4 million. The Company continuously monitors these forward exchange contracts and adjusts accordingly to minimize the exposure.

The Company also enters into forward exchange contracts to hedge certain other anticipated foreign currency transactions. The purpose of these contracts is to protect the Company from the risk that the eventual functional currency cash flows resulting from anticipated foreign currency transactions will be adversely affected by changes in exchange rates.

During the years ended December 31, 2019 and 2018, there were no amounts reclassified to earnings in connection with forecasted transactions that were no longer considered probable of occurring and there was no amount of ineffectiveness related to changes in the fair value of foreign currency forward contracts. Additionally, there were no amounts excluded from the measure of effectiveness during the years ended December 31, 2019 and 2018.

Foreign Exchange Rates Contractual Amount by Expected Maturity-Average Contractual Exchange Rate

	December 31, 20			
In millions		ontract mount	_	air alue
FORWARD EXCHANGE AGREEMENTS:				
Receive \$US/Pay Yen	\$	17.5	\$	
Weighted average contractual exchange rate		107.86		
Receive \$US/Pay Euro	\$	42.9	\$	(0.8)
Weighted average contractual exchange rate		1.11		
Receive \$US/Pay GBP	\$	27.2	\$	(0.7)
Weighted average contractual exchange rate		1.30		

Natural Gas Contracts

The Company has hedged a portion of its expected natural gas usage for 2020 and 2021. The carrying amount and fair value of the natural gas swap contracts is a net liability of \$3.4 million as of December 31, 2019. Such contracts are designated as cash flow hedges and are accounted for by deferring the quarterly change in fair value of the outstanding contracts in Accumulated Other Comprehensive (Loss) Income in Shareholders' Equity. The resulting gain or loss is reclassified into Cost of Sales concurrently with the recognition of the commodity consumed.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

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GRAPHIC PACKAGING HOLDING COMPANY CONSOLIDATED STATEMENTS OF OPERATIONS

	Year En	ded December 31	,
In millions, except per share amounts	2019	2018	2017
Net Sales	\$ 6,160.1 \$	6,029.4 \$	4,405.6
Cost of Sales	5,067.5	5,077.0	3,696.1
Selling, General and Administrative	511.8	472.1	347.5
Other Expense, Net	8.8	7.2	3.0
Business Combinations, Shutdown and Other Special Charges and Gain on Sale of Assets, Net	37.9	14.9	31.1
Income from Operations	534.1	458.2	327.9
Nonoperating Pension and Postretirement Benefit (Expense) Income	(39.5)	14.9	14.8
Interest Expense, Net	(140.6)	(123.7)	(89.7)
Loss on Modification or Extinguishment of Debt	_	(1.9)	_
Income before Income Taxes and Equity Income of Unconsolidated Entity	354.0	347.5	253.0
Income Tax (Expense) Benefit	(76.3)	(54.7)	45.5
Income before Equity Income of Unconsolidated Entity	277.7	292.8	298.5
Equity Income of Unconsolidated Entity	0.4	1.2	1.7
Net Income	\$ 278.1 \$	294.0 \$	300.2
Net Income Attributable to Noncontrolling Interests	(71.3)	(72.9)	_
Net Income Attributable to Graphic Packaging Holding Company	\$ 206.8 \$	221.1 \$	300.2
Net Income Per Share Attributable to Graphic Packaging Holding Company — Basic	\$ 0.70 \$	0.71 \$	0.97
Net Income Per Share Attributable to Graphic Packaging Holding Company — Diluted	\$ 0.70 \$	0.71 \$	0.96

GRAPHIC PACKAGING HOLDING COMPANY CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

Year Ended December 31,

2019

In millions		Graphic Packaging Holding Company	Noncontrolling Interest	Redeemable Noncontrolling Interest	Total
Net Income	\$	206.8	\$ 55.0	\$ 16.3	\$ 278.1
Other Comprehensive (Loss) Income, Net of Tax					
Derivative Instruments		(5.3)	(1.5)	(0.4)	(7.2)
Pension and Postretirement Benefit Plans		7.6	2.3	0.7	10.6
Currency Translation Adjustment		9.8	2.1	0.5	12.4
Total Other Comprehensive Income, Net of Tax		12.1	2.9	0.8	15.8
Total Comprehensive Income	\$	218.9	\$ 57.9	\$ 17.1	\$ 293.9
	2018				
Net Income	\$	221.1	\$ 56.3	\$ 16.6	\$ 294.0
Other Comprehensive Loss, Net of Tax:					
Derivative Instruments		(1.0)	(0.2)	(0.1)	(1.3)
Pension and Postretirement Benefit Plans		(19.4)	(4.7)	(1.4)	(25.5)
Currency Translation Adjustment		(18.7)	(4.5)	(1.3)	(24.5)
Total Other Comprehensive Loss, Net of Tax		(39.1)	(9.4)	(2.8)	(51.3)
Total Comprehensive Income	\$	182.0	\$ 46.9	\$ 13.8	\$ 242.7
	2017				
Net Income	\$	300.2	\$ —	\$ —	\$ 300.2
Other Comprehensive (Loss) Income, Net of Tax:					
Derivative Instruments		(4.9)	_	_	(4.9)
Pension and Postretirement Benefit Plans		8.8	_	_	8.8
Currency Translation Adjustment		44.9	_	_	44.9
Total Other Comprehensive Income, Net of Tax		48.8			48.8
Total Comprehensive Income	\$	349.0	\$ —	\$ —	\$ 349.0

GRAPHIC PACKAGING HOLDING COMPANY CONSOLIDATED BALANCE SHEETS

		Decemb	er 31,
In millions, except share and per share amounts		2019	2018
ASSETS			
Current Assets:			
Cash and Cash Equivalents	\$	152.9 \$	
Receivables, Net		504.5	572.9
Inventories, Net		1,095.9	1,014.4
Other Current Assets		52.3	106.0
Total Current Assets		1,805.6	1,763.8
Property, Plant and Equipment, Net		3,253.8	3,239.7
Goodwill		1,477.9	1,460.6
Intangible Assets, Net		477.3	523.8
Other Assets		275.3	71.3
Total Assets	\$	7,289.9 \$	7,059.2
LIABILITIES			
Current Liabilities:			
Short-Term Debt and Current Portion of Long-Term Debt	\$	50.4 \$	52.0
Accounts Payable		716.1	711.6
Compensation and Employee Benefits		168.4	154.4
Interest Payable		24.7	13.6
Other Accrued Liabilities		239.1	240.7
Total Current Liabilities		1,198.7	1,172.3
Long-Term Debt		2,809.9	2,905.1
Deferred Income Tax Liabilities		511.8	462.2
Accrued Pension and Postretirement Benefits		140.4	107.5
Other Noncurrent Liabilities		266.8	117.8
C			
Commitments (Note 13)		204.2	275.0
Redeemable Noncontrolling Interest (Note 15)		304.3	275.8
SHAREHOLDERS' EQUITY			
Preferred Stock, par value \$.01 per share; 100,000,000 shares authorized; no shares issued or outstanding		_	_
Common Stock, par value \$.01 per share; 1,000,000,000 shares authorized; 290,246,907 and 299,891,585 shares issued and outstanding at December 31, 2019 and December 31, 2018, respectively		2.9	3.0
Capital in Excess of Par Value		1,876.7	1,944.4
Retained Earnings		56.4	10.0
Accumulated Other Comprehensive Loss		(365.8)	(377.9
Total Graphic Packaging Holding Company Shareholders' Equity		1,570.2	1,579.5
Noncontrolling Interest Total Equity		487.8	439.0
Total Equity	Φ.	2,058.0	2,018.5
Total Liabilities and Shareholders' Equity	\$	7,289.9 \$	7,059.2

GRAPHIC PACKAGING HOLDING COMPANY CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY

	Common	Stock	_ Capital in Excess of Par	(Accumulated Deficit) Retained	Accumulated Other Comprehensive	Noncontrolling	Total
In millions, except share amounts	Shares	Amount	Value	Earnings	(Loss) Income	Interests	Equity
Balances at December 31, 2016	313,145,785	\$ 3.1	\$ 1,709.0	\$ (268.0) \$ (387.6)	-	\$ 1,056.5
Net Income	_	_	_	300.2	_	_	300.2
Other Comprehensive (Loss) Income, Net of Tax:							
Derivative Instruments	_	_	_	_	(4.9)	_	(4.9)
Pension and Postretirement Benefit Plans	_	_	_	_	8.8	_	8.8
Currency Translation Adjustment	_	_	_	_	44.9	_	44.9
Repurchase of Common Stock	(4,462,263)	_	(24.2)	(34.2) —	_	(58.4)
Dividends Declared	_	_	_	(93.1) —	_	(93.1)
Pre-2017 Excess Tax Benefit related to Share- Based Payments	_	_	_	39.1	_	_	39.1
Recognition of Stock-Based Compensation	_	_	(1.2)	_	_	_	(1.2)
Issuance of Shares for Stock-Based Awards	1,032,102					_	
Balances at December 31, 2017	309,715,624	\$ 3.1	\$ 1,683.6	\$ (56.0) \$ (338.8)	-	\$ 1,291.9
NACP Combination	_	_	308.4	_	_	424.0	732.4
Net Income	_	_	_	221.1	_	56.3	277.4
Reclassification to Redeemable Noncontrolling Interest for Share Repurchases	_	_	_	_	_	(12.5)	(12.5)
Distribution of Membership Interest	_	_	_	_	_	(19.4)	(19.4)
Other Comprehensive Loss, Net of Tax:							
Derivative Instruments	_	_	_	_	(1.0)	(0.2)	(1.2)
Pension and Postretirement Benefit Plans	_	_	_	_	(19.4)	(4.7)	(24.1)
Currency Translation Adjustment	_	_	_	_	(18.7)	(4.5)	(23.2)
Repurchase of Common Stock ^(a)	(10,566,144)	(0.1)	(57.1)	(62.8) —	_	(120.0)
Dividends Declared	_	_	_	(92.3) —	_	(92.3)
Recognition of Stock-Based Compensation	_	_	9.5	_	_	_	9.5
Issuance of Shares for Stock-Based Awards	658,299	_	_	_	_	_	_
Balances at December 31, 2018	299,807,779	\$ 3.0	\$ 1,944.4	\$ 10.0	\$ (377.9)	\$ 439.0	\$ 2,018.5
Net Income	_	_	_	206.8	_	55.0	261.8
Reclassification to Redeemable Noncontrolling Interest for Share Repurchases	_	_	_	_	_	12.5	12.5
Redeemable Noncontrolling Interest Redemption Value Mark-up	_	_	(30.2)	_	_	_	(30.2)
Distribution of Membership Interest	_	_	_	_	_	(21.6)	(21.6
Other Comprehensive (Loss) Income, Net of Tax:							
Derivative Instruments	_	_	_	_	(5.3)	(1.5)	(6.8)
Pension and Postretirement Benefit Plans	_	_	_	_	7.6	2.3	9.9
Currency Translation Adjustment	_	_	_	_	9.8	2.1	11.9
Repurchase of Common Stock	(10,191,257)	(0.1)	(55.1)	(72.7) —	_	(127.9)
Dividends Declared	-	_	_	(87.7) —	_	(87.7)
Recognition of Stock-Based Compensation	_	_	17.6		_	_	17.6
Issuance of Shares for Stock-Based Awards	630,385			_			
Balances at December 31, 2019	290,246,907	\$ 2.9	\$ 1,876.7	\$ 56.4	\$ (365.8)	\$ 487.8	\$ 2,058.0

⁽a) Includes 83,806 shares repurchased but not settled as of December 31, 2018.

GRAPHIC PACKAGING HOLDING COMPANY CONSOLIDATED STATEMENTS OF CASH FLOWS

			ded December 31,	
In millions		2019	2018	2017
CASH FLOWS FROM OPERATING ACTIVITIES:	Φ.	270.1	2040 0	200.2
Net Income	\$	278.1 \$	294.0 \$	300.2
Adjustments to Reconcile Net Income to Net Cash Provided by (Used in) Operating Activities:				
Depreciation and Amortization		447.2	430.6	330.3
Amortization of Deferred Debt Issuance Costs		4.7	4.4	5.1
Deferred Income Taxes		52.7	26.0	(54.0)
Amount of Postretirement Expense Greater (Less) Than Funding		41.5	(4.7)	(127.1)
Gain on the Sale of Assets, net		_	(38.6)	(3.7)
Other, Net		15.1	35.3	2.0
Changes in Operating Assets and Liabilities, Net of Acquisitions (See Note 3)		(173.5)	(1,120.8)	(645.3)
Net Cash Provided by (Used in) Operating Activities		665.8	(373.8)	(192.5)
CASH FLOWS FROM INVESTING ACTIVITIES:				
Capital Spending		(330.9)	(378.8)	(240.9)
Packaging Machinery Spending		(22.0)	(16.4)	(19.2)
Acquisition of Businesses, Net of Cash Acquired		(54.5)	(89.4)	(189.4)
Proceeds Received from Sale of Assets, Net of Selling Costs			49.4	7.9
Beneficial Interest on Sold Receivables		343.6	1,476.7	806.1
Beneficial Interest Obtained in Exchange for Proceeds		(155.9)	(345.5)	(97.4)
Other, Net		(4.6)	(6.9)	1.0
Net Cash (Used in) Provided by Investing Activities		(224.3)	689.1	268.1
CASH FLOWS FROM FINANCING ACTIVITIES:				
Repurchase of Common Stock		(128.8)	(119.1)	(62.1)
Payments on Debt Proceeds from Issuance of Debt		(36.5) 300.0	(152.4)	(25.0)
Borrowings under Revolving Credit Facilities		2,497.5	1,876.9	1,202.9
Payments on Revolving Credit Facilities		(2,865.1)	(1,787.5)	(1,090.8)
Debt Issuance Costs		(5.0)	(7.9)	(1,090.8)
Repurchase of Common Stock related to Share-Based Payments		(4.1)	(4.3)	(10.2)
Dividends and Distributions Paid to GPIP Partner		(112.7)	(111.0)	(93.4)
Other, Net		(6.1)	(5.4)	8.8
Net Cash Used In Financing Activities		(360.8)	(310.7)	(69.8)
EFFECT OF EXCHANGE RATE CHANGES ON CASH		1.7	(1.5)	2.5
Net Increase in Cash and Cash Equivalents		82.4	3.1	8.3
Cash and Cash Equivalents at Beginning of Year		70.5	67.4	59.1
CASH AND CASH EQUIVALENTS AT END OF YEAR	\$	152.9 \$	70.5 \$	67.4
Non-cash Investing Activities:				
Beneficial Interest (Sold) Obtained in Exchange for Trade Receivables	\$	(68.8) \$	1,025.7 \$	734.7
Non-cash Investment in NACP Combination			1,111.2	
Non-cash Investing Activities	\$	(68.8) \$	2,136.9 \$	734.7
Non-cash Financing Activities:				
Non-cash Financing of NACP Combination	\$	— \$	660.0 \$	
Non-Cash Financing Activities	\$	— \$	660.0 \$	

NOTE 1. NATURE OF BUSINESS AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Nature of Business

Graphic Packaging Holding Company ("GPHC" and, together with its subsidiaries, the "Company") is committed to providing consumer packaging that makes a world of difference. The Company is a leading provider of paper-based packaging solutions for a wide variety of products to food, beverage, foodservice and other consumer products companies. The Company operates on a global basis, is one of the largest producers of folding cartons in the United States ("U.S.") and holds leading market positions in coated-recycled paperboard ("CRB"), coated unbleached kraft paperboard ("CUK") and solid bleached sulfate paperboard ("SBS").

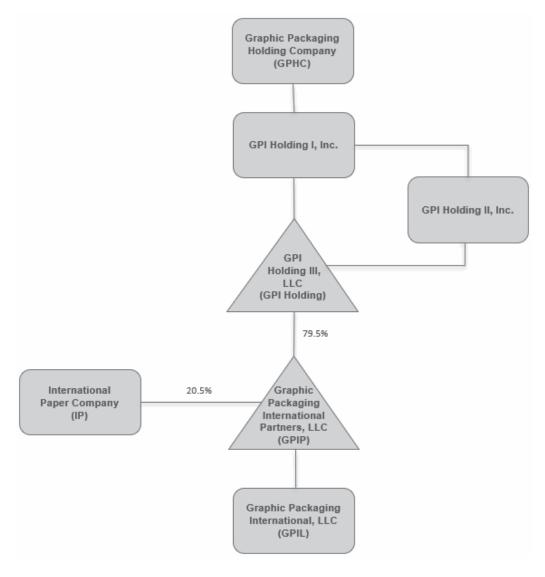
The Company's customers include many of the world's most widely recognized companies and brands with prominent market positions in beverage, food, foodservice, and other consumer products. The Company strives to provide its customers with packaging solutions designed to deliver marketing and performance benefits at a competitive cost by capitalizing on its low-cost paperboard mills and converting facilities, its proprietary carton and packaging designs, and its commitment to quality and service.

On January 1, 2018, GPHC, a Delaware corporation, International Paper Company, a New York corporation ("IP"), Graphic Packaging International Partners, LLC, a Delaware limited liability company formerly known as Gazelle Newco LLC and a wholly owned subsidiary of the Company ("GPIP"), and Graphic Packaging International, LLC, a Delaware limited liability company formerly known as Graphic Packaging International, Inc. and a subsidiary of GPIP ("GPIL"), completed a series of transactions pursuant to an agreement dated October 23, 2017 among the foregoing parties (the "Transaction Agreement"). Pursuant to the Transaction Agreement (i) a wholly owned subsidiary of the Company transferred its ownership interest in GPIL to GPIP; (ii) IP transferred its North America Consumer Packaging ("NACP") business to GPIP, which was then subsequently transferred to GPIL; (iii) GPIP issued membership interests to IP, and IP was admitted as a member of GPIP; and (iv) GPIL assumed certain indebtedness of IP (the "NACP Combination").

GPI Holding III, LLC, an indirect wholly-owned subsidiary of the Company ("GPI Holding"), is the managing member of GPIP.

At closing of the NACP Combination, GPIP issued 309,715,624 common units or 79.5% of the membership interests in GPIP to GPI Holding and 79,911,591 common units or 20.5% of the membership interests in GPIP to IP. Subject to certain restrictions, the common units held by IP are exchangeable into shares of common stock of GPHC or cash.

The following diagram illustrates the organization of the Company immediately subsequent to the transactions described above (not including subsidiaries of GPIL):



During 2019 and 2018, GPIP repurchased 20.8 million partnership units from GPI Holding, which increased IP's ownership interest in GPIP to 21.6% at December 31, 2019. The Company used the proceeds from these repurchases to repurchase 20.8 million shares of its common stock.

On January 28, 2020, the Company announced that IP notified the Company of its intent to begin the process of reducing its ownership interest in GPIP. Per the agreement between the parties, on January 29, 2020, GPIP purchased 15.1 million partnership units from IP for \$250 million. As a result, IP's ownership interest in GPIP decreased from 21.6% to 18.3%.

Unless otherwise negotiated by the parties, IP's next opportunity to exchange their partnership units is 180 days from the purchase date and is limited to the lesser of \$250 million or 25% of the units owned. IP will have further opportunities to exchange their partnership units 180 days after each exchange date. The Company may choose to satisfy these exchanges using shares of its common stock, cash, or a combination thereof.

GPHC conducts no significant business and has no independent assets or operations other than its indirect ownership of GPIL's membership interest.

Basis of Presentation and Principles of Consolidation

The Company's Consolidated Financial Statements include all subsidiaries in which the Company has the ability to exercise direct or indirect control over operating and financial policies. Intercompany transactions and balances are eliminated in consolidation. Certain reclassifications have been made to prior year amounts to conform to current year presentation.

The Company, through its subsidiary, GPIL, holds a 50% ownership interest in a joint venture called Rengo Riverwood Packaging, Ltd. (in Japan) which is accounted for using the equity method.

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States ("U.S. GAAP") requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities at the date of the financial statements and the reported amounts of net sales and expenses during the reporting periods. Actual results could differ from these estimates, and changes in these estimates are recorded when known. Estimates are used in accounting for, among other things, pension benefits, retained insurable risks, slow-moving and obsolete inventory, allowance for doubtful accounts, useful lives for depreciation and amortization, impairment testing of goodwill and long-lived assets, fair values related to acquisition accounting, fair value of derivative financial instruments, share based compensation, deferred income tax assets and potential income tax assessments, and loss contingencies.

Cash and Cash Equivalents

Cash and cash equivalents include bank deposits and other marketable securities that are highly liquid with maturities of three months or less.

Accounts Receivable and Allowances

Accounts receivable are stated at the amount owed by the customer, net of an allowance for estimated uncollectible accounts, returns and allowances, and cash discounts. The allowance for doubtful accounts is estimated based on historical experience, current economic conditions and the credit worthiness of customers. Receivables are charged to the allowance when determined to be no longer collectible.

The Company has entered into agreements to sell, on a revolving basis, certain trade accounts receivable to third party financial institutions. Transfers under these agreements meet the requirements to be accounted for as sales in accordance with the *Transfers and Servicing* topic of the Financial Accounting Standards Board ("FASB") Accounting Standards Codification (the "Codification"). The loss on sale is not material and is included in Other Expense, Net line item on the Consolidated Statement of Operations. The following table summarizes the activity under these programs for the year ended December 31, 2019 and 2018, respectively:

	 Year Ended December 31,							
In millions	2019	2018						
Receivables Sold and Derecognized	\$ 2,654.2 \$	3,314.8						
Proceeds Collected on Behalf of Financial Institutions	2,254.9	3,153.4						
Net Proceeds Received From (Paid to) Financial Institutions	66.5	13.4						
Deferred Purchase Price at December 31 ^(a)	0.7	66.9						
Pledged Receivables at December 31	177.5	43.0						

⁽a) Included in Other Current Assets and represents a beneficial interest in the receivables sold to the financial institutions, which is a Level 3 fair value measure.

The Company has also entered into various factoring and supply chain financing arrangements which also qualify for sale accounting in accordance with the *Transfers and Servicing* topic of the FASB Codification. For the years ended December 31, 2019 and 2018, the Company sold receivables of approximately \$238 million and \$119 million respectively, related to these factoring arrangements.

Receivables sold under all programs subject to continuing involvement, which consists principally of collection services, were approximately \$562 million and \$559 million as of December 31, 2019 and 2018, respectively.

Concentration of Credit Risk

The Company's cash, cash equivalents, and accounts receivable are potentially subject to concentration of credit risk. Cash and cash equivalents are placed with financial institutions that management believes are of high credit quality. Accounts receivable are derived from revenue earned from customers located in the U.S. and internationally and generally do not require collateral. As of and for the years ended December 31, 2019 and 2018, no customer accounted for more than 10% of net sales.

Inventories

Inventories are stated at the lower of cost and net realizable value with cost determined based on standard (which approximates actual), average or actual cost. Work in progress and finished goods inventories are valued at the cost of raw material consumed plus direct manufacturing costs (such as labor, utilities and supplies) as incurred and an applicable portion of manufacturing overhead. Inventories are stated net of an allowance for slow-moving and obsolete inventory.

Property, Plant and Equipment

Property, plant and equipment are recorded at cost. Betterments, renewals and extraordinary repairs that extend the life of the asset are capitalized; other repairs and maintenance charges are expensed as incurred. The Company's cost and related accumulated depreciation applicable to assets retired or sold are removed from the accounts and the gain or loss on disposition is included in income from operations.

Interest is capitalized on assets under construction for one year or longer with an estimated spending of \$1.0 million or more. The capitalized interest is recorded as part of the asset to which it relates and is amortized over the asset's estimated useful life. Capitalized interest was \$2.8 million, \$2.8 million and \$1.2 million for the years ended December 31, 2019, 2018 and 2017, respectively.

The Company assesses its long-lived assets, including certain identifiable intangibles, for impairment whenever events or circumstances indicate that the carrying value of an asset may not be recoverable. To analyze recoverability, the Company projects future cash flows, undiscounted and before interest, over the remaining life of such assets. If these projected cash flows are less than the carrying amount, an impairment would be recognized, resulting in a write-down of assets with a corresponding charge to earnings. The impairment loss is measured based upon the difference between the carrying amount and the fair value of the assets. The Company assesses the appropriateness of the useful life of its long-lived assets periodically.

Depreciation and Amortization

Depreciation is computed using the straight-line method based on the following estimated useful lives of the related assets:

Buildings	40 years
Land improvements	15 years
Machinery and equipment	3 to 40 years
Furniture and fixtures	10 years
Automobiles, trucks and tractors	3 to 5 years

Depreciation expense, including the depreciation expense of assets under capital leases, for 2019, 2018 and 2017 was \$387.9 million, \$360.6 million and \$268.5 million, respectively.

Intangible assets with a determinable life are amortized on a straight-line or accelerated basis over their useful lives. The amortization expense for each intangible asset is recorded in the Consolidated Statements of Operations according to the nature of that asset.

Goodwill is the Company's only intangible asset not subject to amortization. The following table displays the intangible assets that continue to be subject to amortization and accumulated amortization expense as of December 31, 2019 and 2018:

	December 31, 2019					December 31, 2018					
In millions	C	Gross Carrying Amount		cumulated nortization	Net Carrying Amount	C	Gross arrying Amount		cumulated nortization	Net Carrying Amount	
Amortizable Intangible Assets:											
Customer Relationships	\$	946.5	\$	(497.6)	\$ 448.9	\$	937.3	\$	(442.7)	\$ 494.6	
Patents, Trademarks, Licenses, and Leases		138.8		(110.4)	28.4		133.7		(104.5)	29.2	
Total	\$	1,085.3	\$	(608.0)	\$ 477.3	\$	1,071.0	\$	(547.2) 5	\$ 523.8	

The Company recorded amortization expense for the years ended December 31, 2019, 2018 and 2017 of \$59.3 million, \$70.0 million and \$61.8 million, respectively. The Company expects amortization expense for the next five consecutive years to be as follows: \$62 million, \$59 million, \$57 million, \$55 million, and \$53 million.

Goodwill

The Company tests goodwill for impairment annually as of October 1, as well as whenever events or changes in circumstances suggest that the estimated fair value of a reporting unit may no longer exceed its carrying amount.

The Company tests goodwill for impairment at the reporting unit level, which is an operating segment or a level below an operating segment, which is referred to as a component. A component of an operating segment is a reporting unit if the component constitutes a business for which discrete financial information is available and management regularly reviews the operating results of that component. However, two or more components of an operating segment are aggregated and deemed a single reporting unit if the components have similar economic characteristics.

Potential goodwill impairment is measured at the reporting unit level by comparing the reporting unit's carrying amount (including goodwill), to the fair value of the reporting unit. When performing the quantitative analysis, the estimated fair value of each reporting unit is determined by utilizing a discounted cash flow analysis based on the Company's forecasts, discounted using a weighted average cost of capital and market indicators of terminal year cash flows based upon a multiple of EBITDA. If the carrying amount of a reporting unit exceeds its estimated fair value, goodwill is considered impaired. In determining fair value, management relies on and considers a number of factors, including but not limited to, operating results, business plans, economic projections, forecasts including future cash flows, and market data and analysis, including market capitalization. The assumptions used are based on what a hypothetical market participant would use in estimating fair value. Fair value determinations are sensitive to changes in the factors described above. There are inherent uncertainties related to these factors and judgments in applying them to the analysis of goodwill impairment.

Periodically, the Company may perform a qualitative impairment analysis of goodwill associated with each of its reporting units to determine if it is more likely than not that the carrying value of a reporting unit exceeded its fair value. However, the Company performed a quantitative impairment test as of October 1, 2019, and concluded goodwill was not impaired for any of its reporting units.

The following is a rollforward of goodwill by reportable segment:

In millions	erboard Mills	Amer Paperb Packa	oard	Europe Paperboard Packaging	Corporat Other ^{(a}	te/	Total
Balance at December 31, 2017	\$ 408.5	\$ 8	339.0	\$ 59.5	\$ 16	0.0	\$ 1,323.0
Acquisition of Businesses	98.3		43.1	(0.1) -	_	141.3
Foreign Currency Effects	_		0.1	(2.2	(1	.6)	(3.7)
Balance at December 31, 2018	\$ 506.8	\$ 8	382.2	\$ 57.2	\$ 14	.4	\$ 1,460.6
Acquisition of Businesses	_		12.9	_		_	12.9
Foreign Currency Effects	_		1.8	2.6	-		4.4
Balance at December 31, 2019	\$ 506.8	\$ 8	396.9	\$ 59.8	\$ 14	.4	\$ 1,477.9

⁽a) Includes Australia operating segment.

Retained Insurable Risks

It is the Company's policy to self-insure or fund a portion of certain expected losses related to group health benefits and workers' compensation claims. Provisions for expected losses are recorded based on the Company's estimates, on an undiscounted basis, of the aggregate liabilities for known claims and estimated claims incurred but not reported.

Asset Retirement Obligations

Asset retirement obligations are accounted for in accordance with the provisions of the *Asset Retirement and Environmental Obligations* topic of the FASB Codification. A liability and asset are recorded equal to the present value of the estimated costs associated with the retirement of long-lived assets where a legal or contractual obligation exists and the liability can be reasonably estimated. The liability is accreted over time and the asset is depreciated over the remaining life of the asset. Upon settlement of the liability, the Company will recognize a gain or loss for any difference between the settlement amount and the liability recorded. Asset retirement obligations with indeterminate settlement dates are not recorded until such time that a reasonable estimate may be made.

International Currency

The functional currency of the international subsidiaries is the local currency for the country in which the subsidiaries own their primary assets. The translation of the applicable currencies into U.S. dollars is performed for balance sheet accounts using current exchange rates in effect at the balance sheet date and for revenue and expense accounts using an average exchange rate during the period. Any related translation adjustments are recorded directly to a separate component of Shareholders' Equity, unless there is a sale or substantially complete liquidation of the underlying foreign investments. Gains and losses on foreign currency transactions are included in Other Expense, Net for the period in which the exchange rate changes.

The Company pursues a currency hedging program which utilizes derivatives to reduce the impact of foreign currency exchange fluctuations on its consolidated financial results. Under this program, the Company has entered into forward exchange contracts in the normal course of business to hedge certain foreign currency denominated transactions. Realized and unrealized gains and losses on these forward contracts are included in the measurement of the basis of the related foreign currency transaction when recorded.

Revenue Recognition

The Company has two primary activities, manufacturing and converting paperboard, from which it generates revenue from contracts with customers, and revenue is disaggregated primarily by geography and type of activity as further explained in "Note 16-Business Segment and Geographic Area Information." All reportable segments and the Australia and Pacific Rim operating segments recognize revenue under the same method, allocate transaction price using similar methods, and have similar economic factors impacting the uncertainty of revenue and related cash flows.

Revenue is recognized on the Company's annual and multi-year supply contracts when the Company satisfies the performance obligation by transferring control over the product or service to a customer, which is generally based on shipping terms and passage of title under the point-in-time method of recognition. For the years ended December 31, 2019, 2018 and 2017, the Company recognized \$6,140.8 million, \$6,011.9 million and \$4,384.9 million, respectively, of revenue from contracts with customers.

The transaction price allocated to each performance obligation consists of the stand-alone selling price, estimates of rebates and other sales or contract renewal incentives, and cash discounts and sales returns ("Variable Consideration") and excludes sales tax. Estimates are made for Variable Consideration based on contract terms and historical experience of actual results and are applied to the performance obligations as they are satisfied. Purchases by the Company's principal customers are manufactured and shipped with minimal lead time, therefore performance obligations are generally satisfied shortly after manufacturing and shipment. The Company uses standard payment terms that are consistent with industry practice.

The Company's contract assets consist primarily of contract renewal incentive payments to customers which are amortized over the period in which performance obligations related to the contract renewal are satisfied. As of December 31, 2019 and 2018, contract assets were \$24.3 million and \$19.6 million, respectively. The Company's contract liabilities consist principally of rebates, and as of December 31, 2019 and 2018 were \$49.6 million and \$42.5 million, respectively.

The Company did not have a material amount relating to backlog orders at December 31, 2019 or 2018.

Shipping and Handling

The Company includes shipping and handling costs in Cost of Sales.

Research and Development

Research and development costs, which relate primarily to the development and design of new packaging machines and products and are recorded as a component of Selling, General and Administrative expenses, are expensed as incurred. Expenses for the years ended December 31, 2019, 2018 and 2017 were \$9.2 million, \$8.7 million and \$14.4 million, respectively.

Business Combinations, Shutdown and Other Special Charges and (Gain) on Sale of Assets, Net

The following table summarizes the transactions recorded in Business Combinations, Shutdown and Other Special Charges and Gain on Sale of Assets, Net in the Consolidated Statements of Operations for the year ended December 31:

In millions	2019	2018	2017
Charges Associated with Business Combinations	\$ 4.1	\$ 46.8	\$ 16.2
Shutdown and Other Special Charges	23.6	6.7	18.6
Exit Activities	10.2	_	_
Gain on Sale of Assets	_	(38.6)	(3.7)
Total	\$ 37.9	\$ 14.9	\$ 31.1

2019

On September 24, 2019, the Company announced its plan to invest approximately \$600 million in a new CRB mill in Kalamazoo, Michigan. In conjunction with the completion of this project, the Company currently expects to close two of its smaller CRB Mills in 2022 in order to remain capacity neutral. Charges associated with this project are included in Exit Activities in the table above. For more information, see "Note 20 — Exit Activities."

On August 1, 2019, the Company acquired substantially all the assets of Artistic Carton Company ("Artistic"), a diversified producer of folding cartons and CRB. The acquisition included two converting facilities located in Auburn, Indiana and Elgin, Illinois (included in the Americas Paperboard Packaging reportable segment) and one CRB paperboard mill located in White Pigeon, Michigan (included in the Paperboard Mills reportable segment).

2018

On September 30, 2018, the Company acquired substantially all the assets of the foodservice business of Letica Corporation, a subsidiary of RPC Group PLC ("Letica Foodservice"), a producer of paperboard-based cold and hot cups and cartons. The acquisition included two facilities located in Clarksville, Tennessee and Pittston, Pennsylvania. Letica Foodservice is included in the Americas Paperboard Packaging reportable segment.

On August 31, 2018, the Company sold its previously closed coated recycled paperboard mill site in Santa Clara, California, resulting in a gain on sale of assets of \$37.1 million.

On June 12, 2018, the Company acquired substantially all the assets of PFP, LLC and its related entity, PFP Dallas Converting, LLC (collectively, "PFP"), a converter focused on the production of paperboard based air filter frames. The acquisition included two facilities located in Lebanon, Tennessee and Lancaster, Texas. PFP is included in the Americas Paperboard Packaging reportable segment.

On January 1, 2018, the Company completed the NACP Combination. The NACP business produces SBS and paper-based foodservice products. The NACP business included two SBS mills located in Augusta, Georgia and Texarkana, Texas (included in Paperboard Mills reportable segment), three converting facilities in the U.S. (included in Americas Paperboard Packaging reportable segment) and one in the United Kingdom ("U.K.") (included in the Europe Paperboard Packaging reportable segment).

PFP and Letica Foodservice are referred to collectively as the "2018 Acquisitions."

2017

On December 1, 2017, the Company acquired the assets of Seydaco Packaging Corp. and its affiliates, National Carton and Coating Co., and Groupe Ecco Boites Pliantes Ltée (collectively, "Seydaco"), a folding carton producer focused on the foodservice, food, personal care, and household goods markets. The acquisition included three folding carton facilities located in Mississauga, Ontario, St.-Hyacinthe, Québec, and Xenia, Ohio.

On December 1, 2017, the Company closed its coated recycled paperboard mill in Santa Clara, California. This decision was made as a result of a thorough assessment of the facility's manufacturing capabilities and associated costs in the context of the Company's overall mill operating capabilities and cost structure. The financial impact is reflected in Shutdown and Other Special Charges in the table above.

On October 4, 2017, the Company acquired Norgraft Packaging, S.A., ("Norgraft"), a leading folding carton producer in Spain focused on the food and household goods markets. The acquisition included two folding carton facilities located in Miliaño and Requejada, Spain.

On July 10, 2017, the Company acquired substantially all the assets of Carton Craft Corporation and its affiliate, Lithocraft, Inc (collectively, "Carton Craft"). The acquisition included two folding carton facilities located in New Albany, Indiana, focused on the production of paperboard based air filter frames and folding cartons.

The Seydaco, Norgraft, and Carton Craft transactions are referred to collectively as the "2017 Acquisitions." Seydaco and Carton Craft are included in the Americas Paperboard Packaging Segment. Norgraft is included in the Europe Paperboard Packaging Segment.

In October 2017, the Company completed the sale of its Renton, WA facility which was classified as Asset Held for Sale on December 31, 2016. The financial impact is reflected in Gain on Sale of Assets, Net in the table above.

Charges associated with all acquisitions are included in Charges Associated with Business Combinations in the table above. For more information regarding these acquisitions see Note 4 - Business Combinations.

During 2019, the Company began a three-year program to dismantle and dispose of idle and abandoned assets primarily at the paperboard mills. Expected charges for this program are approximately \$40 million. Charges associated with this program are included in Shutdown and Other Special Charges in the table above.

Capital Allocation Plan

On January 28, 2019, the Company's board of directors authorized an additional share repurchase program to allow the Company to purchase up to \$500 million of the Company's issued and outstanding shares of common stock through open market purchases, privately negotiated transactions and Rule 10b5-1 plans (the "2019 share repurchase program"). Two previous \$250 million share repurchase programs were authorized on January 10, 2017 and February 4, 2015 (the "2017 share repurchase program") and (the "2015 share repurchase program"), respectively.

Share repurchases are reflected as a reduction of common stock for the par value of the shares, with any excess of share repurchase price over par value allocated between capital in excess of par value and retained earnings.

The following presents the Company's share repurchases for the years ended December 31, 2019, 2018, and 2017:

Amount repurchased in millions	mount urchased	Number of Shares Repurchased	Average Price		
2019	\$ 127.9	10,191,257 ^(a)	\$	12.55	
2018	\$ 120.0	10,566,144	\$	11.35	
2017	\$ 58.4	4,462,263 ^(b)	\$	13.08	

⁽a) Includes 7,400,171 shares under the 2017 share repurchase program thereby completing that program.

At December 31, 2019, the Company had approximately \$462 million remaining under the 2019 share repurchase program.

During 2019 and 2018, GPHC paid cash dividends of \$88.7 million and \$93.1 million, respectively.

Adoption of New Accounting Standards

Effective January 1, 2019, the Company adopted Accounting Standards Update ("ASU") No. 2017-12, *Derivatives and Hedging (Topic 815); Targeted Improvements to Accounting for Hedging Activities.* The amendments in this ASU better align the risk management activities and financial reporting for these hedging relationships through changes to both the designation and measurement guidance for qualifying hedging relationships and presentation of hedge results. The adoption of this standard did not have a material impact on the Company's financial position, results of operations and cash flows.

Effective January 1, 2019, the Company adopted ASU No. 2018-02, *Income Statement - Reporting Comprehensive Income (Topic 220): Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income.* The amendment allows a reclassification from accumulated other comprehensive income to retained earnings for stranded tax effects resulting from the 2017 Tax Cuts and Job Act ("The Act"). The Company adopted the amendment effective January 1, 2019 and elected not to reclassify the income tax effects of The Act from other comprehensive income to retained earnings. The Company's policy with respect to stranded income tax effects in accumulated other comprehensive loss is to release these effects using the aggregate portfolio approach.

In February 2016, the FASB issued ASU No. 2016-02, *Leases (Topic 842) ("ASC 842")*. The amendments in this ASU require an entity to recognize a right-of-use asset and lease liability for all leases with terms of more than 12 months. Recognition, measurement and presentation of expenses will depend on classification as a finance or operating lease. The amendments also require certain quantitative and qualitative disclosures about leasing arrangements. The Company adopted ASC 842 effective January 1, 2019, prospectively. The adoption of this standard had a material impact on the Company's financial position, with no material impact on the results of operations and cash flows (see "*Note 6 - Leases*").

In January 2017, the FASB issued ASU No. 2017-04, *Intangibles - Goodwill and Other (Topic 350); Simplifying the Test for Goodwill Impairment* which simplifies how an entity is required to test goodwill for impairment by eliminating Step 2 of the goodwill impairment model. Step 2 measures a goodwill impairment loss by comparing the implied value of a reporting unit's goodwill with the carrying amount of that goodwill. An entity would recognize an impairment charge for the amount by which the carrying amount of a reporting unit exceeds its fair value; however, the loss recognized is limited to the amount of goodwill allocated to that reporting unit. The Company adopted the amendment effective October 1, 2019. The adoption of this standard did not have an impact on the Company's financial position, results of operations and cash flows.

⁽b) Includes 1,440,697 shares under the 2015 share repurchase program, thereby completing that program.

Accounting Standards Not Yet Adopted

In June 2016, the FASB issued ASU No. 2016-13, *Financial Instruments - Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments* which amends the FASB's guidance on the impairment of financial instruments. The ASU adds to U.S. GAAP an impairment model (known as the "current expected credit loss model") that is based on expected losses rather than incurred losses. ASU 2016-13 is effective for annual reporting periods beginning after December 15, 2019, including interim periods within those fiscal years. The Company is currently evaluating the impact that this new guidance will have on its financial position, results of operations, cash flows and related disclosures.

In August 2018, the FASB issued ASU No. 2018-13, Fair Value Measurement (Topic 820): Disclosure Framework - Changes to the Disclosure Requirements for Fair Value Measurement. This amendment modifies the disclosure requirements on fair value measurements. The guidance is effective for fiscal years beginning after December 15, 2019, and interim periods within those fiscal years. Early adoption is permitted. The Company is currently evaluating the impact that this new guidance will have on its related disclosures.

In August 2018, the FASB issued ASU No. 2018-14, Compensation - Retirement Benefits - Defined Benefit Plans - General (Subtopic 715-20); Disclosure Framework - Changes to the Disclosure Requirements for Defined Benefit Plans. This amendment removes certain disclosures that are not considered cost beneficial, clarifies certain required disclosures and adds additional disclosures. The guidance is effective for fiscal years ending after December 15, 2020 and would be applied on a retrospective basis. The Company is currently evaluating the impact this guidance will have on its related disclosures.

NOTE 2. SUPPLEMENTAL BALANCE SHEET DATA

The following tables provide disclosure related to the components of certain line items included in our consolidated balance sheets.

Receivables, Net:

In millions	2019	2018
Trade	\$ 462.7 \$	475.9
Less: Allowance	(11.5)	(10.4)
	451.2	465.5
Other	53.3	107.4
Total	\$ 504.5 \$	572.9

Inventories, Net by major class:

In millions	2019	2018
Finished Goods	\$ 434.8 \$	426.9
Work in Progress	123.4	102.2
Raw Materials	370.0	319.9
Supplies	167.7	165.4
Total	\$ 1,095.9 \$	1,014.4

Other Current Assets:

In millions	2019	2018
Deferred Purchase Price	\$ 0.7 \$	66.9
Prepaid Assets	41.2	28.6
Contract Assets, current portion	10.4	9.8
Fair Value of Derivatives, current portion	_	0.7
Total	\$ 52.3 \$	106.0

Property, Plant and Equipment, Net:

In millions	2019	2018
Property, Plant and Equipment, at Cost:		
Land and Improvements	\$ 130.4 \$	134.1
Buildings ^(a)	655.5	608.5
Machinery and Equipment ^(b)	5,832.6	5,716.2
Construction-in-Progress	202.6	201.2
	6,821.1	6,660.0
Less: Accumulated Depreciation ^{(a) (b)}	(3,567.3)	(3,420.3)
Total	\$ 3,253.8 \$	3,239.7

⁽a) Includes gross assets under finance lease of \$105.5 million and related accumulated depreciation of \$5.4 million as of December 31, 2019, and gross assets under finance lease of \$95.5 million and related accumulated depreciation of \$0.4 million as of December 31, 2018.

Other Assets:

In millions	2019	2018
Deferred Debt Issuance Costs, Net of Amortization of \$14.1 million and \$12.5 million for 2019 and 2018, respectively	\$ 4.8	\$ 6.4
Deferred Income Tax Assets	3.0	8.2
Pension Assets	25.6	19.0
Contract Assets, noncurrent portion	13.9	9.8
Fair Value of Derivatives, noncurrent portion	_	0.1
Operating Lease Right-of-Use Asset	202.8	_
Other	25.2	27.8
Total	\$ 275.3	\$ 71.3

⁽b) Includes gross assets under finance lease of \$36.6 million and related accumulated depreciation of \$6.8 million as of December 31, 2019, and gross assets under finance lease of \$39.6 million and related accumulated depreciation of \$10.0 million as of December 31, 2018.

Other Accrued Liabilities:

In millions	2019	2018
Dividends Payable	\$ 21.8 \$	22.5
Deferred Revenue	15.2	14.0
Accrued Customer Rebates	36.5	30.2
Fair Value of Derivatives, current portion	8.5	1.3
Other Accrued Taxes	38.4	44.4
Accrued Payables	31.4	30.3
Liabilities Payable to a Financial Institution	_	62.6
Operating Lease Liabilities, current portion	54.8	_
Other	32.5	35.4
Total	\$ 239.1 \$	240.7

Other Noncurrent Liabilities:

In millions	2019	2018
Deferred Revenue	\$ 5.3 \$	5.2
Multi-employer Plans	30.8	32.4
Workers Compensation Reserve	9.5	9.9
Fair Value of Derivatives, noncurrent portion	3.0	2.1
Unfavorable Supply Agreement	28.9	31.2
Operating Lease Liabilities, noncurrent portion	151.5	_
Other	37.8	37.0
Total	\$ 266.8 \$	117.8

NOTE 3. SUPPLEMENTAL CASH FLOW INFORMATION

Cash Flow Used In Operations Due to Changes in Operating Assets and Liabilities, net of acquisitions:

In millions	2019 2018		2018	2017	
Receivables, Net	\$	(107.6)	\$ (1,158.1)	\$	(658.8)
Inventories, Net		(72.8)	(82.0)		(6.5)
Other Current Assets		(9.5)	0.3		0.8
Other Assets		(7.9)	(1.0)		(32.8)
Accounts Payable		(8.6)	76.2		27.0
Compensation and Employee Benefits		12.9	26.9		3.5
Income Taxes		(4.2)	0.6		2.3
Interest Payable		8.4	(4.1)		(1.7)
Other Accrued Liabilities		5.2	11.8		6.7
Other Noncurrent Liabilities		10.6	8.6		14.2
Total	\$	(173.5)	\$ (1,120.8)	\$	(645.3)

Cash paid for interest and cash paid, net of refunds, for income taxes was as follows:

In millions	2019	2018	2017
Interest	\$ 126.8 \$	125.0	\$ 81.8
Income Taxes	\$ 25.8 \$	25.8	\$ 15.9

NOTE 4. BUSINESS COMBINATIONS

2019

On August 1, 2019, the Company completed the acquisition of Artistic, a diversified producer of folding cartons and CRB. The acquisition included two converting facilities located in Auburn, Indiana and Elgin, Illinois and one CRB paperboard mill located in White Pigeon, Michigan. The Company paid \$52.5 million using existing cash and borrowings under its revolving credit facility. The acquisition accounting for the Artistic acquisition is preliminary as the Company is still reviewing the measurement of tangible and intangible assets and taxes. Management believes that the purchase price attributable to goodwill represents the benefits expected as the acquisition was made to continue to integrate paperboard from the Company's mills, to expand its product offering and to further optimize the Company's supply chain footprint.

Tangible assets and liabilities were valued as of the acquisition date using a market analysis and intangible assets were valued using a discounted cash flow analysis, which represents a Level 3 measurement. The Company recorded \$6.5 million related to identifiable intangible assets (customer relationships), \$38.5 million related to tangible assets (primarily working capital, land/buildings and equipment) and \$7.5 million related to goodwill. Goodwill was recorded in the Americas Paperboard Packaging segment. The Company expects the goodwill to be deductible for tax purposes.

During 2019, Net Sales and Income from Operations from the Artistic acquisition were \$31.2 million and \$2.0 million, respectively.

2018

On January 1, 2018, the Company completed the NACP Combination. The NACP business produces SBS and paper-based foodservice products. The NACP business included two SBS mills located in Augusta, Georgia and Texarkana, Texas, three converting facilities in the U.S. and one in the U.K.

Total consideration for the NACP Combination, including debt assumed of \$660 million, was \$1.8 billion. Management believes that the purchase price attributable to goodwill represents the benefits expected, as the acquisition was made to continue to expand the Company's product offering, integrate paperboard from the Company's mills and to further optimize the Company's supply chain footprint.

In conjunction with the NACP Combination, the Company executed a Tax Receivable Agreement ("TRA") with IP. Pursuant to elections under Section 754 of the Internal Revenue Code, the Company expects to obtain an increase with respect to the tax basis in the assets of GPIP and certain of its subsidiaries when IP exchanges or redeems any of its membership interests. The Company generally expects to treat redemptions or exchanges of membership interests by IP as direct purchases of membership interests for U.S. federal income tax purposes. Increases in tax basis may reduce the amounts that we would otherwise pay in the future to various tax authorities. The TRA provides for the payment by the Company to IP of 50% of the amount of any tax benefits projected to be realized by the Company upon IP's exchange of the membership interests into GPHC common stock.

On September 30, 2018, the Company completed the Letica Foodservice acquisition. The acquisition included two facilities in Clarksville, Tennessee and Pittston, Pennsylvania, focused on the production of paperboard-based cold and hot cups and cartons. The Company paid approximately \$95 million using existing cash and borrowings under its revolving credit facility.

On June 12, 2018, the Company completed the PFP acquisition. The Company paid approximately \$34 million using existing cash and borrowings under its revolving credit facility. The acquisition included two manufacturing facilities in Lebanon, Tennessee and Lancaster, Texas, focused on the production of paperboard-based air filter frames.

The Company expects that goodwill related to the NACP Combination will not be deductible for tax purposes. The Company expects that goodwill related to the Letica Foodservice and the PFP acquisitions will be deductible for tax purposes.

The acquisition accounting for the NACP Combination, PFP and the Letica Foodservice acquisitions as of December 31, 2018 was as follows:

In millions	Rec	Amounts ognized as of uisition Date	Measurement Period Adjustments	Amounts Recognized as of Acquisition Dates (as adjusted)	
Purchase Price ^(a)	\$	1,241.7	\$ (40.9)	\$ 1,200.8	
Assumed Debt ^(b)		660.0	_	660.0	
Total Purchase Consideration	\$	1,901.7	\$ (40.9)	\$ 1,860.8	
Receivables, Net		145.3	_	145.3	
Inventories, Net		314.2	0.8	315.0	
Other Current Assets		20.9	(9.2)	11.7	
Property, Plant and Equipment, Net		1,242.6	32.0	1,274.6	
Intangible Assets, Net ^(c)		136.6	13.5	150.1	
Other Assets		6.0	(6.0)		
Total Assets Acquired		1,865.6	31.1	1,896.7	
Accounts Payable		112.6	_	112.6	
Compensation and Employee Benefits		21.0	(5.7)	15.3	
Current Liabilities		16.3	(0.1)	16.2	
Other Noncurrent Liabilities		41.3	(1.7)	39.6	
Total Liabilities Assumed		191.2	(7.5)	183.7	
Net Assets Acquired		1,674.4	38.6	1,713.0	
Goodwill		227.3	(79.5)	147.8	
Total Estimated Fair Value of Net Assets Acquired	\$	1,901.7	\$ (40.9)	\$ 1,860.8	

⁽a) Includes a \$123.5 million adjustment for discounting the purchase price for lack of marketability of the membership interests issued for the NACP Combination and measurement period adjustments of \$40.5 million, related to working capital true-ups, offset by pension settlements.

As of December 31, 2018, the acquisition accounting for the NACP Combination and PFP Acquisition was complete and the acquisition accounting for Letica Foodservice was preliminary based on the estimated fair values of all assets and liabilities as of the acquisition date.

During the quarter ended March 31, 2019, the acquisition accounting for Letica Foodservice was finalized, resulting in an approximately \$5 million reduction in the value of property, plant and equipment.

⁽b) Assumed Debt was valued at fair market value based on quoted market prices (Level 2 inputs) obtained from independent pricing services.

⁽c) Intangible Assets, Net consists of customer relationships which are generally amortized using either a straight-lined method, when the amortization pattern is not reliably determinable, or an accelerated method, generally over approximately 20 years. The value of customer relationships was determined using a discounted cash flow model, which includes an approximate 5% attrition rate. Beyond the twenty-year life, the present value of cash flows were not meaningful.

The following unaudited pro forma consolidated results of operations data assumes that the NACP Combination occurred as of the beginning of the period presented. This pro forma data is based on historical information and does not necessarily reflect the actual results that would have occurred, nor is it indicative of future results of operations.

In millions, except per share data	ear Ended cember 31, 2017
Net Sales	\$ 5,912.5
Net Income Attributable to Graphic Packaging Holding Company	367.7
Income Per Share — Basic	1.18
Income Per Share — Diluted	1.18

Net Sales and Income from Operations from the NACP Combination was \$1,407.1 million and \$134.7 million, respectively, for the year ended December 31, 2018. Total Assets increased as a result of the NACP Combination for the Paperboard Mills and Americas Paperboard Packaging reportable segments by approximately \$1.5 billion and \$0.6 billion, respectively, as compared to December 31, 2017.

During 2018, Net Sales and Loss from Operations from the Letica Foodservice and PFP acquisitions were \$42.4 million and \$1.4 million, respectively.

In connection with the NACP Combination, the Company entered into agreements with IP for transition services, fiber procurement fees, and corrugated products and ink supply. Payments to IP for the year ended December 31, 2019 under these agreements were \$0.1 million, \$12.4 million (related to pass through wood purchases of approximately \$229.1 million) and \$26.6 million, respectively. Payments to IP for the year ended December 31, 2018 under these agreements were \$22.0 million, \$15.9 million (related to pass through wood purchases of approximately \$194 million) and \$28.5 million, respectively. In addition, approximately \$4 million and \$6 million of payments were made for purchases unrelated to these agreements for the year ended December 31, 2019 and 2018, respectively.

2017

As disclosed in "Note 1 - General Information," in 2017, the Company acquired Seydaco, Norgraft, and Carton Craft, which are referred to collectively as the "2017 Acquisitions," for a total purchase price of approximately \$189 million.

NOTE 5. DEBT

Short-Term Debt is comprised of the following:

In millions	2019	2018
Short Term Borrowings	\$ 9.3 \$	11.7
Current Portion of Finance Lease Obligations	4.6	3.8
Current Portion of Long-Term Debt	36.5	36.5
Total	\$ 50.4 \$	52.0

Short-term borrowings are principally at the Company's international subsidiaries. The weighted average interest rate on short-term borrowings as of December 31, 2019 and 2018 was 2.1% and 8.4%, respectively.

On June 25, 2019, GPIL completed a private offering of \$300.0 million aggregate principal amount of its senior unsecured notes due 2027. The Senior Notes will bear interest at an annual rate of 4.75%. The net proceeds were used by the Company to repay a portion of the outstanding borrowings under GPIL's revolving credit facility, which is under its senior secured credit facility.

Long-Term Debt is comprised of the following:

In millions	2019	2018
Senior Notes with interest payable semi-annually at 4.75%, effective rate of 4.82%, payable in 2027	\$ 300.0	\$
Senior Notes with interest payable semi-annually at 4.125%, effective rate of 4.17%, payable in 2024	300.0	300.0
Senior Notes with interest payable semi-annually at 4.875%, effective rate of 4.91%, payable in 2022	250.0	250.0
Senior Notes with interest payable semi-annually at 4.75%, effective rate of 4.76%, payable in 2021	425.0	425.0
Senior Secured Term Loan Facilities with interest payable at various dates at floating rates (3.28% at December 31, 2019) payable through 2023	1,396.1	1,432.6
Senior Secured Revolving Credit Facilities with interest payable at floating rates (1.50% at December 31, 2019) payable in 2023	52.8	399.0
Finance Leases	134.2	122.9
Other	5.4	26.5
Total Long-Term Debt	2,863.5	2,956.0
Less: Current Portion	41.1	40.3
	2,822.4	2,915.7
Less: Unamortized Deferred Debt Issuance Costs	12.5	10.6
Total	\$ 2,809.9	\$ 2,905.1

Long-Term Debt maturities (excluding finance leases) are as follows:

In millions	
2020	\$ 36.5
2021	489.4
2022	128.2
2023	1,471.2
2024	300.4
After 2024	303.6
Total	\$ 2,729.3

Credit Facilities

The following describes the Senior Secured Term Loan and Revolving Credit Facilities:

Date	Document ^(a)	Provision	Expiration ^(b)
March 2012	Amended and Restated Credit Agreement	•\$1.0 billion revolving credit facility •\$1.0 billion amortizing term loan facility •LIBOR plus variable spread (between 175 basis points and 275 basis points) depending on consolidated total leverage ratio	
December 2012	Amendment No. 1 to Credit Agreement	•\$300 million incremental term loan	
September 2013	Amendment No. 2 to Credit Agreement	•Added €75 million (approximately \$100 million) revolving credit facility for borrowings in Euro and Pound Sterling and a ¥2.5 billion (approximately \$25 million) revolving credit facility for borrowings in Yen. LIBOR plus variable spread (between 150 basis points and 250 basis points) depending on consolidated total leverage ratio	
June 2014	Amendment No. 3 to Credit Agreement	•Increased revolving credit facility under which borrowings can be made in Euros or Sterling by €63 million (approximately \$86 million)	
October 2014	Second Amended and Restated Credit Agreement	•Increased the domestic revolving credit facility by \$250 million and reduced the term loan by approximately \$169 million. LIBOR plus variable spread (between 125 basis points and 225 basis points) depending on consolidated total leverage ratio	
January 2018	Third Amended and Restated Credit Agreement	•Increased the domestic revolving credit facility by \$200 million to \$1,450 million and reduced the term loan by approximately \$125 million to \$800 million. LIBOR plus variable spread (between 125 basis points and 200 basis points) depending on consolidated total leverage ratio •Assumed the term loan indebtedness as part of the NACP Combination in an aggregate amount of \$660.0 million	January 2023

⁽a) The Company's obligations under the Credit Agreement are secured by substantially all of the Company's domestic assets. (b) Expiration date is amended to most recent expiration of January 2023.

In addition to the Amended and Restated Credit Agreement, on January 1, 2018 the Company assumed the term loan indebtedness previously incurred by IP (the "Term Loan Credit Agreement") in an aggregate amount of \$660 million, repayable pursuant to the same amortization schedule (expressed as a percentage of the principal amount thereof) as the Term Loan A under the Amended and Restated Credit Agreement and has the same maturity date of January 1, 2023. The applicable margin interest rate pricing grid, covenants and other terms are substantially equivalent to those contained in the Amended and Restated Credit Agreement. The Term Loan Credit Agreement is secured by a lien and security interest in substantially all of the assets of GPIL on a pari passu basis with the liens and security interests securing the Amended and Restated Credit Agreement pursuant to the terms of a customary intercreditor agreement among the parties. The Amended and Restated Credit Agreement and Term Loan Credit Agreement are collectively referred to as the "Credit Agreement."

At December 31, 2019, the Company and its U.S. and international subsidiaries had the following commitments, amounts outstanding and amounts available under revolving credit facilities:

In millions	Co	Total mmitments	Total Outstanding	Total Available
Senior Secured Domestic Revolving Credit Facility (a)	\$	1,450.0	\$ —	\$ 1,432.1
Senior Secured International Revolving Credit Facilities		178.0	52.8	125.2
Other International Facilities		59.7	14.6	45.1
Total	\$	1,687.7	\$ 67.4	\$ 1,602.4

⁽a) In accordance with its debt agreements, the Company's availability under its Revolving Credit Facility has been reduced by the amount of standby letters of credit issued of \$17.9 million as of December 31, 2019. These letters of credit are primarily used as security against its self-insurance obligations and workers' compensation obligations. These letters of credit expire at various dates through 2020 unless extended.

The Credit Agreement and the 4.75% Senior Notes due 2027 are guaranteed by GPIP and certain domestic subsidiaries, and the 4.75% Senior Notes due 2021, 4.875% Senior Notes due 2022 and 4.125% Senior Notes due 2024 are guaranteed by GPHC and certain domestic subsidiaries. For additional information on the financial statements of GPIP, see "*Note 19 - Guarantor Consolidating Financial Statements*" of the Notes to the Consolidated Financial Statements of GPIL in its Annual Report on Form 10-K for the year ended December 31, 2019 filed with the Securities and Exchange Commission.

The Credit Agreement and the indentures governing the 4.75% Senior Notes due 2021, 4.875% Senior Notes due 2022, 4.125% Senior Notes due 2024 and 4.75% Senior Notes due 2027 (the "Indentures") limit the Company's ability to incur additional indebtedness. Additional covenants contained in the Credit Agreement and the Indentures may, among other things, restrict the ability of the Company to dispose of assets, incur guarantee obligations, prepay other indebtedness, repurchase stock, pay dividends and make other restricted payments, create liens, make equity or debt investments, make acquisitions, modify terms of the Indentures, engage in mergers or consolidations, change the business conducted by the Company and its subsidiaries, and engage in certain transactions with affiliates. Such restrictions could limit the Company's ability to respond to changing market conditions, fund its capital spending program, provide for unexpected capital investments or take advantage of business opportunities.

As of December 31, 2019, the Company was in compliance with the covenants in the Amended and Restated Credit Agreement, the Term Loan Credit Agreement and the Indentures.

NOTE 6. LEASES

Effective January 1, 2019, the Company adopted ASC 842, which requires recognition of a right-of-use asset and lease liability for all leases at the commencement date based on the present value of lease payments over the lease term. Additional qualitative and quantitative disclosures regarding the Company's leasing arrangements are also required. The Company adopted ASC 842 prospectively and elected the package of transition practical expedients that does not require reassessment of: (1) whether any existing or expired contracts are or contain leases, (2) lease classification and (3) initial direct costs. In addition, the Company has elected other available practical expedients to not separate lease and nonlease components, which consist principally of common area maintenance charges, for all classes of underlying assets and to exclude leases with an initial term of 12 months or less.

The Company determines if a contract is or contains a lease at inception. The Company has operating and finance leases for warehouses, corporate and regional offices, and machinery and equipment. The Company enters into lease contracts ranging from one to 25 years with the majority of leases having terms of three to seven years, many of which include options to extend in various increments. Variable lease costs consist primarily of variable warehousing costs, common area maintenance, taxes, and insurance. The Company's leases do not have any significant residual value guarantees or restrictive covenants.

As the implicit rate is not readily determinable for most of the Company's leases agreements, the Company uses an estimated incremental borrowing rate to determine the initial present value of lease payments. These discount rates for leases are calculated using the Company's credit spread adjusted for current market factors, including fixed rate swaps, LIBOR, and foreign currency rates.

Twolvo Months Ended

The components of lease costs are as follows:

	11	verve Months Ended
In millions	I	December 31, 2019
Finance lease costs:		
Amortization of right-of-use asset	\$	7.6
Interest on lease liabilities		7.8
Operating lease costs		64.8
Short-term lease costs		12.9
Variable lease costs		4.4
Total lease costs, net	\$	97.5

Supplemental cash flow information related to leases was as follows:

	Twelve Me	onths Ended
In millions	Decembe	er 31, 2019
Cash paid for amounts included in the measurement of lease liabilities:		
Operating cash flows from operating leases	\$	64.7
Operating cash flows from finance leases		7.8
Financing cash flows from finance leases		4.2
Right-of-use assets obtained in exchange for lease obligations:		
Operating leases		73.1
Finance leases		15.5

Supplemental balance sheet information related to leases was as follows:

In millions, except lease term and discount rate	Balance Sheet Classification	December 31, 2019		
Operating Leases:				
Operating lease right-of-use asset	Other Assets	\$	202.8	
Current operating lease liabilities	Other Current Liabilities	\$	54.8	
Noncurrent operating lease liabilities	Other Noncurrent Liabilities		151.5	
Total operating lease liabilities		\$	206.3	
Finance Leases:				
Property, Plant and Equipment		\$	142.1	
Accumulated depreciation			(12.2)	
Property, Plant and Equipment, net		\$	129.9	
Current finance lease liabilities	Short-Term Debt and Current Portion of Long-Term Debt	\$	4.6	
Noncurrent finance lease liabilities	Long-Term Debt		129.6	
Total finance lease liabilities		\$	134.2	
Weighted Average Remaining Lease Terr	n (Years)			
Operating leases			4	
Finance leases			17	
Weighted Average Discount Rate				
Operating leases			3.57 %	
Finance leases			5.60 %	

Maturities of lease liabilities are as follows:

In millions

Year ending December 31,	Operating Leases		Finance Leases	
2020	\$	60.8	12.5	
2021		48.4	12.6	
2022		38.6	12.2	
2023		29.0	12.4	
2024		18.1	12.4	
Thereafter		30.7	158.2	
Total lease payments		225.6	220.3	
Less imputed interest		(19.3)	(86.1)	
Total	\$	206.3	3 134.2	

NOTE 7. STOCK INCENTIVE PLANS

The Company has one active equity compensation plan from which new grants may be made, the Graphic Packaging Holding Company 2014 Omnibus Stock and Incentive Compensation Plan (the "2014 Plan"). Under the 2014 Plan, the Company may grant stock options, stock appreciation rights, restricted stock, restricted stock units ("RSUs") and other types of stock-based and cash awards. Awards under the 2014 Plan generally vest and expire in accordance with terms established at the time of grant. Shares issued pursuant to awards under the 2014 Plan are from the Company's authorized but unissued shares. Compensation costs are recognized on a straight-line basis over the requisite service period of the award and are adjusted for actual performance for performance-based awards.

Stock Awards, Restricted Stock and Restricted Stock Units

Under the 2014 Plan, all RSUs generally vest and become payable in three years from date of grant. RSUs granted to employees generally contain some combination of service and performance objectives based on various financial targets and relative total shareholder return that must be met for the RSUs to vest. Stock awards granted to non-employee directors as part of their compensation for service on the Board are unrestricted on the grant date.

Data concerning RSUs and stock awards granted in the years ended December 31:

	2019	2018	2017
RSUs — Employees	2,187,603	1,951,738	1,472,995
Weighted-average grant date fair value	\$ 12.37 \$	14.86 \$	13.52
Stock Awards — Board of Directors	74,760	51,226	65,520
Weighted-average grant date fair value	\$ 12.84 \$	15.03 \$	13.43

A summary of the changes in the number of unvested RSUs from December 31, 2016 to December 31, 2019 is presented below:

	Shares	Weighted Average Grant Date Fair Value
Outstanding — December 31, 2016	4,667,675	\$ 12.21
Granted ^(a)	1,472,995	13.52
Released	(1,720,327)	10.05
Forfeited	(622,463)	13.13
Performance adjustment ^(b)	74,054	9.93
Outstanding — December 31, 2017	3,871,934	\$ 13.10
Granted ^(a)	1,951,738	14.86
Released	(744,757)	14.90
Forfeited	(210,553)	13.49
Performance adjustment ^(b)	(408,328)	15.10
Outstanding — December 31, 2018	4,460,034	\$ 13.27
Granted ^(a)	2,187,603	12.37
Released	(900,516)	12.00
Forfeited	(187,729)	13.66
Performance adjustment ^(b)	(499,702)	11.57
Outstanding — December 31, 2019	5,059,690	\$ 13.27

⁽a) Grant activity for all performance-based RSUs is disclosed at target.

⁽b) Reflects the number of RSUs above and below target levels based on actual performance measured at the end of the performance period.

The initial value of the service-based RSUs is based on the market value of the Company's common stock on the date of grant. The 2019 performance-based RSU grants were valued using a Monte Carlo simulation as the total shareholder return contains a market condition. RSUs are recorded in Stockholders' Equity. The unrecognized expense at December 31, 2019 is approximately \$31 million and is expected to be recognized over a weighted average period of 2 years.

The value of stock awards granted to the Company's directors are based on the market value of the Company's common stock on the date of grant. These awards are unrestricted on the date of grant.

During 2019, 2018, and 2017, \$21.7 million, \$13.8 million and \$8.9 million, respectively, were charged to compensation expense for stock incentive plans.

During 2019, 2018, and 2017, RSUs with an aggregate fair value of \$11.1 million, \$13.7 million and \$23.2 million, respectively, vested and were paid out. The RSUs vested and paid out in 2019 were granted primarily during 2016.

NOTE 8. PENSIONS AND OTHER POSTRETIREMENT BENEFITS

DEFINED BENEFIT PLANS

The Company maintains both defined benefit pension plans and postretirement health care plans that provide medical and life insurance coverage to eligible salaried and hourly retired employees in North America and their dependents. The Company maintains international defined benefit pension plans which are either noncontributory or contributory and are funded in accordance with applicable local laws. Pension or termination benefits are based primarily on years of service and the employees' compensation.

Currently, the North American plans are closed to newly-hired employees except as noted below. Effective July 1, 2011, the North American plans were frozen for most salaried and non-union hourly employees and replaced with a defined contribution plan.

During the fourth quarter of 2017, the Company made an additional \$75 million contribution to its U.S. defined benefit plan and also made an additional contribution of \$6.8 million to its U.K. defined benefit plan.

During 2018, the Company began the process of terminating its largest U.S. pension plan (the "US Plan"). This included freezing the plan as of December 31, 2018 and spinning off the active participants to the plan established as part of the NACP Combination (the "NACP Plan"). The NACP Plan is open for union and non-union hourly employees of locations that were part of the NACP Combination. During the third quarter of 2019, the Company offered a lump-sum benefit option to certain participants in the US Plan. Lump sum payments of \$150.2 million were paid in the fourth quarter of 2019 and the Company recognized a non-cash settlement charge of \$39.2 million associated with the payouts. In the first quarter of 2020, the Company agreed to purchase a group annuity contract that will transfer the remaining pension benefit obligation under the US Plan of approximately \$750 million to an insurance company and expects to incur an additional non-cash settlement charge of approximately \$150 million related to this transfer. These non-cash settlement charges relate to Net Actuarial Loss recognized in Accumulated Other Comprehensive Loss.

Pension and Postretirement Expense

The pension and postretirement expenses related to the Company's plans consisted of the following:

	Pension Benefits				Postretirement Benefits				
	Year Ended December 31,								
In millions		2019	2018	2017	2019	2018	2017		
Components of Net Periodic Cost:									
Service Cost	\$	14.0 \$	17.3 \$	8.2 \$	0.5 \$	0.6 \$	0.8		
Interest Cost		46.1	41.8	42.6	1.2	1.2	1.3		
Expected Return on Plan Assets		(54.9)	(63.6)	(64.1)	_	_	_		
Amortization:									
Prior Service Cost (Credit)		0.2	0.4	0.5	(0.3)	(0.3)	(0.3)		
Actuarial Loss (Gain)		10.0	5.9	6.5	(2.3)	(1.8)	(2.1)		
Net Curtailment/Settlement Loss		39.2	1.0	_	_	_	_		
Other		0.3	0.5	0.8	_	_	_		
Net Periodic Cost (Benefit)	\$	54.9 \$	3.3 \$	(5.5) \$	(0.9) \$	(0.3) \$	(0.3)		

Certain assumptions used in determining the pension and postretirement expenses were as follows:

_	Pension Benefits				Postretirement Benefits			
_	Year Ended December 31,							
	2019	2018	2017	2019	2018	2017		
Weighted Average Assumptions:								
Discount Rate	4.14%	3.49%	4.01%	4.29%	3.64%	4.10%		
Rate of Increase in Future Compensation Levels	2.37%	2.09%	1.45%	_	_	_		
Expected Long-Term Rate of Return on Plan Assets	4.74%	4.86%	5.79%	_	_	_		
Initial Health Care Cost Trend Rate	_	_	_	9.00%	9.00%	7.45%		
Ultimate Health Care Cost Trend Rate	_	_	_	4.50%	4.50%	4.50%		
Ultimate Year	_	_	_	2028	2027	2024		

Funded Status

The following table sets forth the funded status of the Company's pension and postretirement plans as of December 31:

	Pension Benefits			Postretirement Benefits		
In millions	2019		2018		2019	2018
Change in Benefit Obligation:						
Benefit Obligation at Beginning of Year	\$ 1,245.2	\$	1,367.1	\$	34.1 \$	37.3
Service Cost	14.0		17.3		0.5	0.6
Interest Cost	46.1		41.8		1.2	1.2
Actuarial Loss (Gain)	157.8		(101.9)		1.1	(3.0)
Foreign Currency Exchange	9.2		(14.8)		0.1	(0.2)
Settlements	(150.2)		_		_	_
Benefits Paid	(67.2)		(65.4)		(1.2)	(1.9)
Other	0.5		1.1		0.1	0.1
Benefit Obligation at End of Year	\$ 1,255.4	\$	1,245.2	\$	35.9 \$	34.1
Change in Plan Assets:						
Fair Value of Plan Assets at Beginning of Year	\$ 1,186.5	\$	1,340.7	\$	— \$	_
Actual Return on Plan Assets	181.7		(79.6)		_	_
Employer Contributions	11.3		5.8		1.2	1.9
Foreign Currency Exchange	10.3		(15.0)			_
Benefits Paid	(67.2)		(65.4)		(1.2)	(1.9)
Settlements	(150.2)		_		_	_
Fair Value of Plan Assets at End of Year	\$ 1,172.4	\$	1,186.5	\$	— \$	_
Plan Assets Less than Projected Benefit Obligation	\$ (83.0)	\$	(58.7)	\$	(35.9) \$	(34.1)
Amounts Recognized in the Consolidated Balance Sheets Consist of:						
Pension Assets	\$ 25.6	\$	19.0	\$	— \$	_
Accrued Pension and Postretirement Benefits Liability — Current	\$ (1.7)	\$	(1.8)	\$	(2.4) \$	(2.5)
Accrued Pension and Postretirement Benefits Liability — Noncurrent	\$ (106.9)	\$	(75.9)	\$	(33.5) \$	(31.6)
Accumulated Other Comprehensive Income:						
Net Actuarial Loss (Gain)	\$ 279.9	\$	297.3	\$	(0.8) \$	(1.6)
Prior Service Cost (Credit)	\$ 3.6	\$	3.6	\$	(17.3) \$	(20.2)
Weighted Average Calculations:						
Discount Rate	2.69%	ó	4.14%)	3.22%	4.299
Rates of Increase in Future Compensation Levels	2.36%	0	2.37%	1	_	_
Initial Health Care Cost Trend Rate	_		_		6.65%	9.00
Ultimate Health Care Cost Trend Rate	_		_		4.50%	4.50
Ultimate Year	_		_		2028	202

The Company determined pension expense using both the fair value of assets and a calculated value that averages gains and losses over a period of years. Investment gains or losses represent the difference between the expected and actual return on assets. As of December 31, 2019, the net actuarial loss was \$279.9 million. These net losses may increase future pension expense if not offset by (i) actual investment returns that exceed the assumed investment returns, or (ii) other factors, including reduced pension liabilities arising from higher discount rates used to calculate pension obligations, or (iii) other actuarial gains, including whether such accumulated actuarial losses at each measurement date exceed the "corridor" determined under the *Compensation*—*Retirement Benefits* topic of the FASB Codification. For the largest plan, the actuarial loss is amortized over the average remaining life expectancy period of employees expected to receive benefits.

The discount rate used to determine the present value of future pension obligations at December 31, 2019 was based on a yield curve constructed from a portfolio of high-quality corporate debt securities with maturities ranging from 1 year to 30 years. Each year's expected future benefit payments were discounted to their present value at the spot yield curve rate thereby generating the overall discount rate for the Company's pension obligations. The weighted average discount rate used to determine the pension obligations was 2.69% and 4.14% in 2019 and 2018, respectively.

Accumulated Benefit Obligation

The accumulated benefit obligation, ("ABO"), for all defined benefit pension plans was \$1,249.8 million and \$1,240.2 million at December 31, 2019 and 2018, respectively. There are three plans where the ABO and projected benefit obligation ("PBO") exceed plan assets. The aggregate ABO, PBO and fair value of plan assets for these plans are \$1,043.0 million, \$1,048.6 million and \$942.9 million, respectively.

Employer Contributions

The Company made contributions of \$11.3 million and \$5.8 million to its pension plans during 2019 and 2018, respectively. The Company also made postretirement health care benefit payments of \$1.2 million and \$1.9 million during 2019 and 2018, respectively. For 2020, the Company expects to make contributions in the range of \$10 million to \$20 million to its pension plans and approximately \$3 million to its postretirement health care plans.

Pension Assets

The Company's overall investment strategy is to achieve a mix of investments for long-term growth and near-term benefit payments through diversification of asset types, fund strategies and fund managers. Investment risk is measured on an ongoing basis through annual liability measurements, periodic asset/liability studies, and quarterly investment portfolio reviews. The plans invest in the following major asset categories: cash, equity securities, fixed income securities, real estate and diversified growth funds. At December 31, 2019 and 2018, pension investments did not include any direct investments in the Company's stock or the Company's debt.

The Company implemented a de-risking or liability driven investment strategy for its U.S. and U.K. pension plans. This strategy moved assets from return seeking (equities) to investments that mirror the underlying benefit obligations (fixed income).

The weighted average allocation of plan assets and the target allocation by asset category is as follows:

	Target	2019	2018
Cash	0.2 %	13.6 %	5.0%
Equity Securities	8.4	7.7	8.1
Fixed Income Securities	85.2	68.6	79.5
Other Investments	6.2	10.1	7.4
Total	100.0 %	100.0 %	100.0%

The plans' investment in equity securities primarily includes investments in U.S. and international companies of varying sizes and industries. The strategy of these investments is to 1) exceed the return of an appropriate benchmark for such equity classes and 2) through diversification, reduce volatility while enhancing long term real growth.

The plans' investment in fixed income securities includes government bonds, investment grade bonds and non-investment grade bonds across a broad and diverse issuer base. The strategy of these investments is to provide income and stability and to diversify the fixed income exposure of the plan assets, thereby reducing volatility.

The Company's approach to developing the expected long-term rate of return on pension plan assets is based on fair values and combines an analysis of historical investment performance by asset class, the Company's investment guidelines and current and expected economic fundamentals.

The following tables set forth, by category and within the fair value hierarchy, the fair value of the Company's pension assets at December 31, 2019 and 2018:

Fair Value Messurements at December 21, 2010

	 Fair Value Measurements at December 31, 2019						
In millions	Total	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)			
Asset Category:							
Cash ^(a)	\$ 159.6	\$ 0.3	\$ 159.3	\$ —			
Equity Securities:							
Domestic (a)	82.9	4.7	78.2	_			
Foreign (a)	7.0	7.0	_	_			
Fixed Income Securities (a)	852.5	17.0	835.3	0.2			
Other Investments:							
Real estate	21.9	_	8.9	13.0			
Diversified growth fund (b)	48.5	_	48.5	_			
Total	\$ 1,172.4	\$ 29.0	\$ 1,130.2	\$ 13.2			

	Fair Value Measurements at December 31, 2018							
In millions		Total	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)			
Asset Category:								
Cash (a)	\$	58.8	\$ 0.3	\$ 58.5	\$ —			
Equity Securities:								
Domestic (a)		86.4	3.6	82.8	_			
Foreign (a)		9.2	5.3	3.8	_			
Fixed Income Securities (a)		980.1	15.0	962.3	2.8			
Other Investments:								
Real estate		9.2	_	7.6	1.6			
Diversified growth fund (b)		42.8	_	41.5	1.4			
Total	\$	1,186.5	\$ 24.2	\$ 1,156.5	\$ 5.8			

^(a) The Level 2 investments are held in pooled funds and fair value is determined by net asset value, based on the underlying investments, as reported on the valuation date.

⁽b) The fund invests in a combination of traditional investments (equities, bonds, and foreign exchange), seeking to achieve returns through active asset allocation over a three to five-year horizon.

A reconciliation of fair value measurements of plan assets using significant unobservable inputs (Level 3) is as follows:

In millions	 2019	2018
Balance at January 1,	\$ 5.8 \$	0.8
Transfers In	7.4	5.0
Return on Assets Held at December 31	_	_
Balance at December 31,	\$ 13.2 \$	5.8

Postretirement Health Care Trend Rate Sensitivity

Assumed health care cost trend rates affect the amounts reported for postretirement health care benefit plans. A one-percentage-point change in assumed health care cost trend rates would have the following effects on 2019 data:

		One Percentage	e Point
In millions	Ir	icrease	Decrease
Health Care Cost Trend Rate Sensitivity:			
Effect on Total Interest and Service Cost Components	\$	0.1 \$	(0.1)
Effect on Year-End Postretirement Benefit Obligation	\$	2.1 \$	(1.8)

Estimated Future Benefit Payments

The following represents the Company's estimated future pension and postretirement health care benefit payments through the year 2029:

In millions	Pensi	on Plans	Postretirement Health Care Benefits
2020	\$	71.4	\$ 2.4
2021		73.0	2.5
2022		74.5	2.6
2023		75.9	2.6
2024		76.9	2.8
2025—2029		384.5	11.4

Amounts in Accumulated Other Comprehensive Loss Expected to Be Recognized in Net Periodic Benefit Costs in 2020

During 2020, amounts recorded in Accumulated Other Comprehensive Loss expected to be recognized in Net Periodic Benefit Costs are as follows:

In millions	Pension Benefits	Postretirement Health Care Benefits
Recognition of Prior Service Cost	\$ 0.2	\$ (0.3)
Recognition of Actuarial Loss (Gain) ^(a)	4.9	(2.1)

⁽a) Estimate excludes approximately \$150 million of expense that we expect to recognize in 2020 related to the settlement of \$750 million of pension obligations through the purchase of a group annuity contract.

Multi-Employer Plans

Certain of the Company's employees participate in multi-employer plans that provide both pension and other postretirement health care benefits to employees under union-employer organization agreements. Expense related to ongoing participation in these plans for the years ended December 31, 2019 and 2018 was \$0.6 million and \$3.4 million, respectively.

Estimated liabilities have been established related to the partial or complete withdrawal from certain multi-employment benefit plans for facilities which have been closed. At December 31, 2019, and December 31, 2018, the Company has \$30.8 million and \$32.4 million, respectively, recorded in Other Noncurrent Liabilities for these withdrawal liabilities which represents the Company's best estimate of the expected withdrawal liability.

In 2019, the Company made a complete withdrawal from the Graphic Communication Conference of the International Brotherhood of Teamster Pension Fund ("GCC/IBT") and the PACE Industry Union-Management Pension Fund ("PIUMPF"). Liabilities of \$4.4 million were recorded associated with these withdrawals.

The Company's remaining participation in a multi-employer pension plan consists of contributions to one plan under the terms contained in collective bargaining agreements. The risks of participating in these multi-employer plans are different from single-employer plans in the following ways:

- a. Assets contributed to the multi-employers plan by one employer may be used to provide benefits to employees of other participating employers.
- b. If a participating employer stops contributing to the plan, the unfunded obligation of the plan may be borne by the remaining participating employers.
- c. If a company chooses to stop participating in a multi-employer plan, a company may be required to pay that plan an amount based on the underfunded status of the plan, referred to as the withdrawal liability.

The Company's participation in these plans for the year ended December 31, 2019, 2018 and 2017 is shown in the table below:

		Pension Protection Act Zone Status		_	C	Company Contributions (in millions)						
Multi-employer Pension Fund	EIN/Pension Plan Number	2019	2018	FIP/RP Status Implemented	2	019	2	018	2	017	Surcharge Imposed	Expiration Date of Bargaining Agreement
Central States Southeast and Southwest Areas Pension Fund	36-6044243/001	Red	Red	Yes	\$	0.1	\$	0.1	\$	0.1	Yes	7/31/2023
PIUMPF ^(a)	11-6166763/001	Red	Red	Yes		_		0.1		0.1	Yes	6/15/2022
GCC/IBT ^(a)	52-6118568/001	Red	Red	Yes		0.1		0.3		0.3	Yes	4/30/2022
Total					\$	0.2	\$	0.5	\$	0.5		

⁽a) As noted above, the Company withdrew from these plans in 2019.

The EIN Number column provides the Employer Identification Number (EIN). Unless otherwise noted, the most recent Pension Protection Act (PPA) zone status available in 2019 and 2018 is for the plan's year-end at December 31, 2018 and December 31, 2017, respectively. The zone status is based on information that the Company receives from the plan and is certified by the plan's actuary. Among other factors, plans in the red zone are generally less than 65 percent funded, plans in the yellow zone are less than 80 percent funded, and plans in the green zone are at least 80 percent funded. The "FIP/RP Status Implemented" column indicates plans for which a Financial Improvement Plan (FIP) or Rehabilitation Plan (RP) has been implemented. The Company's share of the contributions to these plans did not exceed 5% of total plan contributions for the most recent plan year.

DEFINED CONTRIBUTION PLANS

The Company provides defined contribution plans for certain eligible employees. The Company's contributions to the plans are based upon employee contributions, a percentage of eligible compensation, and the Company's annual operating results. Contributions to these plans for the years ended December 31, 2019, 2018 and 2017 were \$57.6 million, \$54.6 million and \$37.7 million, respectively. The increase of \$16.9 million from 2017 to 2018 is due primarily to the NACP Combination.

NOTE 9. INCOME TAXES

The U.S. and international components of Income before Income Taxes and Equity Income of Unconsolidated Entity consisted of the following:

	Year Ended December 31,					
In millions		2019	2018	2017		
U.S.	\$	305.4 \$	298.9 \$	227.5		
International		48.6	48.6	25.5		
Income before Income Taxes and Equity Income of Unconsolidated						
Entity	\$	354.0 \$	347.5 \$	253.0		

The provisions for Income Tax (Expense) Benefit on Income before Income Taxes and Equity Income of Unconsolidated Entity consisted of the following:

	 Year En	ded December 31,	
In millions	2019	2018	2017
Current (Expense) Benefit:			
U.S.	\$ (10.1) \$	(13.0) \$	0.7
International	(13.5)	(15.7)	(9.2)
Total Current	\$ (23.6) \$	(28.7) \$	(8.5)
Deferred (Expense) Benefit:			
U.S.	(47.7)	(31.6)	51.0
International	(5.0)	5.6	3.0
Total Deferred	\$ (52.7) \$	(26.0) \$	54.0
Income Tax (Expense) Benefit	\$ (76.3) \$	(54.7) \$	45.5

A reconciliation of Income Tax (Expense) Benefit on Income before Income Taxes and Equity Income of Unconsolidated Entity at the federal statutory rate of 21% compared with the Company's actual Income Tax (Expense) Benefit is as follows:

	Year Ended December 31,								
In millions		2019	Percent		2018	Percent		2017	Percent
Income Tax Expense at U.S. Statutory Rate	\$	(74.3)	21.0 %	\$	(73.0)	21.0 %	\$	(88.5)	35.0 %
U.S. State and Local Tax Expense		(12.3)	3.5		(11.7)	3.4		(8.7)	3.4
Permanent Items		(2.8)	0.8		(3.8)	1.1		(2.7)	1.0
U.S. Tax Reform					10.9	(3.1)		138.0	(54.5)
Change in Valuation Allowance due to Tax Reform		_	_		_	_		(2.0)	0.8
Change in Valuation Allowance		(4.6)	1.3		13.0	(3.7)		(3.5)	1.4
International Tax Rate Differences		(1.6)	0.5		(1.9)	0.5		3.2	(1.3)
Foreign Withholding Tax		(0.7)	0.2		(0.5)	0.1		(0.4)	0.2
Change in Tax Rates		(1.0)	0.3		1.9	(0.5)		(3.0)	1.2
U.S. Federal & State Tax Credits		9.5	(2.7)		0.3	(0.1)		10.2	(4.0)
Uncertain Tax Positions		(1.9)	0.5		(0.7)	0.2		(0.3)	0.1
Capital Loss Expiration					(2.7)	0.7			
Domestic Minority Interest		13.7	(3.9)		13.7	(3.9)		_	_
Other		(0.3)	0.1		(0.2)	_		3.2	(1.3)
Income Tax (Expense) Benefit	\$	(76.3)	21.6 %	\$	(54.7)	15.7 %	\$	45.5	(18.0)%

During 2019, the Company recognized tax expense of approximately \$4.8 million associated with the valuation allowance against the net deferred tax assets of its Australian subsidiary.

As a result of the NACP Combination, federal and state income taxes are not recorded with respect to consolidated domestic earnings attributable to the Company's minority interest partner, resulting in a difference between the effective tax rate and the statutory tax rate. In addition, during 2018, the Company finalized its accounting for the income tax impact of the Tax Cuts and Jobs Act (the "Act") resulting in a tax benefit of \$10.9 million primarily attributable to the one-time transition tax incurred on its 2017 U.S. federal income tax return. Finally, in 2018, the Company reduced its valuation allowance against certain deferred tax assets. Of the total reduction of \$13 million, approximately \$10 million was related to deferred tax assets for domestic and state income tax attributes that expired during the year and therefore did not have a meaningful impact on the overall effective tax rate. Of the remaining \$3 million reduction, approximately \$2 million was attributable to the release of the valuation allowance against the net deferred tax assets of the Company's wholly-owned subsidiary in France.

During 2017, the Company recognized a provisional net income tax benefit of \$136.0 million as a result of the effect of the enactment of the Act on December 22, 2017. The Act significantly reduced the U.S. federal corporate income tax rate which resulted in an income tax benefit of \$156.3 million as a result of the remeasurement of the Company's domestic net Deferred Tax Liabilities. In addition, the Act required companies to record a one-time transition tax impact based on foreign earnings & profits, which resulted in additional tax expense in 2017 of \$20.5 million.

The tax effects of differences that give rise to significant portions of the deferred income tax assets and deferred income tax liabilities as of December 31 were as follows:

In millions	2019	2018
Deferred Income Tax Assets:		
Compensation Based Accruals	\$ 3.8 \$	2.9
Net Operating Loss Carryforwards	45.5	73.4
Postretirement Benefits	0.9	1.0
Tax Credits	37.2	30.8
Other	10.9	7.6
Valuation Allowance	(41.1)	(36.3)
Total Deferred Income Tax Assets	\$ 57.2 \$	79.4
Deferred Income Tax Liabilities:		
Property, Plant and Equipment	(18.8)	(16.7)
Goodwill	(2.7)	(2.3)
Other Intangibles	(12.3)	(12.3)
Investment in Partnership	(532.2)	(502.1)
Net Noncurrent Deferred Income Tax Liabilities	\$ (566.0) \$	(533.4)
Net Deferred Income Tax Liability	\$ (508.8) \$	(454.0)

As a result of NACP combination, the Company currently owns a controlling interest in GPIP, which is treated as a partnership for U.S. federal and state income tax purposes, with IP holding a minority interest. As such, the Company records income tax on its share of income allocated to it by the partnership. Accordingly, domestic deferred tax assets and liabilities are not tracked based on the inside basis difference of assets and liabilities held within GPIP. Instead, the Company's outside basis difference in its partnership investment is recorded as a deferred tax liability and disclosed above. The deferred tax liability primarily relates to differences between book and tax basis in property, plant and equipment and intangibles inside the partnership. Additionally, in 2018, as a result of the NACP combination the Company's book basis in its investment in GPIP increased resulting in an increase in its deferred tax liability of \$123.3 million that was recorded through additional paid-in capital.

According to the *Income Taxes* topic of the FASB Codification, a valuation allowance is required to be established or maintained when, based on currently available information and other factors, it is more likely than not that all or a portion of a deferred tax asset will not be realized. The FASB Codification provides important factors in determining whether a deferred tax asset will be realized, including whether there has been sufficient pretax income in recent years and whether sufficient income can reasonably be expected in future years in order to utilize the deferred tax asset. The Company has evaluated the need to maintain a valuation allowance for deferred tax assets based on its assessment of whether it is more likely than not that deferred tax assets will be realized through the generation of future taxable income. Appropriate consideration was given to all available evidence, both positive and negative, in assessing the need for a valuation allowance.

The Company reviewed its deferred income tax assets as of December 31, 2019 and 2018, respectively, and determined that it is more likely than not that a portion will not be realized. A valuation allowance of \$41.1 million and \$36.3 million at December 31, 2019 and 2018, respectively, is maintained on the deferred income tax assets for which the Company has determined that realization is not more likely than not. Of the total valuation allowance at December 31, 2019, \$31.8 million relates to net deferred tax assets in certain foreign jurisdictions, \$0.7 million relates to U.S. federal income tax credit carryforwards, \$4.1 million relates to tax credit carryforwards in certain states, and the remaining \$4.5 million relates to net operating losses in certain U.S. states. The need for a valuation allowance is made on a jurisdiction-by-jurisdiction basis. As of December 31, 2019, the Company concluded that due to cumulative pretax losses and the lack of sufficient future taxable income of the appropriate character, realization is less than more likely than not on the net deferred income tax assets related primarily to the Company's Australia, Brazil, China and Germany operations as well as the Company's previously discontinued Canadian operations.

The following table represents a summary of the valuation allowances against deferred tax assets as of and for the three years ended December 31, 2019, 2018, and 2017, respectively:

In millions	2019	2018	2017
Balance Beginning of Period	\$ 36.3	\$ 51.5 \$	45.5
Adjustments for Expenses and (Income)	4.6	(13.0)	5.5
Additions (Deductions)	0.2	(2.2)	0.5
Balance at End of Period	\$ 41.1	\$ 36.3 \$	51.5

The U.S. federal net operating loss carryforwards expire as follows:

In millions	
2024	\$ _
2025	_
2026	_
2027	_
2028	31.8
2029	_
Total	\$ 31.8

U.S. state net operating loss carryforward amounts total \$220.9 million and expire in various years through 2038.

International net operating loss carryforward amounts total \$110.0 million, of which substantially all have no expiration date.

Tax Credit carryforwards total \$37.2 million which expire in various years from 2020 through 2038.

Uncertain Tax Positions

A reconciliation of the beginning and ending amount of unrecognized tax benefits is as follows:

In millions	2019	2018	2017
Balance at January 1,	\$ 15.5 \$	10.5 \$	10.1
Additions for Tax Positions of Current Year	3.2	0.8	0.6
Additions for Tax Positions of Prior Years	2.4	5.2	0.7
Reductions for Tax Positions of Prior Years	(0.4)	(1.0)	(0.9)
Balance at December 31,	\$ 20.7 \$	15.5 \$	10.5

At December 31, 2019, \$17.3 million of the total gross unrecognized tax benefits, if recognized, would affect the annual effective income tax rate. During 2019, \$3.4 million of the total gross unrecognized tax benefits recorded are related to indefinite lived deferred tax assets and did not have an impact on total tax expense. In addition, \$0.1 million of the total change in unrecognized tax benefits relates to currency translation adjustments.

The Company recognizes potential accrued interest and penalties related to unrecognized tax benefits within its global operations in Income Tax Expense. The Company had an accrual for the payment of interest and penalties of \$0.1 million and \$0.1 million at December 31, 2019 and 2018, respectively.

The Company anticipates that \$1.7 million of the total unrecognized tax benefits at December 31, 2019 could change within the next 12 months.

The Company files income tax returns in the U.S. federal jurisdiction, and various states and foreign jurisdictions. With few exceptions, the Company is no longer subject to U.S. federal, state and local tax examinations for years before 2016.

As of December 31, 2019, the Company has only provided for deferred U.S. income taxes attributable to future withholding tax expense related to the Company's equity investment in the joint venture, Rengo Riverwood Packaging, Ltd. During 2019, the Company changed its assertion related to certain earnings of its Canadian subsidiary, Graphic Packaging International Canada, ULC. The Company continues to assert that it is permanently reinvested in the cumulative earnings of its Canadian subsidiary in excess of the amount of cash that is on-hand and available for distribution after consideration of working capital needs and other debt settlement, however, with respect to the excess cash on hand, the Company asserts that it is not permanently reinvested. Due to the deemed taxation of all post-1986 earnings and profits required by the Act, as well as the amount of paid up capital available in Canada from which the Company can distribute earnings without incurring withholding tax, the Company has determined that no deferred tax liability should be recorded related to the outside basis difference of approximately \$31.6 million.

The Company has not provided for deferred U.S. income taxes on approximately \$35 million of its undistributed earnings in international subsidiaries because of the Company's intention to indefinitely reinvest these earnings outside the U.S. The Company's assertion remains unchanged, despite the deemed taxation of all post-1986 earnings and profits required by the Act. The determination of the amount of the unrecognized deferred U.S. income tax liability (primarily withholding tax in certain jurisdictions and some state tax) on the unremitted earnings or any other associated outside basis difference is not practicable because of the complexities associated with the calculation.

The Company has elected to recognize global intangible low-taxed income ("GILTI") as period cost as incurred, therefore there are no deferred taxes recognized for basis differences that are expected to impact the amount of the GILTI inclusion upon reversal.

NOTE 10. FINANCIAL INSTRUMENTS, DERIVATIVES AND HEDGING ACTIVITIES

The Company enters into derivative instruments for risk management purposes only, including derivatives designated as hedging instruments under the *Derivatives and Hedging* topic of the FASB Codification and those not designated as hedging instruments under this guidance. The Company uses interest rate swaps, natural gas swap contracts, and forward exchange contracts. These derivative instruments are designated as cash flow hedges and, to the extent they are effective in offsetting the variability of the hedged cash flows, changes in the derivatives' fair value are not included in current earnings but are included in Accumulated Other Comprehensive Loss. These changes in fair value will subsequently be reclassified to earnings, contemporaneously with and offsetting changes in the related hedged exposure, and presented in the same line of the income statement expected for the hedged item.

Interest Rate Risk

The Company uses interest rate swaps to manage interest rate risks on future interest payments caused by interest rate changes on its variable rate term loan facility. The following table summarizes the Company's current interest rate swap positions for each period presented as of December 31, 2019:

	Start	End	(In Millions) Notional Amount	Weighted Average Interest Rate
Ī	04/03/2018	01/01/2020	\$150.0	2.25%
	04/03/2018	10/01/2020	\$150.0	2.36%
	12/03/2018	01/01/2022	\$120.0	2.92%
	12/03/2018	01/04/2022	\$80.0	2.79%

These derivative instruments are designated as cash flow hedges and, to the extent they are effective in offsetting the variability of the hedged cash flows, changes in the derivatives' fair value are not included in current earnings but are included in Accumulated Other Comprehensive Loss. Ineffectiveness measured in the hedging relationship is recorded in earnings in the period it occurs. During 2019 and 2018, there were no amounts of ineffectiveness. During 2019 and 2018, there were no amounts excluded from the measure of effectiveness.

Commodity Risk

To manage risks associated with future variability in cash flows and price risk attributable to purchases of natural gas, the Company enters into natural gas swap contracts to hedge prices for a designated percentage of its expected natural gas usage. Such contracts are designated as cash flow hedges. The contracts are carried at fair value with changes in fair value recognized in Accumulated Other Comprehensive Loss and resulting gain or loss reclassified into Cost of Sales concurrently with the recognition of the commodity consumed. The Company has hedged approximately 51% and 14% of its expected natural gas usage for 2020 and 2021, respectively.

During 2019 and 2018, there were no and minimal amounts of ineffectiveness related to changes in the fair value of natural gas swap contracts, respectively. Additionally, there were no amounts excluded from the measure of effectiveness.

Foreign Currency Risk

The Company enters into forward exchange contracts to manage risks associated with foreign currency transactions and future variability of cash flows arising from those transactions that may be adversely affected by changes in exchange rates. The contracts are carried at fair value with changes in fair value recognized in Accumulated Other Comprehensive Loss and gains/losses related to these contracts are recognized in Other Expense, Net or Net Sales, when appropriate.

At December 31, 2019 and 2018, multiple forward exchange contracts existed that expire on various dates throughout the following year. Those purchased forward exchange contracts outstanding at December 31, 2019 and 2018, when aggregated and measured in U.S. dollars at contractual rates at December 31, 2019 and 2018, had notional amounts totaling \$87.6 million and \$51.6 million, respectively.

No amounts were reclassified to earnings during 2019 and 2018 in connection with forecasted transactions that were considered probable of not occurring and there was no amount of ineffectiveness related to changes in the fair value of foreign currency forward contracts. Additionally, there were no amounts excluded from the measure of effectiveness during 2019 and 2018.

Derivatives not Designated as Hedges

The Company enters into forward exchange contracts to effectively hedge substantially all of its accounts receivables resulting from sales transactions and intercompany loans denominated in foreign currencies in order to manage risks associated with variability in cash flows that may be adversely affected by changes in exchange rates. At December 31, 2019 and 2018, multiple foreign currency forward exchange contracts existed, with maturities ranging up to three months. Those foreign currency contracts outstanding at December 31, 2019 and 2018, when aggregated and measured in U.S. dollars at contractual rates at December 31, 2019 and 2018, respectively, had net notional amounts totaling \$77.4 million and \$62.2 million. Unrealized gains and losses resulting from these contracts are recognized in Other Expense, Net and approximately offset corresponding recognized but unrealized gains and losses on the remeasurement of these accounts receivable.

Foreign Currency Movement Effect

For the year ended December 31, 2019, net currency exchange gains included in determining Income from Operations were \$2.3 million. For the year ended December 31, 2018 and 2017, net currency exchange losses included in determining Income from Operations were \$1.6 million and \$3.1 million, respectively.

NOTE 11. FAIR VALUE MEASUREMENT

The Company follows the fair value guidance integrated into the *Fair Value Measurements and Disclosures* topic of the FASB Codification in regards to financial and nonfinancial assets and liabilities. Nonfinancial assets and nonfinancial liabilities include those measured at fair value in goodwill impairment testing, asset retirement obligations initially measured at fair value, and those assets and liabilities initially measured at fair value in a business combination.

The FASB's guidance defines fair value, establishes a framework for measuring fair value and expands the fair value disclosure requirements. The accounting guidance applies to accounting pronouncements that require or permit fair value measurements. It indicates, among other things, that a fair value measurement assumes that the transaction to sell an asset or transfer a liability occurs in the principal market for the asset or liability or, in the absence of a principal market, the most advantageous market for the asset or liability. The guidance defines fair value based upon an exit price model, whereby fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The guidance clarifies that fair value should be based on assumptions that market participants would use, including a consideration of non-performance risk.

Valuation Hierarchy

The Fair Value Measurements and Disclosures topic establishes a valuation hierarchy for disclosure of the inputs used to measure fair value. This hierarchy prioritizes the inputs into three broad levels as follows:

Level 1 inputs — quoted prices (unadjusted) in active markets for identical assets or liabilities.

Level 2 inputs — quoted prices for similar assets and liabilities in active markets or inputs that are observable for the asset or liability, either directly or indirectly through market corroboration, for substantially the full term of the financial instrument.

Level 3 inputs — unobservable inputs based on the Company's own assumptions used to measure assets and liabilities at fair value.

An asset or liability's classification within the hierarchy is determined based on the lowest level input that is significant to the fair value measurement.

The Company has determined that its financial assets and financial liabilities include derivative instruments which are carried at fair value and are valued using Level 2 inputs in the fair value hierarchy. The Company uses valuation techniques based on discounted cash flow analyses, which reflects the terms of the derivatives and uses observable market-based inputs, including forward rates and uses market price quotations obtained from independent derivatives brokers, corroborated with information obtained from independent pricing service providers.

Fair Value of Financial Instruments

As of December 31, 2019 and 2018, there has not been any significant impact to the fair value of the Company's derivative liabilities due to its own credit risk. Similarly, there has not been any significant adverse impact to the Company's derivative assets based on evaluation of the Company's counterparties' credit risks. The following table summarizes the fair value of the Company's derivative instruments:

	Derivative A	Assets ^(a)	Derivative Liabilities ^(b)					
	 Decembe	r 31,	December 3	31,				
In millions	2019	2018	2019	2018				
Derivatives designated as hedging instruments:								
Interest rate contracts	\$ — \$	0.8 \$	6.6 \$	2.7				
Foreign currency contracts	_	_	1.5	0.5				
Commodity contracts	_	_	3.4	0.2				
Total Derivatives	\$ — \$	0.8 \$	11.5 \$	3.4				

⁽a) Derivative assets of \$0.7 million are included in Other Current Assets as of December 31, 2018. Derivative assets of \$0.1 million are included in Other Assets as of December 31, 2018.

The fair values of the Company's other financial assets and liabilities at December 31, 2019 and 2018 approximately equal the carrying values reported on the Consolidated Balance Sheets except for Long-Term Debt. The fair value of the Company's Long-Term Debt (excluding finance leases and deferred financing fees) was \$2,788.6 million and \$2,762.5 million, as compared to the carrying amounts of \$2,729.3 million and \$2,833.1 million as of December 31, 2019 and 2018, respectively. The fair value of the Company's Total Debt, including the Senior Notes, are based on quoted market prices (Level 2 inputs). Level 2 valuation techniques for Long-Term Debt are based on quotations obtained from independent pricing service providers.

Effect of Derivative Instruments

The pre-tax effect of derivative instruments in cash flow hedging relationships on the Company's Consolidated Statements of Operations for the year ended December 31, 2019 and 2018 is as follows:

Amount of Loss (Gain) Recognized in Accumulated Other Comprehensive Loss		umulated		Amount of (Gain) Loss Recognized in Statement of Operations						
	Ye	Year Ended December 31,		ember 31,	Location in Statement of	Ye	ar Ended Dec	ember 31,		
In millions	2019 2018		2018	Operations		2019	2018			
Commodity Contracts	\$	1.4	\$	(0.7)	Cost of Sales	\$	(1.8) \$	(0.4)		
Foreign Currency Contracts		0.1		(0.3)	Other Expense, Net		(1.3)	0.7		
Interest Rate Swap Agreements		5.8		2.0	Interest Expense, Net		1.4	(0.9)		
Total	\$	7.3	\$	1.0		\$	(1.7) \$	(0.6)		

The effect of derivative instruments not designated as hedging instruments on the Company's Consolidated Statements of Operations for the years ended December 31, 2019 and 2018 is as follows:

In millions		2019	2018
Foreign Currency Contracts	Other Expense (Income), Net	\$ (0.9) \$	(5.6)

⁽b) Derivative liabilities of \$8.5 million and \$1.3 million are included in Other Accrued Liabilities as of December 31, 2019 and December 31, 2018, respectively. Derivative liabilities of \$3.0 million and \$2.1 million are included in Other Noncurrent Liabilities as of December 31, 2019 and December 31, 2018, respectively.

Accumulated Derivative Instruments (Loss) Income

The following is a rollforward of pre-tax Accumulated Derivative Instruments (Loss) Income which is included in the Company's Consolidated Balance Sheets and Consolidated Statements of Shareholders' Equity as of December 31:

In millions	2019	2018	2017
Balance at January 1	\$ (1.9) \$	(0.3) \$	7.5
Reclassification to Earnings	(1.7)	(0.6)	(2.1)
Current Period Change in Fair Value	(7.3)	(1.0)	(5.7)
Balance at December 31	\$ (10.9) \$	(1.9) \$	(0.3)

At December 31, 2019, the Company expects to reclassify \$7.8 million of pre-tax losses in the next twelve months from Accumulated Other Comprehensive Loss to earnings, contemporaneously with and offsetting changes in the related hedged exposure. The actual amount that will be reclassified to future earnings may vary from this amount as a result of changes in market conditions.

NOTE 12. ACCUMULATED OTHER COMPREHENSIVE INCOME (LOSS)

The components of Other Comprehensive Income (Loss) attributable to Graphic Packaging Holding Company are as follows:

						Year En	de	d Decen	ıbe	r 31,						
		 2019			2018						2017					
In millions	retax mount	Tax Effect	Aı	Net mount ^(a)		retax mount		Гах Effect	Aı	Net mount ^(a)		Pretax Amount		Гах ffect	1	Net Amount
Derivative Instruments (Loss) Gain	\$ (6.7)	\$ 1.4	\$	(5.3)	\$	(1.1) \$	5	0.1	\$	(1.0)	\$	(7.8)	\$	2.9	\$	(4.9)
Pension and Postretirement Benefit Plans	10.1	(2.5)		7.6		(24.8)		5.4		(19.4)		12.3		(3.5)		8.8
Currency Translation Adjustment	9.8	_		9.8		(18.7)		_		(18.7)		44.9		_		44.9
Other Comprehensive Income (Loss)	\$ 13.2	\$ (1.1)	\$	12.1	\$	(44.6) \$	5	5.5	\$	(39.1)	\$	49.4	\$	(0.6)	\$	48.8

⁽a) Amounts exclude impact of noncontrolling interest. See "Note 19 - Changes in Accumulated Other Comprehensive Loss."

The balances of Accumulated Other Comprehensive Loss Attributable to Graphic Packaging Holding Company, net of applicable taxes are as follows:

	December 31,							
In millions		2019	2018					
Accumulated Derivative Instruments Loss	\$	(16.6) \$	(11.3)					
Pension and Postretirement Benefit Plans		(238.5)	(246.1)					
Currency Translation Adjustment		(110.7)	(120.5)					
Accumulated Other Comprehensive Loss	\$	(365.8) \$	(377.9)					

NOTE 13. COMMITMENTS

The Company has entered into other long-term contracts principally for the purchase of fiber and chip processing. The minimum purchase commitments extend beyond 2024. At December 31, 2019, total commitments under these contracts were as follows:

In millions		
2020	\$ 5	57.8
2021	3	80.0
2022	1	9.5
2023	1	8.3
2024	1	8.5
Thereafter	7	77.1
Total	\$ 22	21.2

NOTE 14. ENVIRONMENTAL AND LEGAL MATTERS

Environmental Matters

The Company is subject to a broad range of foreign, federal, state and local environmental, health and safety laws and regulations, including those governing discharges to air, soil and water, the management, treatment and disposal of hazardous substances, solid waste and hazardous wastes, the investigation and remediation of contamination resulting from historical site operations and releases of hazardous substances, and the health and safety of employees. Compliance initiatives could result in significant costs, which could negatively impact the Company's consolidated financial position, results of operations or cash flows. Any failure to comply with environmental or health and safety laws and regulations or any permits and authorizations required thereunder could subject the Company to fines, corrective action or other sanctions.

Some of the Company's current and former facilities are the subject of environmental investigations and remediations resulting from historic operations and the release of hazardous substances or other constituents. Some current and former facilities have a history of industrial usage for which investigation and remediation obligations may be imposed in the future or for which indemnification claims may be asserted against the Company. Also, closures or sales of facilities may necessitate investigation and may result in remediation activities at those facilities.

The Company has established reserves for those facilities or issues where a liability is probable and the costs are reasonably estimable. The Company believes that the amounts accrued for its loss contingencies, and the reasonably possible loss beyond the amounts accrued, are not material to the Company's consolidated financial position, results of operations or cash flows. The Company cannot estimate with certainty other future compliance, investigation or remediation costs. Some costs relating to historic usage that the Company considers to be reasonably possible of resulting in liability are not quantifiable at this time. The Company will continue to monitor environmental issues at each of its facilities, as well as regulatory developments, and will revise its accruals, estimates and disclosures relating to past, present and future operations, as additional information is obtained.

Legal Matters

The Company is a party to a number of lawsuits arising in the ordinary conduct of its business. Although the timing and outcome of these lawsuits cannot be predicted with certainty, the Company does not believe that disposition of these lawsuits will have a material adverse effect on the Company's consolidated financial position, results of operations or cash flows.

NOTE 15. REDEEMABLE NONCONTROLLING INTEREST

As disclosed in "Note 1 - Nature of Business and Summary of Significant Accounting Policies," on January 1, 2018, the Company combined its business with IP's NACP business. Under the terms of the Transaction Agreement, GPIP issued 79,911,591 common units to IP. In connection with the closing, the Company, GPIP, GPI Holding and IP entered into an Exchange Agreement ("Exchange Agreement"), under which subject to certain restrictions, the common units held by IP are exchangeable into common stock of the Company or cash, upon the second anniversary of the NACP combination unless certain other events occur before that time. GPHC also has the ability to call such common units exercisable starting on the same date. Upon an election of an exchange, GPHC may chose to satisfy the exchange using shares of its common stock, cash, or a combination thereof. Also, under the Exchange Agreement, the Company may not issue shares of common stock in exchange for more than 61,633,409 common units without first obtaining GPHC shareholder approval.

At December 31, 2019, the redeemable noncontrolling interest was determined as follows:

In millions	
Balance at December 31, 2017	\$ _
Issuance of Redeemable Noncontrolling Interest at January 1, 2018	255.2
Net Income Attributable to Redeemable Noncontrolling Interest	16.6
Other Comprehensive Loss, Net of Tax	(2.8)
Reclassification to Noncontrolling Interest for Share Repurchases ^(a)	12.5
Distributions of Membership Interest	(5.7)
Balance at December 31, 2018	\$ 275.8
Net Income Attributable to Redeemable Noncontrolling Interest	16.3
04 0 1 1 1 1 1 1 1 1	
Other Comprehensive Loss, Net of Tax	0.8
Other Comprehensive Loss, Net of Tax Redeemable Noncontrolling Interest Redemption Value Mark-up	30.2
•	
Redeemable Noncontrolling Interest Redemption Value Mark-up	30.2

^(a) In the second quarter of 2019, the Company recorded a reversal for the 2018 reclassification to redeemable noncontrolling interest back to noncontrolling interest related to share repurchases. The Company determined that this reclassification due to the share repurchases was not required.

Redeemable noncontrolling interest is recorded at the greater of carrying amount or redemption value at the end of each period. The redemption value is determined by the closing price of the Company's common stock.

NOTE 16. BUSINESS SEGMENT AND GEOGRAPHIC AREA INFORMATION

The Company has three reportable segments as follows:

Paperboard Mills includes the nine North American paperboard mills which produce primarily CRB, CUK, and SBS, which is consumed internally to produce paperboard packaging for the Americas and Europe Packaging segments. The remaining paperboard is sold externally to a wide variety of paperboard packaging converters and brokers. The Paperboard Mills segment Net Sales represent the sale of paperboard only to external customers. The effect of intercompany transfers to the paperboard packaging segments has been eliminated from the Paperboard Mills segment to reflect the economics of the integration of these segments.

Americas Paperboard Packaging includes paperboard packaging, primarily folding cartons, sold primarily to Consumer Packaged Goods ("CPG") companies, and cups, lids and food containers sold primarily to foodservice companies and quick-service restaurants ("QSR"), all serving the food, beverage, and consumer product markets in the Americas.

Europe Paperboard Packaging includes paperboard packaging, primarily folding cartons, sold primarily to CPG companies serving the food, beverage and consumer product markets in Europe.

The Company allocates certain mill and corporate costs to the reportable segments to appropriately represent the economics of these segments. The Corporate and Other caption includes the Pacific Rim and Australia operating segments and unallocated corporate and one-time costs.

These segments are evaluated by the chief operating decision maker based primarily on Income from Operations as adjusted for depreciation and amortization. The accounting policies of the reportable segments are the same as those described above in "Note 1 - Nature of Business and Summary of Significant Accounting Policies."

The Company did not have any one customer who accounted for 10% or more of the Company's net sales during 2019, 2018 or 2017.

Business segment information is as follows:

		nded December 31,	1,			
In millions		2019	2018	2017		
NET SALES:						
Paperboard Mills	\$	1,094.8 \$	1,078.1 \$	399.7		
Americas Paperboard Packaging		4,233.7	4,098.3	3,245.1		
Europe Paperboard Packaging		689.3	695.9	593.5		
Corporate/Other/Eliminations ^(a)		142.3	157.1	167.3		
Total	\$	6,160.1 \$	6,029.4 \$	4,405.6		
INCOME (LOSS) FROM OPERATIONS:			***	(
Paperboard Mills ^(b)	\$	33.1 \$	30.6 \$	(35.0)		
Americas Paperboard Packaging		477.7	420.1	358.2		
Europe Paperboard Packaging		60.3	46.1	37.3		
Corporate and Other ^(c)		(37.0)	(38.6)	(32.6)		
Total	\$	534.1 \$	458.2 \$	327.9		
CARVEAU EXPENDITATION						
CAPITAL EXPENDITURES:						
Paperboard Mills	\$	208.0 \$	240.1 \$	111.4		
Americas Paperboard Packaging		94.7	104.3	98.8		
Europe Paperboard Packaging		34.5	19.5	17.3		
Corporate and Other		15.7	31.3	32.6		
Total	\$	352.9 \$	395.2 \$	260.1		
DEPRECIATION AND AMORTIZATION:						
Paperboard Mills	\$	224.4 \$	197.5 \$	143.7		
Americas Paperboard Packaging		165.1	165.4	125.3		
Europe Paperboard Packaging		36.7	48.9	42.1		
Corporate and Other		21.0	18.8	19.2		
Total	\$	447.2 \$	430.6 \$	330.3		

⁽a) Includes revenue from contracts with customers for the Australia and Pacific Rim operating segments.

^(c) Includes expenses related to business combinations, exit activities, idle and abandoned assets, gain on sale of assets and shutdown and other special charges.

	 December 31,			
In millions	2019	2018	2017	
ASSETS AT DECEMBER 31:				
Paperboard Mills	\$ 2,912.2 \$	3,005.6 \$	1,487.0	
Americas Paperboard Packaging	3,392.3	3,143.6	2,478.7	
Europe Paperboard Packaging	686.3	603.4	607.1	
Corporate and Other	299.1	306.6	290.2	
Total	\$ 7,289.9 \$	7,059.2 \$	4,863.0	

⁽b) Includes Augusta, Georgia mill outage in 2018 and accelerated depreciation related to shutdown of the Santa Clara mill in 2017.

Business geographic area information is as follows:

	 Year I	Ended December 31	,
In millions	2019	2018	2017
NET SALES:			
Americas ^(a)	\$ 5,328.5 \$	5,176.4 \$	3,644.8
Europe	689.3	695.9	593.5
Asia Pacific	219.3	217.8	215.7
Corporate and Other	(77.0)	(60.7)	(48.4)
Total	\$ 6,160.1 \$	6,029.4 \$	4,405.6

In millions	2019	2018	2017
ASSETS AT DECEMBER 31:			
Americas ^(a)	\$ 6,396.3 \$	6,260.1 \$	4,046.4
Europe	686.3	603.4	607.1
Asia Pacific	207.3	195.7	209.5
Total	\$ 7,289.9 \$	7,059.2 \$	4,863.0

⁽a) Includes North America and Brazil.

NOTE 17. QUARTERLY FINANCIAL INFORMATION (UNAUDITED)

Results of operations for the four quarters of 2019 and 2018 are shown below.

			2019		
In millions, except per share amounts	First	Second	Third	Fourth ^(a)	Total
Statement of Operations Data:					
Net Sales	\$ 1,505.9	\$ 1,552.8	\$ 1,581.6	\$ 1,519.8	\$ 6,160.1
Gross Profit	266.1	287.8	266.4	272.3	1,092.6
Business Combinations, Shutdown and Other Special Charges and Gain on Sale of Assets, Net	6.2	9.9	8.2	13.6	37.9
Income from Operations	134.0	144.4	122.7	133.0	534.1
Net Income	78.1	86.1	70.0	43.9	278.1
Net Income Attributable to Graphic Packaging Holding Company	57.9	63.8	52.1	33.0	206.8
Net Income Per Share Attributable to Graphic Packaging Holding Company — Basic	\$ 0.19	\$ 0.22	\$ 0.18	\$ 0.11	\$ 0.70
Net Income Per Share Attributable to Graphic Packaging Holding Company — Diluted	\$ 0.19	\$ 0.22	\$ 0.18	\$ 0.11	\$ 0.70

^(a) During the fourth quarter of 2019, the Company recorded an approximate \$7 million immaterial prior period adjustment to reduce amortization expense related to intangible assets.

			2018		
In millions, except per share amounts	First	Second	Third	Fourth	Total
Statement of Operations Data:					
Net Sales	\$ 1,477.4	\$ 1,510.9	\$ 1,531.8	\$ 1,509.3	\$ 6,029.4
Gross Profit	223.9	237.5	258.3	232.7	952.4
Business Combinations, (Gain) on Sale of Assets and Shutdown and Other Special Charges, Net	26.3	8.6	(27.4)	7.4	14.9
Income from Operations	74.0	110.3	166.4	107.5	458.2
Net Income	42.7	66.0	122.0	63.3	294.0
Net Income Attributable to Graphic Packaging Holding Company	29.9	49.4	94.3	47.5	221.1
Net Income Per Share Attributable to Graphic Packaging Holding Company — Basic ^(a)	\$ 0.10	\$ 0.16	\$ 0.30	\$ 0.16	\$ 0.71
Net Income Per Share Attributable to Graphic Packaging Holding Company — Diluted	\$ 0.10	\$ 0.16	\$ 0.30	\$ 0.15	\$ 0.71

⁽a) Does not cross foot due to rounding

NOTE 18. EARNINGS PER SHARE

	Year Ended December 31,			
In millions, except per share data		2019	2018	2017
Net Income Attributable to Graphic Packaging Holding Company	\$	206.8 \$	221.1 \$	300.2
Weighted Average Shares:				
Basic		294.1	309.5	311.1
Dilutive effect of RSUs		0.7	0.6	0.8
Diluted		294.8	310.1	311.9
Earnings Per Share — Basic	\$	0.70 \$	0.71 \$	0.97
Earnings Per Share — Diluted	\$	0.70 \$	0.71 \$	0.96

NOTE 19. CHANGES IN ACCUMULATED OTHER COMPREHENSIVE LOSS

The following represents changes in Accumulated Other Comprehensive Loss attributable to Graphic Packaging Holding Company by component for the year ended December 31, 2019 ^(a):

In millions	 rivatives Pos	ension and stretirement enefit Plans	Currency Translation Adjustments	Total
Balance at December 31, 2018	\$ (11.3) \$	(246.1)	\$ (120.5) \$	(377.9)
Other Comprehensive (Loss) Income before Reclassifications	(5.8)	(26.9)	12.4	(20.3)
Amounts Reclassified from Accumulated Other Comprehensive (Loss) Income ^(b)	(1.4)	37.5	_	36.1
Net Current-period Other Comprehensive (Loss) Income	(7.2)	10.6	12.4	15.8
Less:				
Net Current-period Other Comprehensive Loss (Income) Attributable to Noncontrolling Interest ^(c)	1.9	(3.0)	(2.6)	(3.7)
Balance at December 31, 2019	\$ (16.6) \$	(238.5)	\$ (110.7) \$	(365.8)

⁽a) All amounts are net-of-tax.

⁽b) See following table for details about these reclassifications.

⁽c) Includes amounts related to redeemable noncontrolling interest which are separately classified outside of permanent equity in the mezzanine section of the Consolidated Balance Sheets.

The following represents reclassifications out of Accumulated Other Comprehensive Loss for the year ended December 31, 2019:

In millions

	Amount Reclassified from Accumulated Other		Afficiant Line Lauring the Statement
Details about Accumulated Other Comprehensive Loss Components	Comprehe		Affected Line Item in the Statement Where Net Income is Presented
Derivatives Instruments:			
Commodity Contracts	\$	(1.8)	Cost of Sales
Foreign Currency Contracts		(1.3)	Other Expense, Net
Interest Rate Swap Agreements		1.4	Interest Expense, Net
		(1.7)	Total before Tax
		0.3	Tax Expense
	\$	(1.4)	Net of Tax
Amortization of Defined Benefit Pension Plans:			
Prior Service Costs	\$	0.2 (a)	
Actuarial Losses		49.2 ^(a)	
		49.4	Total before Tax
		(9.8)	Tax Benefit
	\$	39.6	Net of Tax
Amortization of Postretirement Benefit Plans:			
Prior Service Credits	\$	$(0.3)^{(a)}$	
Actuarial Gains		(2.3) (a)	
		(2.6)	Total before Tax
		0.5	Tax Expense
	\$	(2.1)	Net of Tax
Total Reclassifications for the Period	\$	36.1	
(a) —			

⁽a) These accumulated other comprehensive loss components are included in the computation of net periodic pension cost (see "Note 8 — Pensions and Other Postretirement Benefits").

NOTE 20. EXIT ACTIVITIES

As previously mentioned, the Company announced its plans to invest approximately \$600 million in a new CRB Mill in Kalamazoo, Michigan. In conjunction with the completion of this project, the Company currently expects to close two of its smaller CRB Mills in 2022 in order to remain capacity neutral.

The Company accounts for the costs associated with these closures in accordance with ASC 360, *Impairment or Disposal of Long-Lived Assets ("ASC 360")*, ASC 420, *Exit or Disposal Costs Obligations ("ASC 420") and ASC 712 Compensation-Nonretirement Post Employment Benefits ("ASC 712")*. The Company recorded \$14.9 million of exit costs during 2019. Other costs associated with the start up of the new CRB mill will be recorded in the period in which they are incurred.

The following table summarizes the costs incurred during 2019 related to restructuring:

In millions	Location in Statement of Operations	Decen	nber 31, 2019
Severance costs and other (a)	Business Combinations, Shutdown and Other Special Charges and Gain on Sale of Assets, Net	\$	7.7
Accelerated depreciation	Cost of Sales		4.7
Inventory and asset write-offs	Business Combinations, Shutdown and Other Special Charges and Gain on Sale of Assets, Net		2.5
Total		\$	14.9

⁽a) Costs incurred include activities for post-employment benefits, retention bonuses, incentives and professional services.

The following table summarizes the balance of accrued expenses related to restructuring:

In millions	Tota	al
Balance at December 31, 2018	\$	_
Costs incurred		7.7
Payments		(0.6)
Balance at December 31, 2019	\$	7.1

The Company currently expects to incur charges associated with these exit activities for post-employment benefits, retention bonuses and incentives in the range of \$15 million to \$20 million and for accelerated depreciation and inventory and asset write-offs in the range of \$50 million to \$60 million.

NOTE 21. SUBSEQUENT EVENTS

On January 28, 2020, the Company announced that IP notified the Company of its intent to begin the process of reducing its ownership interest in GPIP. Per the agreement between the parties, on January 29, 2020, GPIP purchased 15.1 million partnership units from IP for \$250 million. As a result, IP's ownership interest in GPIP decreased from 21.6% to 18.3%.

On January 28, 2020, the Company also announced that it reached an agreement to acquire a folding carton facility from Quad/Graphics, Inc. for \$40 million, subject to standard closing conditions. This facility is located in Omaha, Nebraska and consumes roughly 40,000 tons of paperboard. The Company closed this transaction on January 31, 2020.

On January 28, 2020, the Company also announced that it agreed to purchase a group annuity contract that will transfer the remaining pension benefit obligation under the US Plan of approximately \$750 million to an insurance company and expects to incur an additional non-cash settlement charge of approximately \$150 million related to this transfer. These non-cash settlement charges relate to Net Actuarial Loss recognized in Accumulated Other Comprehensive Loss. The Company completed this transaction on January 30, 2020.

Report of Independent Registered Public Accounting Firm

To the Shareholders and the Board of Directors of Graphic Packaging Holding Company

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Graphic Packaging Holding Company (the Company) as of December 31, 2019 and 2018, the related consolidated statements of operations, comprehensive income, shareholders' equity and cash flows for each of the three years in the period ended December 31, 2019, and the related notes (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at December 31, 2019 and 2018, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2019, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2019, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) and our report dated February 10, 2020 expressed an unqualified opinion thereon.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matter

The critical audit matter communicated below is a matter arising from the current period audit of the financial statements that was communicated or required to be communicated to the audit committee and that: (1) relates to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective or complex judgments. The communication of the critical audit matter does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

Goodwill Impairment

Description of the Matter

On December 31, 2019, the Company's aggregate goodwill balance was \$1.5 billion. As explained in Note 1 to the consolidated financial statements, the Company tests goodwill for impairment annually as of October 1, and whenever events or changes in circumstances indicate that the estimated fair value of a reporting unit may no longer exceed the carrying amount. The evaluation of goodwill impairment involves the comparison of the fair value of each reporting unit to its carrying value. The Company uses the discounted cash flow model to estimate fair value, which requires management to make significant estimates and assumptions.

Auditing the goodwill impairment analysis was complex and highly judgmental due to the significant estimation required to determine the fair value of the reporting units. In particular, the fair value estimates were sensitive to significant assumptions, such as revenue growth rates, weighted average cost of capital ("WACC") rates, reporting unit operating margins, and terminal year multiples of EBITDA, which are affected by expectations about future market or economic conditions.

How We Addressed the Matter in Our Audit We obtained an understanding, evaluated the design and tested the operating effectiveness of controls over the Company's goodwill impairment review process, including controls over management's review of the significant assumptions described above. For example, we tested controls over management's review of the estimation of the reporting units' respective fair value, including management's review of the significant inputs to the fair value model, the data utilized within the fair value model, the mathematical accuracy of the valuation models, as well as the reconciliation of the aggregate estimated fair value of the reporting units to the market capitalization of the Company.

To test the estimated fair value of the Company's reporting units, our audit procedures included, among others, testing the methodologies and significant assumptions discussed above and the underlying historical sales and cost data, business plans, as well as the appropriateness of comparable companies used by the Company in its analyses. We involved our valuation specialists to assist in our evaluation of the Company's WACC rates applied to the fair value calculations and to independently recalculate WACC rates for the respective reporting units. As part of this assessment, we compared the WACC rates to rates for hypothetical market participants based on the capital structure of the reporting units and Company and its related peer group. We evaluated whether management's methodology for determining the WACC rates reflected the risk associated with the forecasted cash flows of the reporting units. To test the assumed EBITDA multiple applied in the Company's calculations, we involved our valuation specialists to assist in analyzing recent transactions in the market and current peer group trading multiples that would be indicative of the respective EBITDA multiple utilized in the calculation of fair value for the identified reporting units. We compared forecasts to business plans and previous forecasts to actual results to assess the reasonableness of the projected cash flows of each reporting unit. We also evaluated sensitivity analyses of the significant assumptions described above to assess the changes in the fair value of the reporting units that would result from changes in the key assumptions. In addition, we tested management's reconciliation of the estimated fair value of the reporting units to the market capitalization of the Company.

/s/ Ernst & Young LLP

We have served as the Company's auditor since 2008.

Atlanta, Georgia February 10, 2020

Report of Independent Registered Public Accounting Firm

To the Shareholders and the Board of Directors of Graphic Packaging Holding Company

Opinion on Internal Control Over Financial Reporting

We have audited Graphic Packaging Holding Company's internal control over financial reporting as of December 31, 2019, based on criteria established in Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the COSO criteria). In our opinion, Graphic Packaging Holding Company (the Company) maintained, in all material respects, effective internal control over financial reporting as of December 31, 2019, based on the COSO criteria.

As indicated in the accompanying Management's Report on Internal Control Over Financial Reporting, management's assessment of and conclusion on the effectiveness of internal control over financial reporting did not include the internal controls of Artistic Carton Company, which is included in the 2019 consolidated financial statements of the Company and constituted 0.8% and 2.6% of total and net assets, respectively, as of December 31, 2019 and 0.5% and 0.7% of net sales and net income, respectively, for the year then ended. Our audit of internal control over financial reporting of the Company also did not include an evaluation of the internal control over financial reporting of Artistic Carton Company.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated balance sheets of the Company as of December 31, 2019 and 2018, the related consolidated statements of operations, comprehensive income, shareholders' equity and cash flows for each of the three years in the period ended December 31, 2019, and the related notes and our report dated February 10, 2020 expressed an unqualified opinion thereon.

Basis for Opinion

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying Management's Report on Internal Control Over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects.

Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control Over Financial Reporting

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

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

/s/ Ernst & Young LLP

Atlanta, Georgia February 10, 2020

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

None.

ITEM 9A. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

The Company's management has established disclosure controls and procedures designed to ensure that information required to be disclosed by the Company in the reports that it files or submits under the Securities Exchange Act of 1934, as amended (the "Exchange Act") is recorded, processed, summarized and reported within time periods specified in the Securities and Exchange Commission rules and forms. Such disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by the Company in the reports that it files or submits under the Exchange Act is accumulated and communicated to the Company's management to allow timely decisions regarding required disclosure.

Based on management's evaluation as of the end of the period covered by this Annual Report on Form 10-K, the Company's Chief Executive Officer and Chief Financial Officer have concluded that the Company's disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) promulgated under the Exchange Act) were effective as of the end of the period covered by this Annual Report on Form 10-K.

Management's Report on Internal Control Over Financial Reporting

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

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate. The Company's management did not include in its assessment the internal controls of the Artistic acquisition, which are included in the Company's results for the year ended December 31, 2019. As of December 31, 2019, the Artistic acquisition total assets represent 0.8% of the Company's consolidated total assets. Net Sales attributable to the Artistic acquisition represented 0.5% of the Company's consolidated Net Sales for the twelve months ended December 31, 2019.

The Company's management, under the supervision of and with the participation of the President and Chief Executive Officer and the Chief Financial Officer, assessed the effectiveness of the Company's internal control over financial reporting as of December 31, 2019 based on criteria for effective control over financial reporting described in Internal Control - Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework). Based on this assessment the Company's management concluded that its internal control over financial reporting was effective as of December 31, 2019.

The effectiveness of the Company's internal control over financial reporting as of December 31, 2019 has been audited by Ernst & Young LLP, an independent registered public accounting firm, as stated in their report which appears herein.

Changes in Internal Control Over Financial Reporting

None.

ITEM 9B. OTHER INFORMATION

None.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

Pursuant to Instruction G(3) to Form 10-K, the information relating to Directors of the Registrant, compliance with Section 16(a) of the Exchange Act, compliance with the Company's Code of Ethics, and certain other information required by Item 10 is incorporated by reference to the Registrant's definitive Proxy Statement for the 2020 Annual Meeting of Stockholders, which is to be filed pursuant to Regulation 14A within 120 days after the end of the Registrant's fiscal year ended December 31, 2019.

ITEM 11. EXECUTIVE COMPENSATION

Pursuant to Instruction G(3) to Form 10-K, the information required by Item 11 is incorporated by reference to the Registrant's definitive Proxy Statement for the 2020 Annual Meeting of Stockholders, which is to be filed pursuant to Regulation 14A within 120 days after the end of the Registrant's fiscal year ended December 31, 2019.

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

Pursuant to Instruction G(3) to Form 10-K, the information required by Item 12 is incorporated by reference to the Registrant's definitive Proxy Statement for the 2020 Annual Meeting of Stockholders, which is to be filed pursuant to Regulation 14A within 120 days after the end of the Registrant's fiscal year ended December 31, 2019.

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

Pursuant to Instruction G(3) to Form 10-K, the information required by Item 13 is incorporated by reference to the Registrant's definitive Proxy Statement for the 2020 Annual Meeting of Stockholders, which is to be filed pursuant to Regulation 14A within 120 days after the end of the Registrant's fiscal year ended December 31, 2019.

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

Pursuant to Instruction G(3) to Form 10-K, the information required by Item 14 is incorporated by reference to the Registrant's definitive Proxy Statement for the 2020 Annual Meeting of Stockholders, which is to be filed pursuant to Regulation 14A within 120 days after the end of the Registrant's fiscal year ended December 31, 2019.

PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

- a. Financial statements, financial statement schedule and exhibits filed as part of this report:
 - 1. Consolidated Statements of Operations for each of the three years in the period ended December 31, 2019

Consolidated Statements of Comprehensive Income for each of the three years in the period ended December 31, 2019

Consolidated Balance Sheets as of December 31, 2019 and 2018

Consolidated Statements of Shareholders' Equity for each of the three years in the period ended December 31, 2019

Consolidated Statements of Cash Flows for each of the three years in the period ended December 31, 2019

Notes to Consolidated Financial Statements

Reports of Independent Registered Public Accounting Firm

- 2. All schedules are omitted as the information required is either included elsewhere in the consolidated financial statements herein or is not applicable.
- 3. Exhibits to Annual Report on Form 10-K for Year Ended December 31, 2019.

Exhibit Number	Description
2.1	Transaction Agreement dated October 23, 2017, by and among International Paper Company, Graphic Packaging Holding Company, Gazelle Newco LLC and Graphic Packaging International, Inc. Filed as Exhibit 2.1 to the Registrant's Current Report on Form 8-K filed on October 24, 2017 and incorporated herein by reference.
3.1	Restated Certificate of Incorporation of New Giant Corporation. Filed as Exhibit 3.1 to Graphic Packaging Holding Company's Current Report on Form 8-K filed on March 10, 2008 and incorporated herein by reference.
3.2	Bylaws of Graphic Packaging Holding Company, as amended on May 20, 2015. Filed as Exhibit 3.1 to Graphic Packaging Holding Company's Current Report on Form 8-K filed on May 27, 2015 and incorporated herein by reference.
3.3	Certificate of Formation of Graphic Packaging International, LLC. Filed as Exhibit 3.1 to the Registrant's Current Report on Form 8-K filed on January 1, 2018 and incorporated herein by reference.
3.4	Amended and Restated Limited Liability Company Operating Agreement of Graphic Packaging International, LLC. Filed as Exhibit 3.2 to the Registrant's Current Report on Form 8-K filed on January 1, 2018 and incorporated herein by reference.
3.5	Amended and Restated Limited Liability Company Agreement dated as of January 1, 2018 by and among Graphic Packaging Holding Company, Graphic Packaging International Partners, LLC (formerly known as Gazelle Newco LLC), GPI Holding III, LLC, and International Paper Company. Filed as Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed on January 1, 2018 and incorporated herein by reference.
4.1	Indenture, dated as of September 29, 2010, among Graphic Packaging International, Inc. and Graphic Packaging Holding Company, Graphic Packaging Corporation and the other Note Guarantors party thereto, as Note Guarantors, and U.S. Bank National Association, as Trustee. Filed as Exhibit 4.1 to Graphic Packaging Holding Company's Current Report on Form 8-K filed on September 29, 2010 and incorporated herein by reference.
4.2	Supplemental Indenture, dated as of April 2, 2013, among Graphic Packaging International, Inc., the guarantors named therein and U.S. Bank National Association, as Trustee, relating to the 4.75% Senior Notes due 2021 of Graphic Packaging International, Inc. Filed as Exhibit 4.1 to Graphic Packaging Holding Company's Current Report on Form 8-K filed on April 2, 2013 and incorporated herein by reference.
4.3	Indenture dated as of November 6, 2014, by and among Graphic Packaging International, Inc., the guarantors named therein and U.S. Bank National Association, as trustee. Filed as Exhibit 4.1 to the Registrant's Current Report on Form 8-K filed on November 6, 2014 and incorporated herein by reference.

- 4.4 First Supplemental Indenture dated as of November 6, 2014 by and among Graphic Packaging International, Inc. the guarantors named therein and U.S. Bank National Association, as trustee. Filed as Exhibit 4.2 to the Registrant's Current Report on Form 8-K filed on November 6, 2014 and incorporated herein by reference.
- 4.5 Second Supplemental Indenture dated as of August 11, 2016 by and among Graphic Packaging International Inc., Graphic Packaging Holding Company, the other guarantors named therein and U.S. Bank National Association as trustee. Filed as Exhibit 4.2 to the Registrant's Current Report on Form 8-K filed on August 11, 2016 and incorporated herein by reference.
- 4.6 Supplemental Indenture among Graphic Packaging International, Inc., Graphic Packaging Holding Company, the other guarantors party thereto and U.S. Bank National Association, as Trustee, with respect to the 4.75% Senior Notes due 2021. Filed as Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed on October 24, 2017 and incorporated herein by reference.
- 4.7 Supplemental Indenture among Graphic Packaging International, Inc., Graphic Packaging Holding Company, the other guarantors party thereto and U.S. Bank National Association, as Trustee, with respect to the 4.875% Senior Notes due 2022. Filed as Exhibit 10.2 to the Registrant's Current Report on Form 8-K filed on October 24, 2017 and incorporated herein by reference.
- 4.8 Supplemental Indenture among Graphic Packaging International, Inc., Graphic Packaging Holding Company, the other guarantors party thereto and U.S. Bank National Association, as Trustee, with respect to the 4.125% Senior Notes due 2024. Filed as Exhibit 10.3 to the Registrant's Current Report on Form 8-K filed on October 24, 2017 and incorporated herein by reference.
- 4.9 Third Supplemental Indenture dated as of June 25, 2019, by and among Graphic Packaging International, LLC, the guarantors listed therein and U.S. Bank, National Association. Filed as Exhibit 4.2 to Graphic Packaging Holding Company and Graphic Packaging International, LLC's current report on Form 8-K filed on June 25, 2019 and incorporated herein by reference.
- 10.1* GPI U.S. Consolidated Pension Plan Master Document as amended and restated, effective January 1, 2017. Filed as exhibit 10.1 to the Registrant's Annual Report on Form 10-K filed on February 8, 2017 and incorporated herein by reference.
- 10.2* Second Amendment to the GPI Savings Plan as amended and restated, effective January 1, 2015. Filed as Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q filed on April 28, 2016 and incorporated herein by reference.
- 10.3* Third Amendment to the GPI Savings Plan as amended and restated, effective January 1, 2015. Filed as Exhibit 10.2 to the Registrant's Quarterly Report on Form 10-Q filed on April 28, 2016 and incorporated herein by reference.
- 10.4* Fourth Amendment to the GPI Savings Plan as amended and restated, effective January 1, 2015. Filed as Exhibit 10.3 to the Registrant's Quarterly Report on Form 10-Q filed on April 28, 2016 and incorporated herein by reference.
- Amended and Restated Employment Agreement dated as of November 19, 2015 by and among Graphic Packaging International, Inc., the Registrant and Michael P. Doss. Filed as Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed on November 19, 2015 and incorporated herein by reference.
- 10.6* Graphic Packaging Excess Benefit Plan, as amended and restated, effective as of January 1, 2009. Filed as Exhibit 10.22 to Registrant's Annual Report on Form 10-K filed on February 23, 2010 and incorporated herein by reference.
- 10.7* Graphic Packaging Supplemental Retirement Plan, as amended and restated, effective as of January 1, 2009. Filed as Exhibit 10.23 to Registrant's Annual Report on Form 10-K filed on February 23, 2010 and incorporated herein by reference.
- 10.8* Graphic Packaging Holding Company 2014 Omnibus Stock and Incentive Compensation Plan effective as of May 21, 2014. Filed as Appendix A to the Registrant's Definitive Proxy Statement on Schedule 14A filed on April 10, 2014 and incorporated herein by reference.
- 10.9* Graphic Packaging International, Inc. Management Incentive Plan, as amended and restated as of December 5, 2016. Filed as Exhibit 10.11 to the Registrant's Annual Report on Form 10-K filed on February 13, 2019 and incorporated herein by reference.
- 10.10 Master Services Agreement dated November 29, 2007 by and between Graphic Packaging International, Inc. and Perot Systems Corporation. Filed as Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed on December 5, 2007 and incorporate herein by reference.
- 10.11* Graphic Packaging International, Inc. Supplemental Plan for Participants in the Riverwood International Employees Retirement Plan, as amended and restated, effective as of January 1, 2009. Filed as Exhibit 10.36 to the Registrant's Annual Report on Form 10-K filed on February 23, 2010 and incorporated herein by reference.
- 10.12* Riverwood International Change in Control Supplemental Retirement Plan, as amended and restated, effective as of January 1, 2008. Filed as Exhibit 10.37 to Graphic Packaging Holding Company's Annual Report on Form 10-K filed on February 23, 2010 and incorporated herein by reference.

- Amended and Restated Form of Indemnification Agreement for Directors. Filed as Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q filed on November 4, 2010 and incorporated herein by reference.
- 10.14* First Amendment to the Graphic Packaging International, Inc. Supplemental Plan for Participants in the Riverwood International Employees Retirement Plan. Filed as Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed on May 24, 2012 and incorporated herein by reference.
- 10.15* Employment Agreement dated as of April 1, 2012 by and among Graphic Packaging International, Inc., Graphic Packaging Holding Company and Stephen Scherger. Filed as Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed on April 5, 2012 and incorporated herein by reference.
- First Amendment to Master Services Agreement dated as of September 22, 2008 by and between Graphic Packaging International, Inc. and Perot Systems Corporation. Filed as Exhibit 10.22 to the Registrant's Annual Report on Form 10-K filed on February 7, 2018 and incorporated herein by reference.
- 10.17 Second Amendment to Master Services Agreement effective as of August 1, 2012 by and between Graphic Packaging International, Inc. and Dell Marketing L.P. (as assignee of Perot Systems Corporation). Filed as Exhibit 10.30 to the Registrant's Annual Report on Form 10-K filed on February 12, 2016 and incorporated herein by reference.
- 10.18* Fifth Amendment to the GPI Savings Plan as amended and restated, effective January 1, 2015. Filed as exhibit 10.24 to the Registrant's Annual Report on Form 10-K filed on February 8, 2017 and incorporated herein by reference.
- 10.19* GPI Savings Plan, as amended and restated effective January 1, 2015. Filed as Exhibit 10.32 to the Registrant's Annual Report on Form 10-K filed on February 12, 2016 and incorporated herein by reference.
- 10.20* First Amendment to the GPI Savings Plan, effective January 1, 2015. Filed as Exhibit 10.33 to the Registrant's Annual Report on Form 10-K filed on February 12, 2016 and incorporated herein by reference.
- 10.21* Amended and Restated Employment Agreement among the Registrant, Graphic Packaging International, Inc. and Joseph P. Yost effective September 1, 2015. Filed as Exhibit 10.38 to the Registrant's Annual Report on Form 10-K filed on February 12, 2016 and incorporated herein by reference.
- 10.22* Graphic Packaging International, Inc. Executive Severance Plan dated as of February 25, 2014. Filed as Exhibit 10.39 to the Registrant's Annual Report on Form 10-K filed on February 12, 2016 and incorporated herein by reference.
- 10.23* First Amendment to the Graphic Packaging Holding Company 2014 Omnibus Stock and Incentive Compensation Plan effective January 1, 2017. Filed as exhibit 10.33 to the Registrant's Annual Report on Form 10-K filed on February 8, 2017 and incorporated herein by reference.
- 10.24 Local Country Agreement European Union Addendum effective as of November 1, 2016 to the Master Services Agreement between Graphic Packaging International, Inc. and Dell Marketing, L.P., as amended. Filed as Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q filed on April 26, 2017 and incorporated herein by reference.
- Third Amendment to Master Services Agreement dated as of November 1, 2016 between Graphic Packaging International, Inc. and Dell Marketing, L.P. Filed as Exhibit 10.2 to the Registrant's Quarterly Report on Form 10-Q filed on April 26, 2017 and incorporated herein by reference.
- Fourth Amendment to Master Services Agreement dated as of March 1, 2017 between Graphic Packaging International, Inc. and NTT DATA Services, LLC, as successor-in-interest to Dell Marketing, L.P. Filed as Exhibit 10.3 to the Registrant's Quarterly Report on Form 10-Q filed on April 26, 2017 and incorporated herein by reference.
- 10.27* First Amendment to the GPI US Consolidated Pension Plan, dated as of May 19, 2017 and effective as of January 1, 2017. Filed as Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q filed on July 26, 2017 and incorporated herein by reference.
- 10.28* Sixth Amendment to the GPI Savings Plan, dated as of June 27, 2017 and effective as of January 1, 2015. Filed as Exhibit 10.2 to the Registrant's Quarterly Report on Form 10-Q filed on July 26, 2017 and incorporated herein by reference.
- 10.29* Graphic Packaging International, Inc. Non-Qualified Deferred Compensation Plan, as amended and restated effective November 1, 2017. Filed as Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q filed on October 25, 2017 and incorporated herein by reference.
- Exchange Agreement dated as of January 1, 2018 by and among Graphic Packaging Holding Company, Graphic Packaging International Partners, LLC (formerly known as Gazelle Newco LLC), GPI Holding III, LLC and International Paper Company. Filed as Exhibit 10.2 to the Registrant's Current Report on Form 8-K filed on January 1, 2018 and incorporated herein by reference.

- Governance Agreement dated as of January 1, 2018 by and among Graphic Packaging Holding Company, Graphic Packaging International Partners, LLC (formerly known as Gazelle Newco LLC), and International Paper Company. Filed as Exhibit 10.3 to the Registrant's Current Report on Form 8-K filed on January 1, 2018 and incorporated herein by reference.
- Tax Receivable Agreement dated as of January 1, 2018 by and among Graphic Packaging Holding Company, Graphic Packaging International Partners, LLC (formerly known as Gazelle Newco LLC), GPI Holding III, LLC and International Paper Company. Filed as Exhibit 10.4 to the Registrant's Current Report on Form 8-K filed on January 1, 2018 and incorporated herein by reference.
- 10.33 Registration Rights Agreement dated as of January 1, 2018 by and between Graphic Packaging Holding Company and International Paper Company. Filed as Exhibit 10.5 to the Registrant's Current Report on Form 8-K filed on January 1, 2018 and incorporated herein by reference.
- 10.34 Restrictive Covenants Agreement dated as of January 1, 2018 by and between Graphic Packaging International Partners, LLC (formerly known as Gazelle Newco LLC) and International Paper Company. Filed as Exhibit 10.6 to the Registrant's Current Report on Form 8-K filed on January 1, 2018 and incorporated herein by reference.
- Third Amended and Restated Credit Agreement dated as of January 1, 2018 by and among Graphic Packaging International, LLC and certain subsidiaries thereof as Borrowers, the lenders and agents named therein, and Bank of America, N.A., as Administrative Agent. Filed as Exhibit 10.7 to the Registrant's Current Report on Form 8-K filed on January 1, 2018 and incorporated herein by reference.
- Amended and Restated Credit Agreement dated as of January 1, 2018 and effective as of January 8, 2018 by and among Graphic Packaging International, LLC, the lenders and agents named therein and Bank of America, N.A., as Administrative Agent. Filed as Exhibit 10.8 to the Registrant's Current Report on Form 8-K filed on January 1, 2018 and incorporated herein by reference.
- 10.37* First Amendment to the Amended and Restated Graphic Packaging International, Inc. Non-Qualified Deferred Compensation Plan effective January 1, 2018. Filed as Exhibit 10.51 to the Registrant's Annual Report on Form 10-K filed on February 7, 2018 and incorporated herein by reference.
- 10.38* Second Amendment to the GPI US Consolidated Pension Plan dated as of November 8, 2017. Filed as Exhibit 10.52 to the Registrant's Annual Report on Form 10-K filed on February 7, 2018 and incorporated herein by reference.
- 10.39* Third Amendment to the GPI US Consolidated Pension Plan effective as of January 1, 2018. Filed as Exhibit 10.53 to the Registrant's Annual Report on Form 10-K filed on February 7, 2018 and incorporated herein by reference.
- 10.40* Seventh Amendment to the GPI Savings Plan effective as of January 1 2018. Filed as Exhibit 10.54 to the Registrant's Annual Report on Form 10-K filed on February 7, 2018 and incorporated herein by reference.
- 10.41* Eighth Amendment to the GPI Savings Plan effective as of January 1, 2018. Filed as Exhibit 10.55 to the Registrant's Annual Report on Form 10-K filed on February 7, 2018 and incorporated herein by reference.
- 10.42* Tenth Amendment to the GPI Savings Plan dated as of November 12, 2018. Filed as Exhibit 10.49 to the Registrant's Annual Report on Form 10-K filed on February 13, 2019 and incorporated herein by reference.
- 10.43* Fourth Amendment to the GPI US Consolidated Pension Plan dated as of December 20, 2018. Filed as Exhibit 10.50 to the Registrant's Annual Report on Form 10-K filed on February 13, 2019 and incorporated herein by reference.
- 10.44* Fifth Amendment to the GPI US Consolidated Pension Plan.
- Ninth Amendment to the GPI Savings Plan. Filed as Exhibit 10.1 to the Registrant's Form 10-Q filed on July 24, 2018 and incorporated herein by reference.
- 14.1 Code of Business Conduct and Ethics. Filed as Exhibit 14.1 to the Company's Annual Report on Form 10-K filed on March 8, 2011 and incorporated herein by reference.
- 21.1 List of Subsidiaries.
- 23.1 Consent of Independent Registered Public Accounting Firm.
- 24.1 Power of Attorney. Incorporated by reference to the signature page of this Annual Report on Form 10-K.
- 31.1 Certification required by Rule 13a-14(a).
- 31.2 Certification required by Rule 13a-14(a).
- 32.1 Certification required by Section 1350 of Chapter 63 of Title 18 of the United States Code.
- 32.2 Certification required by Section 1350 of Chapter 63 of Title 18 of the United States Code.

101.INS	Instance Document - the instance document does not appear in the Interactive Data File because its XBRL tags
	are embedded within the Inline XBRL document.

101.SCH XBRL Taxonomy Extension Schema

101.CAL XBRL Taxonomy Extension Calculation Linkbase

101.DEF XBRL Taxonomy Extension Definition Linkbase

101.LAB XBRL Taxonomy Extension Label Linkbase

101.PRE XBRL Taxonomy Extension Presentation Linkbase

Cover Page Interactive Data File – the cover page interactive data file does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document (included in Exhibit 101).

^{*} Executive compensation plan or agreement

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

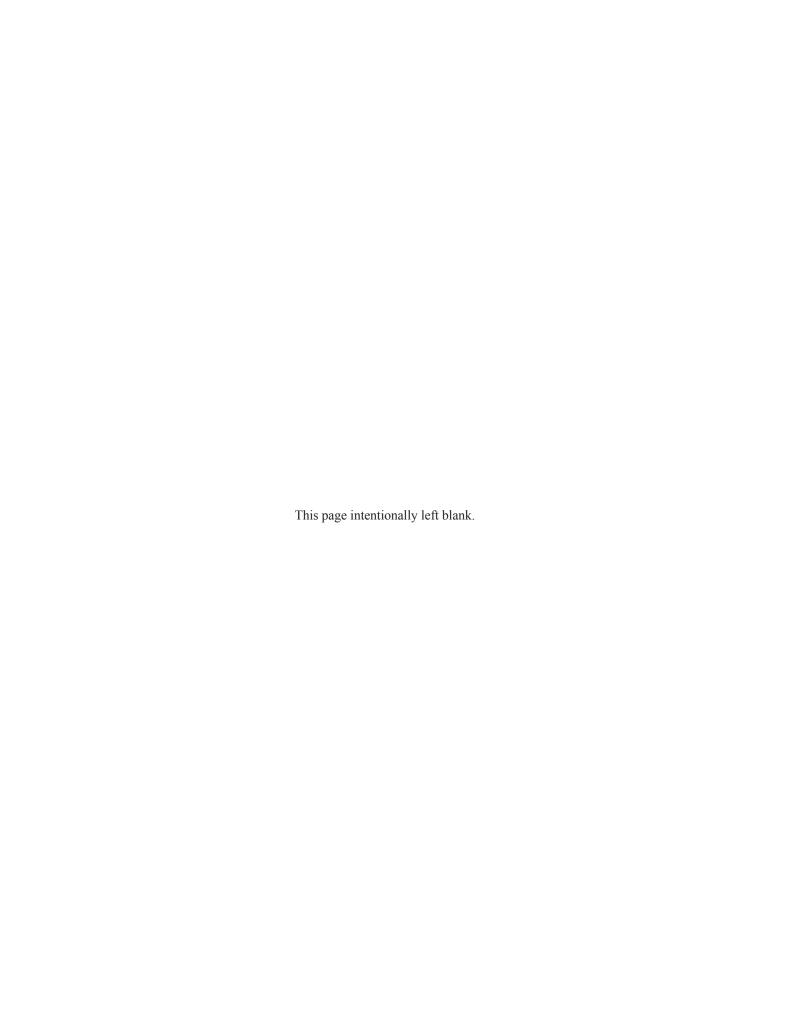
GRAPHIC PACKAGING HOLDING COMPANY (Registrant)

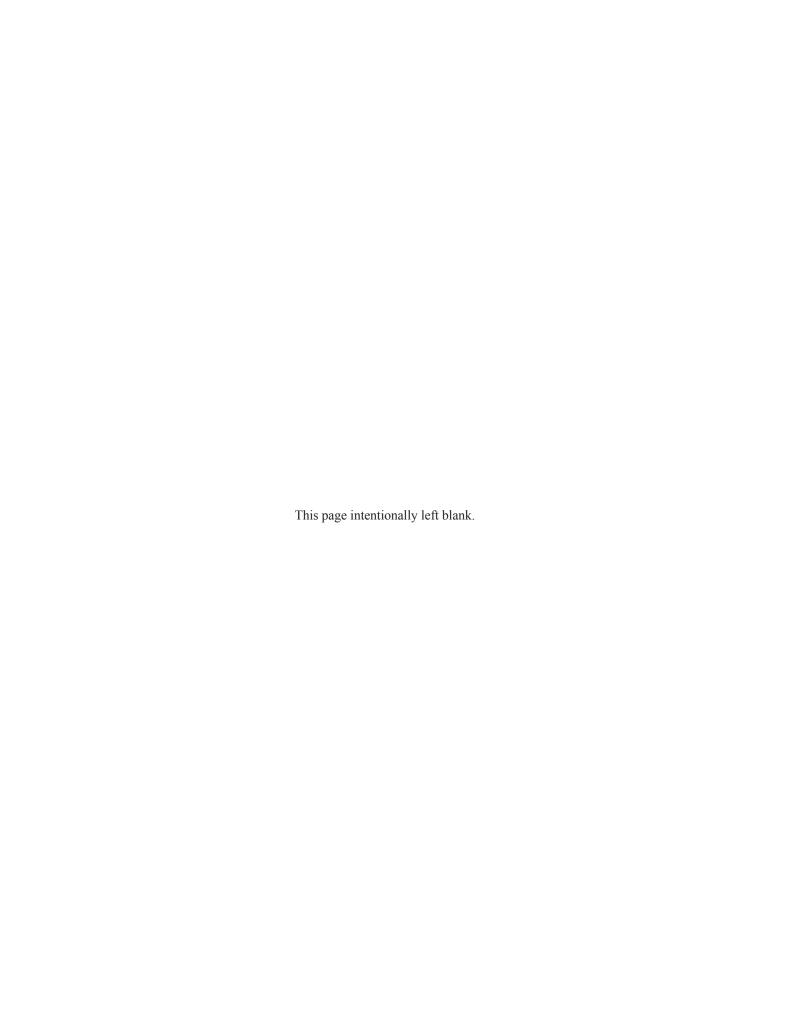
/s/ Stephen R. Scherger Stephen R. Scherger	Executive Vice President and Chief Financial Officer (Principal Financial Officer)	February 10, 2020	
Pursuant to the requirements of the Securities Exchange Act of 1934, this report on Form 10-K has been signed below by the following persons on behalf of the Registrant and in the capacities and on the dates indicated.			
/s/ Michael P. Doss Michael P. Doss	President and Chief Executive Officer (Principal Executive Officer)	February 10, 2020	
/s/ Stephen R. Scherger Stephen R. Scherger	Executive Vice President and Chief Financial Officer (Principal Financial Officer)	February 10, 2020	
/s/ Charles D. Lischer Charles D. Lischer	Senior Vice President and Chief Accounting Officer (Principal Accounting Officer)	February 10, 2020	

POWER OF ATTORNEY

Each of the directors of the Registrant whose signature appears below hereby appoints Stephen R. Scherger and Lauren S. Tashma, and each of them severally, as his or her attorney-in-fact to sign in his or her name and behalf, in any and all capacities stated below, and to file with the Securities and Exchange Commission any and all amendments to this report on Form 10-K, making such changes in this report on Form 10-K as appropriate, and generally to do all such things on their behalf in their capacities as directors and/or officers to enable the Registrant to comply with the provisions of the Securities Exchange Act of 1934, and all requirements of the Securities and Exchange Commission.

<u>Signatures</u>	<u>Title</u>	<u>Date</u>
/s/ Laurie Brlas	Director	February 10, 2020
Laurie Brlas		
/s/ David D. Campbell David D. Campbell	Director	February 10, 2020
/s/ Paul D. Carrico Paul D. Carrico	Director	February 10, 2020
/s/ Michael P. Doss Michael P. Doss	Director, President and Chief Executive Officer	February 10, 2020
/s/ Robert A. Hagemann Robert A. Hagemann	Director	February 10, 2020
/s/ Philip R. Martens Philip R. Martens	Chairman of the Board	February 10, 2020
/s/ Dean A. Scarborough Dean A. Scarborough	Director	February 10, 2020
/s/ Larry M. Venturelli Larry M. Venturelli	Director	February 10, 2020
/s/ Lynn A. Wentworth Lynn A. Wentworth	Director	February 10, 2020





Corporate Information

Graphic Packaging Holding Company Board of Directors



Standing left to right: Philip R. Martens, Chairman of the Board; Michael P. Doss, President and CEO; David D. Campbell; Lynn A. Wentworth; Larry M. Venturelli; Laurie Brlas, Paul D. Carrico; Robert A. Hagemann; and Dean A. Scarborough

Board of Directors

Laurie Brlas^{2,3}

Former EVP and CFO Newmont Mining Corporation, a mining industry leader

David D. Campbell 2,3

Former Chairman and CEO ACCO Brands Corporation, an office and computer accessories manufacturer

Paul D. Carrico^{1,3}

Former President and CEO Axiall Corporation, a chemical and vinyl-based building products company

Michael P. Doss

President and CEO Graphic Packaging Holding Company

Robert A. Hagemann^{1,2}

Former SVP and CFO Quest Diagnostics Incorporated, a diagnostic testing information services leader

Philip R. Martens³

Former President and CEO Novelis Inc., a rolled aluminum manufacturing company

Dean A. Scarborough^{1,2}

Former CEO Avery Dennison Corporation, a packaging and labeling solutions leader

Larry M. Venturelli1,2

Former EVP and CFO Whirlpool Corporation, the world's leading manufacturer of home appliances

Lynn A. Wentworth^{1,3}

Former SVP, CFO and Treasurer BlueLinx Holdings Inc., a building products company

Stockholder Information

Transfer Agent and Registrar

Broadridge Corporate Issuer Solutions, Inc. P.O. Box 1342
Brentwood, NY 11717
Toll Free: 877-830-4931
www.shareholder.broadridge.com

Stock Listing

Graphic Packaging Holding Company's common stock is listed on the New York Stock Exchange (NYSE) under the ticker symbol "GPK."

Investor Information and Contact

Web: investors.graphicpkg.com Email: investor.relations@graphicpkg.com

Financial Reports

Graphic Packaging Holding Company's 2019 Annual Report on Form 10-K is filed with the SEC and is available online at: investors.graphicpkg.com.

Annual Meeting

The 2020 Annual Meeting of Stockholders will be held at 10:00 a.m. ET, on Wednesday, May 20, 2020, at Graphic Packaging Holding Company's headquarters located at 1500 Riveredge Parkway, Suite 100, Atlanta, GA 30328.

- Audit Committee
- ² Compensation & Management Development Committee
- Nominating & Corporate Governance Committee



Corporate Offices 1500 Riveredge Parkway NW Suite 100 Atlanta, GA 30328 (770) 240-7200

www.graphicpkg.com



