
UNITED STATES SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549
Form 10-K

- ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
For the fiscal year ended December 31, 2020
- or**
- TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
For the transition period from to

COMMISSION FILE NUMBER: 001-33988

Graphic Packaging Holding Company

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of incorporation or organization)

1500 Riveredge Parkway, Suite 100

Atlanta, Georgia

(Address of principal executive offices)

26-0405422

(I.R.S. employer identification no.)

30328

(Zip Code)

(770) 240-7200

Registrant's telephone number, including area code:

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

<u>Title of Each Class</u>	<u>Trading Symbol(s)</u>	<u>Name of Each Exchange on Which Registered</u>
Common Stock, \$0.01 par value per share	GPK	New York Stock Exchange

Securities registered pursuant to Section 12(g) of the Act:
None

Indicate by check mark if the registrant is a well-known 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 Section 15(d) of the Act. Yes No

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

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

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

Large accelerated filer

Accelerated filer

Smaller reporting company

Non-accelerated filer (Do not check if a smaller reporting company)

Emerging growth company

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

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report. Yes No

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

The aggregate market value of voting and non-voting common equity held by non-affiliates at June 30, 2020 was approximately \$ 3.9 billion.

As of February 12, 2021 there were approximately 267,755,764 shares of the registrant's Common Stock, \$0.01 par value per share outstanding.

DOCUMENTS INCORPORATED BY REFERENCE:

Portions of the registrant's definitive Proxy Statement for the 2021 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, pursuing strategic acquisition opportunities, obtaining adequate wood and fiber supplies, the deductibility of goodwill for tax purposes, the availability of U.S. federal income tax attributes 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 coated recycled paperboard 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, the effects of the COVID-19 pandemic on the Company’s operations and business, 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 U.S. federal income tax attributes to offset taxable income or U.S. federal income taxes 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 sustainable, 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”).

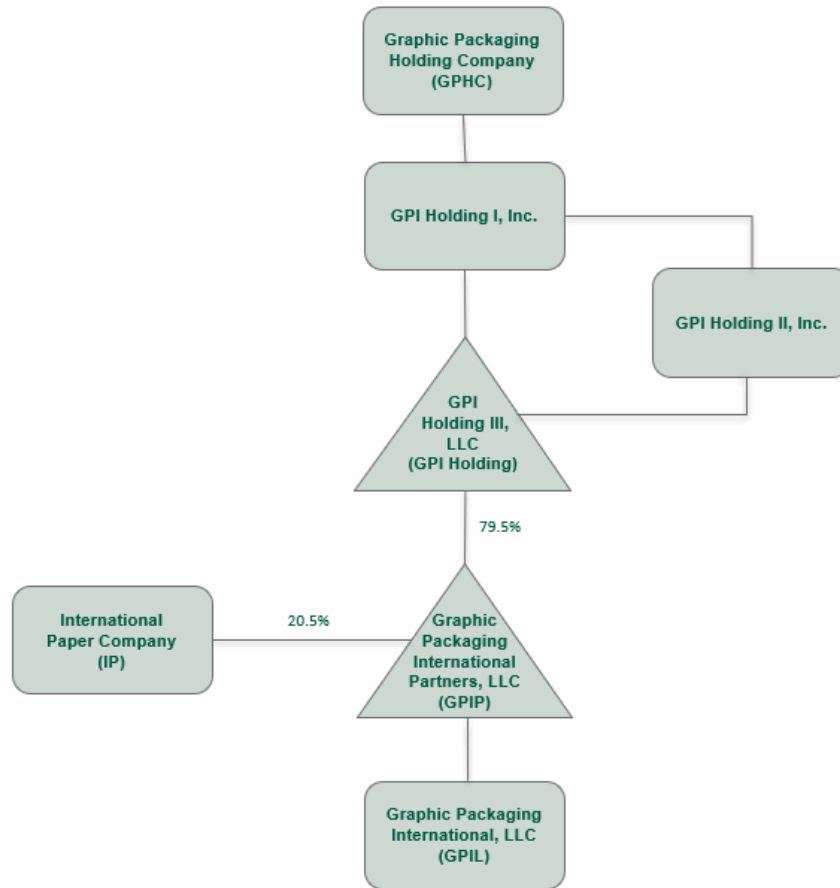
The Company’s customers include many of the world’s most widely recognized companies and brands with prominent market positions in beverage, food, foodservice and other consumer products. The Company strives to provide its customers with innovative sustainable packaging solutions designed to deliver 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 on January 1, 2018, immediately subsequent to the transactions described above (not including subsidiaries of GPIL):



On January 28, 2020, the Company announced that IP had 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 in cash. As a result, IP's ownership interest in GPIP decreased to 18.3% as of January 29, 2020.

On August 10, 2020, the Company announced that IP had notified the Company of its intent to exchange additional partnership units. Per the agreement between the parties, on August 13, 2020, GPIP purchased 17.4 million partnership units from IP for \$250 million in cash, which included full redemption of the remaining 3.1 million partnership units that were required to be redeemed in cash. As a result, IP's ownership interest in GPIP decreased to 14.5% as of August 13, 2020.

Unless otherwise negotiated by the parties, IP's next opportunity to exchange its partnership units begins 180 days from the August 13, 2020 purchase date and is limited to the lesser of \$250 million or 25% of the units owned immediately following the initial transaction, subject to a minimum. IP will have further opportunities to exchange its partnership units beginning 180 days after each purchase date. The Company may choose to satisfy these exchanges using shares of its common stock, cash, or a combination thereof.

During 2020, 2019 and 2018, GPIP repurchased 44.2 million partnership units from GPI Holding, which distributed the proceeds to GPHC. GPHC used the proceeds from these repurchases to repurchase 44.2 million shares of GPHC's common stock. These partnership unit repurchases increased IP's ownership interest in GPIP, which was 15.0% at December 31, 2020.

Acquisitions, Closures, 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.

2020

On January 31, 2020, the Company acquired a folding carton facility from Quad/Graphics, Inc. ("Quad"), a commercial printing company. The converting facility is located in Omaha, Nebraska and is included in the Americas Paperboard Packaging reportable segment. For more information, see Note 4 in the Notes to Consolidated Financial Statements included herein under "Item 8., Financial Statements and Supplementary Data."

In March 2020, the Company made the decision to close the White Pigeon, Michigan CRB mill and to shut down the PMI containerboard machine in West Monroe, Louisiana. During the second quarter of 2020, the Company closed the White Pigeon, Michigan CRB mill and shut down the PMI containerboard machine. For more information, see Note 20 in the Notes to Consolidated Financial Statements included herein under "Item 8., Financial Statements and Supplementary Data."

On April 1, 2020, the Company acquired the Consumer Packaging Group business from Greif, Inc. ("Greif"), a leader in industrial packaging products and services. The acquisition included seven converting facilities across the United States, which are included in the Americas Paperboard Packaging reportable segment. For more information, see Note 4 in the Notes to Consolidated Financial Statements included herein under "Item 8., Financial Statements and Supplementary Data."

In June 2020, the Company made the decision to close certain converting facilities that were acquired from Greif. The Burlington, North Carolina converting facility and the Los Angeles, California converting facility were closed in the third quarter of 2020. For more information, see Note 20 in the Notes to Consolidated Financial Statements included herein under "Item 8., Financial Statements and Supplementary Data."

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). For more information, see Note 4 in the Notes to Consolidated Financial Statements included herein under "Item 8., Financial Statements and Supplementary Data."

During 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. For more information, see Note 20 in the Notes to Consolidated Financial Statements included herein under "Item 8., Financial Statements and Supplementary Data."

2018

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). For more information, see Note 4 in the Notes to Consolidated Financial Statements included herein under "Item 8., Financial Statements and Supplementary Data."

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. For more information, see Note 4 in the Notes to Consolidated Financial Statements included herein under "Item 8., Financial Statements and Supplementary Data."

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

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. For more information, see Note 4 in the Notes to Consolidated Financial Statements included herein under "Item 8., Financial Statements and Supplementary Data."

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

Share Repurchases and Dividends

On January 28, 2019, GPHC's board of directors authorized an additional share repurchase program to allow GPHC to purchase up to \$500 million of GPHC'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"). A previous \$250 million share repurchase program was authorized on January 10, 2017 (the "2017 share repurchase program").

The following presents GPHC's share repurchases for the years ended December 31, 2020, 2019, and 2018:

<i>Amount repurchased in millions</i>	Amount Repurchased	Number of Shares Repurchased	Average Price
2020	\$ 315.6	23,420,010	\$ 13.48
2019	\$ 127.9	10,191,257 ^(a)	\$ 12.55
2018	\$ 120.0	10,566,144	\$ 11.35

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

At December 31, 2020, GPHC had approximately \$146.5 million of share repurchase authority remaining under the 2019 share repurchase program.

During 2020 and 2019, GPHC paid cash dividends of \$84.7 million and \$88.7 million, respectively.

Products

The Company has three reportable segments as follows:

Paperboard Mills includes the eight North American paperboard mills that 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.

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") 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, sustainability 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.

The Company provides a wide range of sustainable 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, handling, and delivery needs, including tear and wet strength, puncture resistance, durability and compression strength (providing the ability to ship products in their own branded carton and 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 and Cooking 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 2020:

Location	Product	# of Machines	2020 Net Tons Produced
West Monroe, LA	CUK	2	911,520
Macon, GA	CUK	2	712,326
Texarkana, TX	SBS	2	623,207
Augusta, GA	SBS	2	596,821
Kalamazoo, MI	CRB	2	511,852
Battle Creek, MI	CRB	2	215,610
Middletown, OH	CRB	1	175,266
East Angus, Québec	CRB	1	99,754
White Pigeon, MI ^(a)	CRB	1	34,098
West Monroe, LA ^(a)	Corrugated Medium	1	60,847

^(a) Indicates net tons produced from January to June. For more information, see Note 20 in the Notes to Consolidated Financial Statements included herein under "Item 8., Financial Statements and Supplementary Data."

The Company consumes most of its coated board output in its converting operations, which is an integral part of the customer value proposition. In 2020, approximately 70% of combined mill sales of CRB, CUK and SBS was consumed internally.

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.

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.

Corrugated Medium. The Company exited its corrugated medium production in June of 2020.

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.

Sales and Marketing

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 KFC, among others. The Company also sells paperboard in the open market to independent and integrated paperboard converters.

Sales 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 2020, 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's 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, sustainability (particularly recyclability) 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 and distribution 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."

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, developing sustainable packaging to replace plastic packaging, 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 allow goods to ship in their own branded container and 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 products and manufacturing processes. 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, 2020, 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 500 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 Vendor™, IntegraPak™, KeelClip™, MicroFlex-Q™, MicroRite™, Quilt Wave™, Qwik Crisp™, Tite-Pak™, and Z-Flute™. The Company takes significant steps to protect its intellectual property and proprietary rights.

Human Capital

We believe that the Company's greatest asset is our workforce. Solving day-to-day operational and business challenges in order to drive positive results for stakeholders requires attracting, developing, and retaining talented individuals with different skills, ideas, and experiences. Our Vision 2025 outlines how we will be better stewards of our planet, supporters of our people, and allies to our partners, all while generating returns for our stakeholders. Our employees play a crucial role in achieving our Vision 2025 and are guided by our shared values and growth behaviors.

Our people are one of the pillars of our Vision 2025 and we strive to engage employees in a high-performance culture. In order to achieve this, we must attract, develop, and retain our talented workforce by providing opportunities for growth and a conducive atmosphere. Our talent acquisition, development, succession and diversity and inclusion strategies are all critical components of the multi-year plan for our people. We will continue to invest in capability development areas that serve as a competitive advantage for the Company such as GPI University, which is launching in 2021 and will serve as a platform for all employees to access relevant training and development resources on topics related to technical skills and leadership effectiveness. Also, central to capability development and talent management is challenging our team with new experiences that will enhance their leadership skills and technical capabilities. We will also continuously improve our processes and use technology to promote safety, automate our manufacturing processes, and achieve greater efficiencies utilizing processes such as Lean Six Sigma.

We are evolving the capabilities of our workforce as our business and strategy change. We have invested in innovation, research and development, and digital capabilities to allow us to capture sustainability supported organic growth. As our business continues to change, we will adapt our workforce to ensure that we have the necessary human capital capabilities in place to support our strategy.

As of December 31, 2020, the Company had approximately 18,775 employees worldwide based in over 90 locations in 15 different countries around the world. Approximately 77% of our employees are in the United States and 14% are in Europe. Worldwide, approximately 41% were represented by labor unions and covered by collective bargaining agreements or covered by works councils in Europe. As of December 31, 2020, none of the Company's employees were working under expired contracts, which are currently being negotiated, and 2,462 were covered under collective bargaining agreements that expire within one year. The Company considers its employee relations to be satisfactory.

Employee Health and Safety

Maintaining a safe work environment is vital to the Company, and we are committed to the health, safety and wellness of our employees. Our Recorded Incident Rate, which is the rate of workplace injuries per 100 full-time employees, is approximately 1%, and we work to maintain a safety performance rating that outperforms the industry average. We seek to achieve an injury-free workplace through various safety initiatives and programs.

In response to the COVID-19 pandemic, we implemented significant changes that we determined were in the best interest of our employees, as well as the communities in which we operate, while continuing to service our customers. We quickly implemented remote working, enhanced safety measures for employees continuing critical, on-site work at our facilities such as walk-through temperature scanners, plexiglass barriers between employees, and other methods of encouraging social distancing, and paid employees during necessary quarantines due to COVID-19. We will continue to monitor local COVID-19 conditions and adjust our practices to ensure the health and safety of our employees. We also demonstrated our commitment to our employees and our communities through one-time aggregate payments of \$5.0 million to front-line production employees and contributions of \$0.5 million to local food banks in the communities where our manufacturing operations are located.

Diversity and Inclusion

We believe that a diverse and inclusive working environment encourages creativity, innovation, and collaboration and that a diverse and inclusive culture propels our ability to serve our global customers and communities. Our commitment to diversity and inclusion is reflected in the definitions of our core values, which dictate behavioral norms. The Compensation and Management Development Committee of our Board of Directors annually reviews the processes and practices related to workforce diversity and inclusion programs to ensure continued equitable treatment of all employees and a culture of inclusion. Our goal moving forward is to not only mirror the diversity of the communities where we operate, but also to excel in unlocking the potential that a diverse workforce can generate.

Community Engagement

Building connections between our employees, their families, and our communities creates a more meaningful, fulfilling and enjoyable workplace. Our employees around the world dedicate their time and talents to improve the communities in which we live and work. Driven by our core values, making a difference for our customers, our consumers, and our community is at the root of our community engagement strategy. The Company focuses on three pillars that guide the strategy for our community service activities and philanthropic commitments: (1) putting food on the table, (2) preserving the environment, and (3) investing in education.

Governmental Regulations

The Company is subject to a broad range of foreign, federal, state and local environmental, employee health and safety, and other governmental regulations and employs a team of professionals in order to maintain compliance at each of its facilities. In 2020, the Company spent approximately \$8.2 million of capital on projects to maintain compliance with environmental laws, regulations and the Company's permits granted thereunder. In 2021, 2022, and 2023, the Company estimates it will spend approximately \$10 million, \$27 million and \$20 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, as well as certain environmental, social, and governance information 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 current estimates or expectations:

Industry Risks

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

Changing consumer dietary habits and preferences have impacted sales growth for many of the food and beverage products the Company packages. Preferences are constantly changing based on, among other factors, convenience, cost and health considerations, as well as environmental and social concerns and perceptions. If these trends continue and the Company is unable to adapt to the trends, then the Company's financial results could be adversely affected.

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.

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.

Operational Risks

The Company's financial results could be adversely impacted by global events outside the Company's control, such as the current COVID-19 pandemic.

As a result of global events such as the current COVID-19 pandemic, there could be unpredictable disruptions to the Company's operations that could reduce its future revenues and negatively impact the Company's financial condition. The COVID-19 pandemic may result in supply chain and transportation disruptions to and from our facilities and affected employees could impact the Company's ability to operate its facilities and distribute products to its customers in a timely fashion. In addition, the COVID-19 pandemic has resulted in extreme volatility and disruptions in the capital and credit markets as well as widespread furloughs and layoffs for workers in the broader economy. This volatility and loss of employment may negatively impact consumer buying habits, which could adversely affect the Company's financial results.

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'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, ransomware, 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, interrupted operations, 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, the regulatory environment related to information security, data collection and use, and privacy is becoming 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 could experience material disruptions at our facilities or increases in the cost of insurance.

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 earthquakes, hurricanes, tornadoes, floods and fires, as well as other unexpected disruptions such as the unavailability of critical raw materials, power outages and equipment breakdowns or failures can reduce production and increase manufacturing costs. These types of disruptions, whether caused by climate change or other events, 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 and insurance coverage may be subject to certain deductibles. The premiums for insurance coverage have recently increased and may continue to increase, along with the level of deductibles. In addition, the availability of some insurance coverage may decline due to insurance company losses from extensive property damage caused by natural disasters and increased cyber security breaches. 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 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, KeelClip, 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 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 2020, before intercompany eliminations, net sales from operations outside of the U.S. represented approximately 21% 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, 2020, approximately 16% 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 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.

Financial Risks

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

As of December 31, 2020, the Company had an aggregate principal amount of \$3,666.6 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 Third Amended and Restated Credit Agreement (as amended by the Incremental Facility Amendment) and the Amended and Restated Credit Agreement (collectively, the "Current Credit Agreement") and the indentures governing the 4.75% Senior Notes due 2021 (redeemed January 2021), 4.875% Senior Notes due 2022, 4.125% Senior Notes due 2024, 4.75% Senior Notes due 2027, 3.50% Senior Notes due 2028 and 3.50% Senior Notes due 2029 (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, 2020, approximately 35% 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.

Legal and Regulatory Risks

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, recycling of packaging, and the health and safety of employees. The Company cannot currently assess the impact that future emission standards, climate control initiatives, regulation changes 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."

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 ^(a) ; Research and Development
White Pigeon, MI ^(a)	CRB
Other:	
Atlanta, GA ^(b)	Headquarters, Research and Development, Packaging Machinery and Design
Concord, NH ^(b)	Research and Development, Design Center
Crosby, MN	Packaging Machinery Engineering, Design and Manufacturing
Louisville, CO ^(b)	Research and Development
Menomonee Falls, WI	Foodservice Rebuild Center

North American Converting Plants:

Atlanta, GA^(b)
Auburn, IN
Burlington, NC^(c)
Carol Stream, IL
Centralia, IL
Charlotte, NC
Chicago, IL^(b)
Clarksville, TN
Cobourg, Ontario^(b)
Elgin, IL
Elk Grove, IL^{(b)(d)}
Fort Smith, AR^(d)
Gordonsville, TN^(b)
Grand Rapids, MI
Gresham, OR^(b)
Hamel, MN
Irvine, CA
Kalamazoo, MI
Kendallville, IN
Kenton, OH
Kingston Springs, TN
Lancaster, TX
Lawrenceburg, TN
Lebanon, TN^(b)
Los Angeles, CA^{(b)(c)}
Lumberton, NC
Marion, OH
Mississauga, Ontario^{(b)(d)}
Mitchell, SD

Monroe, LA^(b)
Monterrey, Mexico^(b)
New Albany, IN^(d)
Newton, IA
North Portland, OR
Omaha, NE
Oroville, CA^(b)
Pacific, MO
Perry, GA
Pineville, NC
Pittston, PA
Prosperity, SC
Queretaro, Mexico^(b)
Randleman, NC
Shelbyville, IL
Solon, OH
Staunton, VA
St.-Hyacinthe, Québec^(b)
Tijuana, Mexico^(b)
Tuscaloosa, AL
Valley Forge, PA
Vancouver, WA^(b)
Visalia, CA
Wausau, WI
Wayne, NJ
West Monroe, LA^(d)
Winnipeg, Manitoba
Xenia, OH^(b)

International Converting Plants:

Auckland, New Zealand^(b)
Bremen, Germany^(b)
Bristol, United Kingdom
Coalville, United Kingdom^(b)
Gateshead, United Kingdom^(b)
Hoogerheide, Netherlands
Iguialada, Spain
Jundiai, Sao Paulo, Brazil
Leeds, United Kingdom
Masnieres, France^(b)
Melbourne, Australia^(b)
Miliaño, Spain
Newcastle Upon Tyne, United Kingdom^(b)
Portlaoise, Ireland^(b)
Requejada, Spain
Sneek, Netherlands
Sydney, Australia^(b)
Winsford, United Kingdom^(b)

Note:

- ^(a) Closed in the second quarter of 2020.
- ^(b) Leased facility.
- ^(c) Closed in third quarter of 2020.
- ^(d) 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, 2020.

Michael P. Doss, 54, is a Director and the President and Chief Executive Officer of Graphic Packaging Holding Company. He was elected to the Board of Directors on May 20, 2015. 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, 56, 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, 54, 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.

Jean-Francois Roche, 54, is the Senior Vice President and President, Europe, Middle East and Africa of Graphic Packaging Holding Company. Prior to assuming his current position, Mr. Roche served as Vice President, Global Accounts from October 2018 through December 2019. From April 2015 through December 2019, Mr. Roche also served as the Vice President, Sales, Europe, Middle East and Africa Consumer Products. Mr. Roche joined Graphic Packaging in April 2015 from LGR Packaging where he served as Chief Sales and Marketing Officer. Prior to that Mr. Roche spent 25 years at A&R Packaging, a large Scandinavian-based multinational consumer packaging provider, working in positions of increasing responsibility culminating the position of Senior Vice President, Sales and Marketing. Mr. Roche also serves as the President of the European Carton Makers Association, Europe’s folding carton industry association.

Lauren S. Tashma, 54, 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, 48, 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 Human Resources leadership roles, including Global Vice President of Talent and Development and Vice President, HR, Europe, Middle East and 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.

Joseph P. Yost, 53, 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.”

During 2020 and 2019, GPHC paid cash dividends of \$84.7 million and \$88.7 million, respectively.

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"). The previous \$250 million share repurchase program was authorized on January 10, 2017 (the "2017 share repurchase program").

The following presents GPHC's share repurchases for the years ended December 31, 2020, 2019, and 2018:

<i>Amount repurchased in millions</i>	Amount Repurchased	Number of Shares Repurchased	Average Price
2020	\$ 315.6	23,420,010	\$ 13.48
2019	\$ 127.9	10,191,257 ^(a)	\$ 12.55
2018	\$ 120.0	10,566,144	\$ 11.35

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

During the fourth quarter of 2020, pursuant to the 2019 share repurchase program, GPHC purchased shares of its common stock as follows:

Period (2020)	Issuer Purchases of Equity Securities			
	Total Number of Shares Purchased	Average Price Paid Per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Maximum Number of Shares That May Yet Be Purchased Under the Publicly Announced Program ^(a)
October 1, through October 31,	3,114,123	\$ 14.10	65,057,961	12,538,057
November 1, through November 30,	1,409,349	\$ 14.24	66,467,310	9,564,954
December 1, through December 31,	—	\$ —	66,467,310	8,650,242
Total	4,523,472			

^(a) Based on the closing price of GPHC's common stock as of the end of each period.

2020

On March 6, 2020, GPIL completed a private offering of \$450 million aggregate principal amount of its 3.50% senior unsecured notes due 2028 (the "2028 Senior Notes"). The 2028 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 \$443 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 August 28, 2020, GPIL completed a private offering of \$350 million aggregate principal amount of its 3.50% senior unsecured notes due 2029 (the "2029 Senior Notes"). The 2029 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 \$345 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.

2019

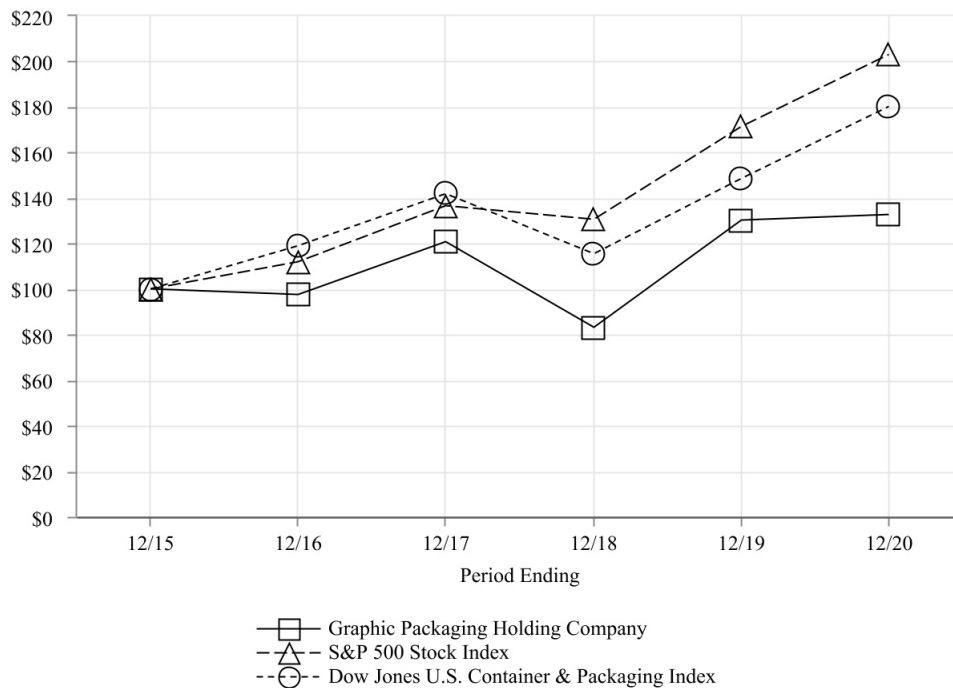
On June 25, 2019, GPIL completed a private offering of \$300 million aggregate principal amount of its 4.75% senior unsecured notes due 2027 (the "2027 Senior Notes"). The 2027 Senior Notes were sold in a private placement in reliance on Rule 144A and Regulation S under the Securities Exchange Act, as 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 2, 2021, there were approximately 1,055 stockholders of record and approximately 36,517 beneficial holders of GPHC's common stock.

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, 2015 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



	12/31/2015	12/31/2016	12/31/2017	12/31/2018	12/31/2019	12/31/2020
Graphic Packaging Holding Company	\$ 100.00	\$ 97.65	\$ 120.89	\$ 83.25	\$ 130.28	\$ 132.55
S&P 500 Stock Index	100.00	111.96	136.40	130.42	171.49	203.04
Dow Jones U.S. Container & Packaging Index	100.00	119.06	141.70	115.56	148.59	179.99

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.”

<i>In millions, except per share amounts</i>	Year Ended December 31,				
	2020	2019	2018	2017	2016
Statement of Operations Data:					
Net Sales	\$ 6,559.9	\$ 6,160.1	\$ 6,029.4	\$ 4,405.6	\$ 4,301.0
Income from Operations	524.3	534.1	458.2	327.9	407.4
Net Income	203.3	278.1	294.0	300.2	228.0
Net Income Attributable to Noncontrolling Interests	(36.0)	(71.3)	(72.9)	—	—
Net Income Attributable to Graphic Packaging Holding Company	167.3	206.8	221.1	300.2	228.0
Net Income Attributable to Graphic Packaging Holding Company Per Share Basis:					
Basic	\$ 0.60	\$ 0.70	\$ 0.71	\$ 0.97	\$ 0.71
Diluted	\$ 0.60	\$ 0.70	\$ 0.71	\$ 0.96	\$ 0.71
Balance Sheet Data:					
<i>(as of period end)</i>					
Cash and Cash Equivalents	\$ 179.0	\$ 152.9	\$ 70.5	\$ 67.4	\$ 59.1
Total Assets	7,804.6	7,289.9	7,059.2	4,863.0	4,603.4
Total Debt	3,644.2	2,860.3	2,957.1	2,274.5	2,151.9
Total Equity	1,840.3	2,058.0	2,018.5	1,291.9	1,056.5
Additional Data:					
Depreciation and Amortization	\$ 475.8	\$ 447.2	\$ 430.6	\$ 330.3	\$ 299.3
Capital Spending, including Packaging Machinery ^(a)	646.3	352.9	395.2	260.1	294.6
Dividends Declared per Share	0.30	0.30	0.30	0.30	0.225

^(a) During 2019, the Company announced its plan to invest approximately \$600 million in a new CRB mill in Kalamazoo, Michigan. See Note 20 in the Notes to Consolidated Financial Statements included herein under “Item 8., Financial Statements and Supplementary Data.”

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 2020 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 sustainable 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 paperboard. 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 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

COVID-19 Pandemic. Many uncertainties remain regarding the current novel coronavirus ("COVID-19") pandemic, including the anticipated duration of the pandemic, and the extent of local and worldwide social, political, and economic disruption it may cause. While the COVID-19 pandemic has not materially impacted the Company's overall business, operations, or financial results to date, it may have far-reaching impacts on many aspects of the Company's operations, including impacts on customer and consumer behaviors, business and manufacturing operations, inventory, accounts receivable, the Company's employees, and the market generally. The Company will continue to assess the evolving impact of the COVID-19 pandemic and intends to make adjustments to its business accordingly, such as to match the Company's supply with demand by adjusting mill maintenance outages and taking market downtime where appropriate such as the uncoated SBS cupstock paper machine market downtime that the Company took in Q3 of 2020 to reflect reduced demand for paperboard packaging from foodservice customers.

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 \$29.9 million in 2020 and increased year over year by \$79.1 million in 2019. The higher costs in 2020 were due to costs of labor and benefits (\$45.1 million), secondary fiber (\$22.5 million), freight (\$8.7 million), and other costs, net (\$1.9 million), partially offset by lower costs of wood (\$32.7 million), energy (\$9.9 million) and external board (\$5.7 million). The higher costs in 2019 were due to costs of labor and benefits (\$40.4 million), wood (\$39.6 million), external board (\$12.1 million), partially offset by lower costs of secondary fiber (\$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 2021 and 2022. 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 and the use of Lean Sigma principles in manufacturing and supply chain processes.

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, service 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 are driven by consumer buying habits in the markets its customers serve, and recently we have seen net organic sales growth driven by the consumers' desire for sustainable packaging solutions and increased at home consumption. 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 \$3,666.6 million of outstanding debt obligations as of December 31, 2020. 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 Current 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 Current Credit Agreement also requires 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 Current 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 2020 increased by \$399.8 million or 6.5%, to \$6,559.9 million from \$6,160.1 million in 2019 due to organic sales growth, and the Greif, Quad and Artistic acquisitions, partially offset by lower open market volume of our paperboard and unfavorable foreign currency exchange rates.
- Income from Operations in 2020 decreased by \$9.8 million or 1.8%, to \$524.3 million from \$534.1 million in 2019. Transactions recorded in Business Combinations, Shutdown and Other Special Charges and Exit Activities, Net increased \$23.4 million driven by higher charges for exit activities, including those related to our announced closures of White Pigeon, Michigan, CRB mill and West Monroe, Louisiana, PM1 containerboard machine, costs related to COVID-19, and increases in estimated liabilities related to the withdrawal from certain multi-employment benefit plans for facilities which have been closed. In addition, Income from Operations was negatively impacted in 2020 as compared to 2019 by non-commodity inflation (primarily labor and benefits), product mix, higher levels of planned maintenance and higher levels of market downtime at the uncoated SBS cupstock paper machine, and higher depreciation and amortization. Income from Operations was positively impacted in 2020 as compared to 2019 by higher volumes from organic sales growth and acquisitions, cost savings from continuous improvement and other programs, and commodity deflation.

Acquisitions, Closures, and Dispositions

- On January 31, 2020, the Company acquired a folding carton facility from Quad, a commercial printing company. The converting facility is located in Omaha, Nebraska and is included in the Americas Paperboard Packaging reportable segment.
- On April 1, 2020, the Company acquired the Consumer Packaging Group business from Greif, a leader in industrial packaging products and services. The acquisition included seven converting facilities across the United States, which are included in the Americas Paperboard Packaging reportable segment.
- 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 Leticia Foodservice, and sold its previously closed CRB mill site in Santa Clara, California.

Share Repurchases and Dividends

- During 2020, GPHC repurchased 23.4 million shares of GPHC's outstanding common stock, for \$315.6 million, at an average price of \$13.48 per share. At December 31, 2020, GPHC had approximately \$146.5 million available for additional repurchases under the 2019 share repurchase program.
- During 2020, GPHC declared cash dividends of \$83.0 million and paid cash dividends of \$84.7 million.

RESULTS OF OPERATIONS

<i>In millions</i>	Year Ended December 31,		
	2020	2019	2018
Net Sales	\$ 6,559.9	\$ 6,160.1	\$ 6,029.4
Income from Operations	\$ 524.3	\$ 534.1	\$ 458.2
Nonoperating Pension and Postretirement Benefit (Expense) Income	(151.5)	(39.5)	14.9
Interest Expense, Net	(128.8)	(140.6)	(123.7)
Loss on Modification or Extinguishment of Debt	—	—	(1.9)
Income before Income Taxes and Equity Income of Unconsolidated Entity	\$ 244.0	\$ 354.0	\$ 347.5
Income Tax Expense	(41.6)	(76.3)	(54.7)
Income before Equity Income of Unconsolidated Entity	\$ 202.4	\$ 277.7	\$ 292.8
Equity Income of Unconsolidated Entity	0.9	0.4	1.2
Net Income	\$ 203.3	\$ 278.1	\$ 294.0

2020 COMPARED WITH 2019
Net Sales

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

<i>In millions</i>	Year Ended December 31,						
	2019	Variances			2020	Increase	Percent Change
		Price	Volume/Mix	Foreign Exchange			
Consolidated	\$ 6,160.1	\$ (1.2)	\$ 408.0	\$ (7.0)	\$ 6,559.9	\$ 399.8	6.5 %

The Company's Net Sales in 2020 increased by \$399.8 million or 6.5%, to \$6,559.9 million from \$6,160.1 million for the same period in 2019, due to Net Sales of \$268.6 million from the Greif, Artistic and Quad Acquisitions and organic sales growth including new product introductions and conversions to our paperboard packaging solutions. These increases were partially offset by lower open market volume of our paperboard, product mix, and unfavorable foreign currency exchange rates, primarily the Brazilian Real, Mexican Peso, and Canadian Dollar as well as lower selling prices. Core converting volumes were up, primarily in global beverage, dry foods, frozen foods, dairy products and cereal, offset by declines in foodservice packaging, including cups. The COVID-19 pandemic had a positive impact on volumes in 2020 for food and beverage packaging offset by a reduction in demand for some foodservice products.

Income from Operations

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

<i>In millions</i>	Year Ended December 31,								
	2019	Variances					2020	Decrease	Percent Change
		Price	Volume/Mix	Inflation	Foreign Exchange	Other ^(a)			
Consolidated	\$ 534.1	\$ (1.2)	\$ 13.5	\$ (29.9)	\$ 0.3	\$ 7.5	\$ 524.3	\$ (9.8)	(1.8)%

^(a) Includes the Company's cost reduction initiatives, planned mill maintenance costs, mill market downtime costs, expenses related to acquisitions and integration activities, exit activities, and shutdown and other special charges.

The Company's Income from Operations for 2020 decreased \$9.8 million or 1.8%, to \$524.3 million from \$534.1 million for the same period in 2019. Transactions recorded in Business Combinations, Shutdown and Other Special Charges and Exit Activities, Net increased \$23.4 million driven by higher charges for exit activities, including those related to our announced closures of White Pigeon, Michigan, CRB mill and West Monroe, Louisiana, PM1 containerboard machine, costs related to COVID-19, and increases in estimated liabilities related to the withdrawal from certain multi-employment benefit plans for facilities which have been closed. In addition, Income from Operations was negatively impacted in 2020 as compared to 2019 by non-commodity inflation (primarily labor and benefits), product mix, higher levels of planned maintenance and higher levels of market downtime at the uncoated SBS cupstock paper machine, and higher depreciation and amortization. Income from Operations was positively impacted in 2020 as compared to 2019 by higher volumes from organic sales growth and acquisitions, cost savings from continuous improvement and other programs, and commodity deflation.

Inflation for 2020 increased due to higher costs of labor and benefits (\$45.1 million), secondary fiber (\$22.5 million), freight (\$8.7 million), and other costs, net (\$1.9 million), partially offset by lower costs for wood (\$32.7 million), energy (\$9.9 million) and external board (\$5.7 million).

Nonoperating Pension and Postretirement Benefit

Nonoperating Pension and Postretirement Benefit was an expense of \$151.5 million in 2020 versus \$39.5 million in 2019. The increase was due to a settlement charge of \$152.5 million incurred during the first quarter of 2020 associated with the Company's purchase of a group annuity contract that transferred the remaining pension benefit obligation under the largest U.S. Plan of approximately \$713 million to an insurance company.

Interest Expense, Net

Interest Expense, Net decreased by \$11.8 million to \$128.8 million in 2020 from \$140.6 million in 2019. Interest Expense, Net decreased due to lower interest rates, partially offset by higher debt balances as compared to prior year. As of December 31, 2020, approximately 35% of the Company's total debt was subject to floating interest rates.

Income Tax Expense

During 2020, the Company recognized Income Tax Expense of \$41.6 million on Income before Income Taxes and Equity Income of Unconsolidated Entity of \$244.0 million. 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. The effective tax rate for 2020 is different than the statutory rate due to the tax effect of income attributable to noncontrolling interests as well as the mix of earnings between foreign and domestic tax jurisdictions. In addition, during 2020, the Company recorded discrete benefits of \$7.6 million and \$4.1 million related to the release of valuation allowances against the net deferred tax assets of two of its Canadian subsidiaries as a result of a planned internal restructuring and the tax effect of tax credit and other provision to return adjustments related to the 2019 U.S. federal income tax return, respectively. The effective tax rate in 2020 is lower than the effective tax rate in 2019 primarily due to these discrete benefits as compared to 2019. Also during 2019, the Company established a valuation allowance related to the net deferred tax assets of its Australian subsidiaries.

The Company utilized its remaining U.S. federal net operating losses during 2020. However, based on tax benefits associated with planned capital projects, the anticipated reduction of International Paper's investment in GPIIP, as well as tax credit carryforwards which are available to offset future U.S. federal income tax, 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 \$0.9 million in 2020 and \$0.4 million in 2019 and is related to the Company's equity investment through its GPIIL subsidiary, in the Rengo Riverwood Packaging, Ltd. joint venture.

2019 COMPARED WITH 2018

Net Sales

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

<i>In millions</i>	Year Ended December 31,							
	2018	Variances			2019	Increase	Percent Change	
		Price	Volume/Mix	Foreign Exchange				
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 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 result 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:

<i>In millions</i>	Year Ended December 31,								
	2018	Variances				2019	Increase	Percent Change	
		Price	Volume/Mix	Inflation	Foreign Exchange	Other ^(a)			
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.

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.

Segment Reporting

The Company has three reportable segments as follows:

Paperboard Mills includes the eight North American paperboard mills that 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 represents 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 Good ("CPG") companies, and cups, lids and food containers sold primarily to foodservice companies and quick-service restaurants ("QSR") 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 in Note 1 in the Notes to Consolidated Financial Statements included herein under "Item 8. Financial Statements and Supplementary Data."

<i>In millions</i>	Year Ended December 31,		
	2020	2019	2018
NET SALES:			
Paperboard Mills	\$ 988.1	\$ 1,094.8	\$ 1,078.1
Americas Paperboard Packaging	4,650.1	4,233.7	4,098.3
Europe Paperboard Packaging	764.6	689.3	695.9
Corporate/Other/Eliminations ^(a)	157.1	142.3	157.1
Total	\$ 6,559.9	\$ 6,160.1	\$ 6,029.4
(LOSS) INCOME FROM OPERATIONS:			
Paperboard Mills ^(b)	\$ (109.9)	\$ 33.1	\$ 30.6
Americas Paperboard Packaging	638.5	477.7	420.1
Europe Paperboard Packaging	65.9	60.3	46.1
Corporate and Other ^(c)	(70.2)	(37.0)	(38.6)
Total	\$ 524.3	\$ 534.1	\$ 458.2

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

^(b) Includes accelerated depreciation related to exit activities in 2020 and 2019, excludes \$29.6 million related to the Augusta, Georgia mill outage in 2018.

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

2020 COMPARED WITH 2019

Paperboard Mills - Net Sales decreased from prior year due to customer mix, lower open market volume primarily of containerboard due to the shutdown of the PM1 containerboard machine and CUK as the Company internalized more paperboard tons, and lower selling prices.

Income from Operations decreased due to the lower selling prices, lower open market volume, higher levels of planned maintenance at the mills, higher levels of market downtime at the SBS cupstock paper machine, higher labor and benefits costs, increased depreciation expense including accelerated depreciation related to exit activities, and customer mix of open market volume partially offset by productivity improvements, including benefits from capital projects, and commodity deflation. The commodity deflation was primarily due to lower prices for wood and energy offset by higher prices for secondary fiber.

Americas Paperboard Packaging - Net Sales increased due to higher selling prices, the Greif, Artistic, and Quad acquisitions, organic sales growth including conversions to our paperboard packaging solutions, and new product introductions offset by unfavorable foreign currency exchange rates. Higher volumes in global beverage, dry foods, frozen foods, dairy products and cereal were offset by declines in foodservice packaging, including cups. In beverage, volumes increased in all categories including soft drink, craft and specialty, and big beer. COVID-19 had a positive impact on volumes in 2020 for food and beverage packaging offset by a reduction in demand for some foodservice products.

Income from Operations increased due to higher volumes including from organic sales growth and acquisitions, higher selling prices, cost savings through continuous improvement and other programs, and commodity deflation, partially offset by other inflation (primarily labor and benefits), higher levels of market downtime at the SBS cupstock paper machine, and unfavorable foreign currency exchange rates. The commodity deflation was primarily due to lower prices for wood, energy, and external board offset by higher prices for secondary fiber and freight.

Europe Paperboard Packaging - Net Sales increased due to higher pricing, increased volumes led by beverage, machine sales, and convenience, favorable mix, and favorable foreign currency exchange rates.

Income from Operations increased due to higher selling prices, increased volumes, commodity deflation, and favorable foreign currency exchange rates partially offset by higher labor and benefits, unfavorable mix, and COVID-19 costs.

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.

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.

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

<i>In millions</i>	Years Ended December 31,	
	2020	2019
Net Cash Provided by Operating Activities	\$ 824.7	\$ 665.8
Net Cash Used in Investing Activities	\$ (647.8)	\$ (224.3)
Net Cash Used in Financing Activities	\$ (152.0)	\$ (360.8)

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 2020 totaled \$824.7 million, compared to \$665.8 million in 2019. The increase was due primarily to the restructuring of certain of the Company's accounts receivable sale and securitization programs as well as improved operations as compared to prior year. Pension contributions in 2020 and 2019 were \$19.1 million and \$11.3 million, respectively.

Net cash used in investing activities in 2020 totaled \$647.8 million, compared to \$224.3 million in 2019. Capital spending was \$646.3 million and \$352.9 million in 2020 and 2019, respectively. In 2020, the Company paid approximately \$41 million and \$80 million for the Quad and Greif acquisitions, respectively. 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 \$54.5 million, net of cash acquired, for the 2019 Acquisitions. Net cash receipts related to the accounts receivable securitization and sale programs were \$127.0 million and \$187.7 million in 2020 and 2019, respectively.

Net cash used in financing activities in 2020 totaled \$152.0 million, compared to \$360.8 million in 2019. Current year activities include a debt offering of \$450 million aggregate principal amount of 3.50% senior notes due 2028, and a debt offering of \$350 million aggregate principal amount of 3.50% senior notes due 2029. The Company used the net proceeds to repay outstanding borrowings under its senior secured revolving credit facility. The Company also paid \$500 million toward the redemption of IP's ownership interest in GPIIP. Additionally, the Company made borrowings under revolving credit facilities primarily for capital spending, redemption of IP's ownership interest, repurchase of common stock of \$315.6 million and payments on debt of \$36.5 million. The Company also paid dividends and distributions of \$102.8 million and withheld \$9.1 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 a debt offering of \$300 million aggregate principal amount of 4.75% senior notes due 2027. The Company also made borrowings under revolving credit facilities primarily for capital spending, repurchase of 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 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 (redeemed in January 2021), 4.875% Senior Notes due 2022, 4.125% Senior Notes due 2024, 4.75% Senior Notes due 2027, 3.50% Senior Notes due 2028, and 3.50% Senior Notes due 2029 (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.

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, 2020 and 2019, respectively:

<i>In millions</i>	Year Ended December 31,	
	2020	2019
Receivables Sold and Derecognized	\$ 2,849.8	\$ 2,654.2
Proceeds Collected on Behalf of Financial Institutions	2,787.4	2,254.9
Net Proceeds Received From Financial Institutions	54.9	66.5
Deferred Purchase Price at December 31 ^(a)	5.3	0.7
Pledged Receivables at December 31	201.0	177.5

^(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, 2020 and 2019, the Company sold receivables of approximately \$368 million and \$238 million, respectively, related to these factoring arrangements.

Receivables sold under all programs subject to continuing involvement, which consist principally of collection services, were approximately \$621 million and \$562 million as of December 31, 2020 and 2019, respectively.

Covenant Restrictions

Covenants contained in the Current 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 Current 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 Current Credit Agreement requires that the Company maintain a maximum Consolidated Total Leverage Ratio of less than 4.25 to 1.00. At December 31, 2020, the Company was in compliance with such covenant and the ratio was 3.07 to 1.00.

The Company must also comply with a minimum Consolidated Interest Expense Ratio of 3.00 to 1.00. At December 31, 2020, the Company was in compliance with such covenant and the ratio was 8.89 to 1.00.

As of December 31, 2020, 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 2020 were \$651.3 million (\$646.3 million was paid), compared to \$359.1 million (\$352.9 million was paid) in 2019. During 2020, the Company had capital spending of \$605.7 million for improving process capabilities, \$15.4 million for capital spares and \$30.2 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, 2020 is as follows:

<i>In millions</i>	Payments Due by Period				
	Total	Less than 1 Year	1-3 Years	3-5 Years	More than 5 Years
Debt Obligations	\$ 3,527.2	\$ 492.2	\$ 1,631.3	\$ 300.5	\$ 1,103.2
Operating Leases	234.0	64.1	92.0	43.6	34.3
Finance Leases	207.8	12.6	24.6	24.9	145.7
Interest Payable	464.5	98.9	150.0	104.8	110.8
Purchase Obligations ^(a)	691.8	379.4	157.5	96.1	58.8
Total Contractual Obligations ^(b)	\$ 5,125.3	\$ 1,047.2	\$ 2,055.4	\$ 569.9	\$ 1,452.8

^(a) Purchase obligations primarily consist of commitments for the purchase of fiber and chip processing along with commitments associated with building the new CRB paper machine in Kalamazoo, Michigan.

^(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.

International Operations

For 2020, before intercompany eliminations, net sales from operations outside of the U.S. represented approximately 21% of the Company's net sales. The Company's revenues from export sales fluctuate with changes in foreign currency exchange rates. At December 31, 2020, approximately 16.0% 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 \$17.7 million, which was recorded in Other Comprehensive (Loss) Income for the year ended December 31, 2020. 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 2021 and 2022. 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.”

Off-Balance Sheet Arrangements

The Company does not have any off-balance sheet arrangements.

CRITICAL ACCOUNTING JUDGEMENTS AND ESTIMATES

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, future cash flows associated with impairment testing for goodwill and long-lived assets, and deferred income taxes.

• 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 \$167.9 million in 2020 compared to \$54.9 million in 2019. The 2020 expense includes a \$153.7 million charge associated with the termination and settlement of its largest U.S. plan. 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 4.12% and 4.74% in 2020 and 2019, 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, 2020, the net actuarial loss was \$105.5 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.

The discount rate used to determine the present value of future pension obligations at December 31, 2020 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 2.11% and 2.69% in 2020 and 2019, respectively.

The Company's pension expense is estimated to be approximately \$13.3 million in 2021. The estimate is based on a weighted average expected long-term rate of return of 3.59%, a weighted average discount rate of 2.11% 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, 2020 projected benefit obligation would increase approximately \$10 million.

The fair value of assets in the Company's plans was \$516.3 million at December 31, 2020 and \$1,172.4 million at December 31, 2019. The projected benefit obligations exceed the fair value of plan assets by \$76.5 million and \$83.0 million as of December 31, 2020 and 2019, respectively. The accumulated benefit obligation ("ABO") exceeded the fair value of plan assets by \$71.8 million at the end of 2020. At the end of 2019, the ABO exceeded the fair value of plan assets by \$77.4 million.

• **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, 2020, 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, 2020, 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, 2020. 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 7.0% 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 17% and 37%, respectively, whereas all other reporting units exceeded by more than 45%. 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 \$42.9 million and \$14.7 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, 2020, the Company has recorded a valuation allowance of \$34.4 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, 2019, a total valuation allowance of \$41.1 million was recorded.

As of December 31, 2020, the Company has 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. In addition, the Company provided deferred income taxes for future Canadian withholding tax to the extent of excess cash available for distribution after consideration of working capital needs and other debt settlement of its Canadian subsidiary, Graphic Packaging International Canada, ULC. During the year ended December 31, 2020, the Company distributed its remaining paid-up capital in Canada and as a result, the Company expects to incur Canadian withholding tax on future distributions. 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. Due to the deemed taxation of all post-1986 earnings and profits required by the Act, the Company has determined that no deferred tax liability should be recorded related to the outside basis difference of its Canadian subsidiary of approximately \$51.4 million as of December 31, 2020.

The Company has not provided for deferred U.S. income taxes on outside basis differences of approximately \$55 million in its other international subsidiaries because of the Company's intention to indefinitely reinvest these earnings outside the U.S. The Company's assertion with respect to these subsidiaries 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 income tax liability (primarily withholding tax in certain jurisdictions and some state tax) on the unremitted earnings or any other associated outside basis differences 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 2021 is expected to be in the range of \$690 million to \$710 million.

The Company also expects the following in 2021:

- Depreciation and amortization expense of approximately \$460 million, excluding approximately \$5 million of pension amortization and \$24 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, 2020, the Company had active interest rate swap agreements with a notional amount of \$200 million expiring in January 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

<i>In millions</i>	Expected Maturity Date						Total	Fair Value
	2021	2022	2023	2024	2025	Thereafter		
Total Debt								
Fixed Rate	\$ 425.0	\$ 250.7	\$ 0.5	\$ 300.5	\$ —	\$ 1,103.2	\$ 2,079.9	\$ 2,173.0
Average Interest Rate	4.75 %	4.86 %	1.73 %	4.12 %	— %	3.83 %		
Variable Rate	\$ 63.9	\$ 127.7	\$ 1,252.4	\$ —	\$ —	\$ —	\$ 1,444.0	\$ 1,451.7
	LIBOR + Spread	LIBOR + Spread	LIBOR + Spread	—	—	—	—	—

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

<i>In millions</i>	Expected Maturity Date						Total
	2021	2022	2023	2024	2025	Thereafter	
Notional	\$ —	\$ 200.0	\$ —	\$ —	\$ —	\$ —	\$ 200.0
Average Pay Rate	— %	2.87 %	— %	— %	— %	— %	— %
Average Receive Rate	—	LIBOR	—	—	—	—	—

Foreign Exchange Rates

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, 2020 and 2019, 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, 2020 and 2019.

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

<i>In millions</i>	December 31, 2020	
	Contract Amount	Fair Value
FORWARD EXCHANGE AGREEMENTS:		
Receive \$US/Pay Yen	\$ 18.5	\$ (0.2)
Weighted average contractual exchange rate	104.1	
Receive \$US/Pay Euro	\$ 53.8	\$ (1.6)
Weighted average contractual exchange rate	1.2	
Receive \$US/Pay GBP	\$ 29.3	\$ (1.1)
Weighted average contractual exchange rate	1.3	

Derivatives not Designated as Hedges

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, 2020, multiple foreign currency forward exchange contracts existed, with maturities ranging up to two months. Those forward currency exchange contracts outstanding at December 31, 2020, when aggregated and measured in U.S. dollars at December 31, 2020 contractual rates, had net notional amounts totaling \$80.0 million. The Company continuously monitors these forward exchange contracts and adjusts accordingly to minimize the exposure.

Natural Gas Contracts

The Company has hedged a portion of its expected natural gas usage for 2021 and 2022. The carrying amount and fair value of the natural gas swap contracts is a net asset of \$2.1 million as of December 31, 2020. 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 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

<i>In millions, except per share amounts</i>	Year Ended December 31,		
	2020	2019	2018
Net Sales	\$ 6,559.9	\$ 6,160.1	\$ 6,029.4
Cost of Sales	5,459.7	5,067.5	5,077.0
Selling, General and Administrative	512.6	511.8	472.1
Other Expense, Net	2.0	8.8	7.2
Business Combinations, Shutdown and Other Special Charges, Exit Activities and Gain on Sale of Assets, Net	61.3	37.9	14.9
Income from Operations	524.3	534.1	458.2
Nonoperating Pension and Postretirement Benefit (Expense) Income	(151.5)	(39.5)	14.9
Interest Expense, Net	(128.8)	(140.6)	(123.7)
Loss on Modification or Extinguishment of Debt	—	—	(1.9)
Income before Income Taxes and Equity Income of Unconsolidated Entity	244.0	354.0	347.5
Income Tax Expense	(41.6)	(76.3)	(54.7)
Income before Equity Income of Unconsolidated Entity	202.4	277.7	292.8
Equity Income of Unconsolidated Entity	0.9	0.4	1.2
Net Income	\$ 203.3	\$ 278.1	\$ 294.0
Net Income Attributable to Noncontrolling Interests	(36.0)	(71.3)	(72.9)
Net Income Attributable to Graphic Packaging Holding Company	\$ 167.3	\$ 206.8	\$ 221.1
Net Income Per Share Attributable to Graphic Packaging Holding Company — Basic	\$ 0.60	\$ 0.70	\$ 0.71
Net Income Per Share Attributable to Graphic Packaging Holding Company — Diluted	\$ 0.60	\$ 0.70	\$ 0.71

The accompanying notes are an integral part of the consolidated financial statements.

GRAPHIC PACKAGING HOLDING COMPANY
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

Year Ended December 31,
2020

<i>In millions</i>	Graphic Packaging Holding Company	Noncontrolling Interest	Redeemable Noncontrolling Interest	Total
Net Income (Loss)	\$ 167.3	\$ 39.2	\$ (3.2)	\$ 203.3
Other Comprehensive Income (Loss), Net of Tax				
Derivative Instruments	3.5	0.7	(0.1)	4.1
Pension and Postretirement Benefit Plans	99.9	29.4	9.5	138.8
Currency Translation Adjustment	16.5	1.7	(0.5)	17.7
Total Other Comprehensive Income, Net of Tax	119.9	31.8	8.9	160.6
Total Comprehensive Income	\$ 287.2	\$ 71.0	\$ 5.7	\$ 363.9
2019				
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

The accompanying notes are an integral part of the consolidated financial statements.

**GRAPHIC PACKAGING HOLDING COMPANY
CONSOLIDATED BALANCE SHEETS**

<i>In millions, except share and per share amounts</i>	December 31,	
	2020	2019
ASSETS		
Current Assets:		
Cash and Cash Equivalents	\$ 179.0	\$ 152.9
Receivables, Net	654.4	504.5
Inventories, Net	1,127.6	1,095.9
Other Current Assets	59.2	52.3
Total Current Assets	2,020.2	1,805.6
Property, Plant and Equipment, Net	3,560.0	3,253.8
Goodwill	1,477.6	1,477.9
Intangible Assets, Net	436.9	477.3
Other Assets	309.9	275.3
Total Assets	\$ 7,804.6	\$ 7,289.9
LIABILITIES		
Current Liabilities:		
Short-Term Debt and Current Portion of Long-Term Debt	\$ 497.2	\$ 50.4
Accounts Payable	825.0	716.1
Compensation and Employee Benefits	213.1	168.4
Interest Payable	30.3	24.7
Other Accrued Liabilities	291.0	239.1
Total Current Liabilities	1,856.6	1,198.7
Long-Term Debt	3,147.0	2,809.9
Deferred Income Tax Liabilities	539.6	511.8
Accrued Pension and Postretirement Benefits	129.8	140.4
Other Noncurrent Liabilities	291.3	266.8
Commitments (Note 13)		
Redeemable Noncontrolling Interest (Note 15)	—	304.3
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; 267,726,373 and 290,246,907 shares issued and outstanding at December 31, 2020 and December 31, 2019, respectively	2.7	2.9
Capital in Excess of Par Value	1,714.6	1,876.7
(Accumulated Deficit) Retained Earnings	(47.1)	56.4
Accumulated Other Comprehensive Loss	(245.9)	(365.8)
Total Graphic Packaging Holding Company Shareholders' Equity	1,424.3	1,570.2
Noncontrolling Interest	416.0	487.8
Total Equity	1,840.3	2,058.0
Total Liabilities and Shareholders' Equity	\$ 7,804.6	\$ 7,289.9

The accompanying notes are an integral part of the consolidated financial statements.

**GRAPHIC PACKAGING HOLDING COMPANY
CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY**

<i>In millions, except share amounts</i>	Common Stock		Capital in Excess of Par Value	(Accumulated Deficit) Retained Earnings	Accumulated Other Comprehensive (Loss) Income	Noncontrolling Interests	Total Equity
	Shares	Amount					
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
Net Income	—	—	—	167.3	—	39.2	206.5
Redeemable Noncontrolling Interest Redemption Value Adjustment	—	—	12.2	—	—	—	12.2
Distribution of Membership Interest	—	—	—	—	—	(19.3)	(19.3)
Other Comprehensive Income, Net of Tax:							
Derivative Instruments	—	—	—	—	3.5	0.7	4.2
Pension and Postretirement Benefit Plans	—	—	—	—	99.9	29.4	129.3
Currency Translation Adjustment	—	—	—	—	16.5	1.7	18.2
Repurchase of Common Stock	(23,420,010)	(0.2)	(127.6)	(187.8)	—	—	(315.6)
Redemption of IP's Ownership Interest	—	—	(87.4)	—	—	(123.5)	(210.9)
Tax Effect IP Redemption	—	—	16.0	—	—	—	16.0
Dividends Declared	—	—	—	(83.0)	—	—	(83.0)
Recognition of Stock-Based Compensation	—	—	24.7	—	—	—	24.7
Issuance of Shares for Stock-Based Awards	899,476	—	—	—	—	—	—
Balances at December 31, 2020	267,726,373	\$ 2.7	\$ 1,714.6	\$ (47.1)	\$ (245.9)	\$ 416.0	\$ 1,840.3

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

The accompanying notes are an integral part of the consolidated financial statements.

GRAPHIC PACKAGING HOLDING COMPANY
CONSOLIDATED STATEMENTS OF CASH FLOWS

<i>In millions</i>	Year Ended December 31,		
	2020	2019	2018
CASH FLOWS FROM OPERATING ACTIVITIES:			
Net Income	\$ 203.3	\$ 278.1	\$ 294.0
Adjustments to Reconcile Net Income to Net Cash Provided by (Used in) Operating Activities:			
Depreciation and Amortization	475.8	447.2	430.6
Amortization of Deferred Debt Issuance Costs	5.7	4.7	4.4
Deferred Income Taxes	(0.7)	52.7	26.0
Amount of Postretirement Expense Greater (Less) Than Funding	147.1	41.5	(4.7)
Gain on the Sale of Assets, net	—	—	(38.6)
Other, Net	12.9	15.1	35.3
Changes in Operating Assets and Liabilities, Net of Acquisitions (See Note 3)	(19.4)	(173.5)	(1,120.8)
Net Cash Provided by (Used in) Operating Activities	824.7	665.8	(373.8)
CASH FLOWS FROM INVESTING ACTIVITIES:			
Capital Spending	(616.1)	(330.9)	(378.8)
Packaging Machinery Spending	(30.2)	(22.0)	(16.4)
Acquisition of Businesses, Net of Cash Acquired	(120.6)	(54.5)	(89.4)
Proceeds Received from Sale of Assets, Net of Selling Costs	—	—	49.4
Beneficial Interest on Sold Receivables	135.5	343.6	1,476.7
Beneficial Interest Obtained in Exchange for Proceeds	(8.5)	(155.9)	(345.5)
Other, Net	(7.9)	(4.6)	(6.9)
Net Cash (Used in) Provided by Investing Activities	(647.8)	(224.3)	689.1
CASH FLOWS FROM FINANCING ACTIVITIES:			
Repurchase of Common Stock	(315.6)	(128.8)	(119.1)
Payments on Debt	(36.5)	(36.5)	(152.4)
Proceeds from Issuance of Debt	800.0	300.0	—
Redemption of Noncontrolling Interest	(500.0)	—	—
Borrowings under Revolving Credit Facilities	2,613.5	2,497.5	1,876.9
Payments on Revolving Credit Facilities	(2,596.8)	(2,865.1)	(1,787.5)
Debt Issuance Costs	(13.9)	(5.0)	(7.9)
Repurchase of Common Stock related to Share-Based Payments	(9.1)	(4.1)	(4.3)
Dividends and Distributions Paid to GPIP Partner	(102.8)	(112.7)	(111.0)
Other, Net	9.2	(6.1)	(5.4)
Net Cash Used In Financing Activities	(152.0)	(360.8)	(310.7)
EFFECT OF EXCHANGE RATE CHANGES ON CASH	1.2	1.7	(1.5)
Net Increase in Cash and Cash Equivalents	26.1	82.4	3.1
Cash and Cash Equivalents at Beginning of Year	152.9	70.5	67.4
CASH AND CASH EQUIVALENTS AT END OF YEAR	\$ 179.0	\$ 152.9	\$ 70.5
Non-cash Investing Activities:			
Beneficial Interest (Sold) Obtained in Exchange for Trade Receivables	\$ 135.2	\$ (68.8)	\$ 1,025.7
Right-of-Use Assets Obtained in Exchange for New Operating Lease Liabilities	\$ 70.5	\$ 73.1	\$ —
Non-cash Investment in NACP Combinations	\$ —	\$ —	\$ 1,111.2
Non-cash Financing Activities:			
Right-of-Use Assets Obtained in Exchange for New Finance Lease Liabilities	\$ 0.1	\$ 15.5	\$ —
Non-cash Financing of NACP Combination	\$ —	\$ —	\$ 660.0

The accompanying notes are an integral part of the consolidated financial statements.

**GRAPHIC PACKAGING HOLDING COMPANY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

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 sustainable, 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 innovative sustainable 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.

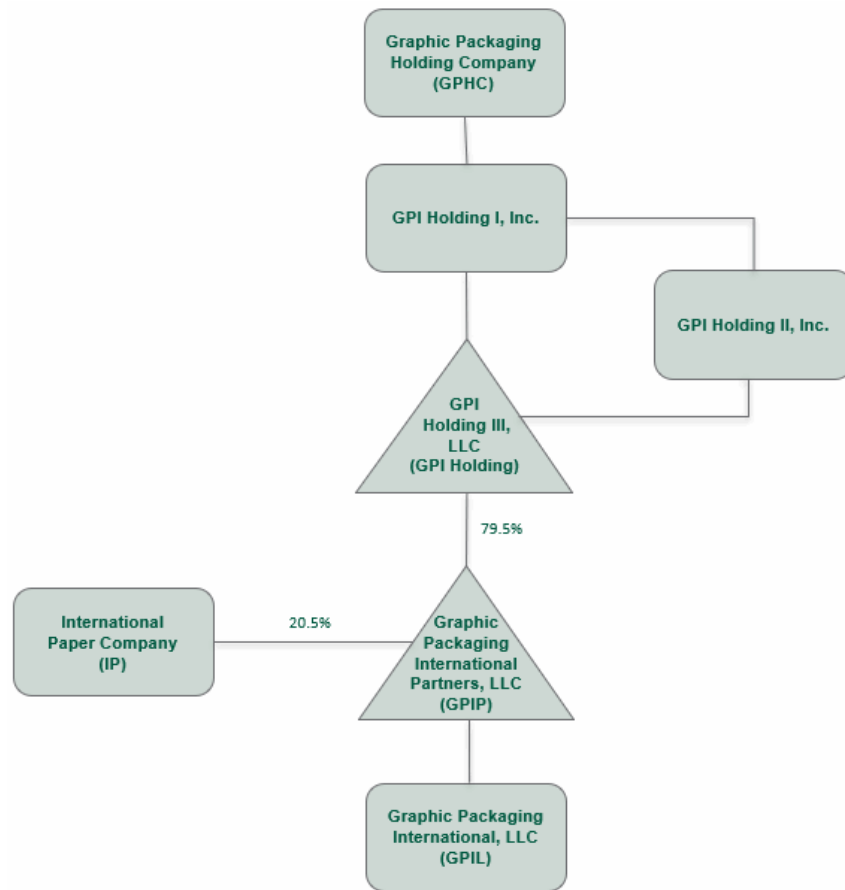
On January 1, 2018, GPHC, a Delaware corporation, International Paper Company, a New York corporation (“IP”), Graphic Packaging International Partners, LLC, a Delaware limited liability company formerly known as Gazelle Newco LLC and a wholly-owned subsidiary of the Company (“GPIP”), and Graphic Packaging 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.

GRAPHIC PACKAGING HOLDING COMPANY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

The following diagram illustrates the organization of the Company on January 1, 2018, immediately subsequent to the transactions described above (not including subsidiaries of GPIL):



On January 28, 2020, the Company announced that IP had 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 in cash. As a result, IP's ownership interest in GPIP decreased to 18.3% as of January 29, 2020.

On August 10, 2020, the Company announced that IP had notified the Company of its intent to exchange additional partnership units. Per the agreement between the parties, on August 13, 2020, GPIP purchased 17.4 million partnership units from IP for \$250 million in cash, which included full redemption of the remaining 3.1 million partnership units that were required to be redeemed in cash. As a result, IP's ownership interest in GPIP decreased to 14.5% as of August 13, 2020.

Unless otherwise negotiated by the parties, IP's next opportunity to exchange its partnership units begins 180 days from the August 13, 2020 purchase date and is limited to the lesser of \$250 million or 25% of the units owned immediately following the initial transaction, subject to a minimum. IP will have further opportunities to exchange its partnership units beginning 180 days after each purchase date. The Company may choose to satisfy these exchanges using shares of its common stock, cash, or a combination thereof.

GRAPHIC PACKAGING HOLDING COMPANY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

During 2020, 2019 and 2018, GPIP repurchased 44.2 million partnership units from GPI Holding, which distributed the proceeds to GPHC. GPHC used the proceeds from these repurchases to repurchase 44.2 million shares of GPHC's common stock. These partnership unit repurchases increased IP's ownership interest in GPIP, which was 5.0% at December 31, 2020.

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 GPIL subsidiary, is a party to a Japanese joint venture, Rengo Riverwood Packaging, Ltd. in which it holds a 50% ownership interest that 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.

GRAPHIC PACKAGING HOLDING COMPANY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

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, 2020 and 2019, respectively:

<i>In millions</i>	Year Ended December 31,	
	2020	2019
Receivables Sold and Derecognized	\$ 2,849.8	\$ 2,654.2
Proceeds Collected on Behalf of Financial Institutions	2,787.4	2,254.9
Net Proceeds Received From Financial Institutions	54.9	66.5
Deferred Purchase Price at December 31 ^(a)	5.3	0.7
Pledged Receivables at December 31	201.0	177.5

^(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, 2020 and 2019, the Company sold receivables of approximately \$68 million and \$238 million respectively, related to these factoring arrangements.

Receivables sold under all programs subject to continuing involvement, which consists principally of collection services, were approximately \$621 million and \$562 million as of December 31, 2020 and 2019, 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. For the years ended December 31, 2020, 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 \$6.9 million, \$2.8 million and \$2.8 million for the years ended December 31, 2020, 2019 and 2018, respectively.

GRAPHIC PACKAGING HOLDING COMPANY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

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 2020, 2019 and 2018 was \$13.7 million, \$387.9 million and \$360.6 million, respectively.

Intangible Assets

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, 2020 and 2019:

<i>In millions</i>	December 31, 2020			December 31, 2019		
	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
Amortizable Intangible Assets:						
Customer Relationships	\$ 965.2	\$ (556.4)	\$ 408.8	\$ 946.5	\$ (497.6)	\$ 448.9
Patents, Trademarks, Licenses, and Leases	141.1	(113.0)	28.1	138.8	(110.4)	28.4
Total	\$ 1,106.3	\$ (669.4)	\$ 436.9	\$ 1,085.3	\$ (608.0)	\$ 477.3

The Company recorded amortization expense for the years ended December 31, 2020, 2019 and 2018 of \$2.1 million, \$59.3 million and \$70.0 million, respectively. The Company expects amortization expense for the next five consecutive years to be approximately as follows: \$60 million, \$57 million, \$55 million, \$53 million, and \$49 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. Two or more components of an operating segment are aggregated and deemed a single reporting unit if the components have similar economic characteristics.

GRAPHIC PACKAGING HOLDING COMPANY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

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, future operating results, business plans, economic projections of revenues and operating margins, 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, 2020, and concluded goodwill was not impaired for any of its reporting units.

The following is a rollforward of goodwill by reportable segment:

<i>In millions</i>	Paperboard Mills	Americas Paperboard Packaging	Europe Paperboard Packaging	Corporate/Other ^(a)	Total
Balance at December 31, 2018	\$ 506.8	\$ 882.2	\$ 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	\$ 896.9	\$ 59.8	\$ 14.4	\$ 1,477.9
Acquisition of Businesses	—	—	—	—	—
Foreign Currency Effects	(0.5)	2.2	(1.0)	(1.0)	(0.3)
Balance at December 31, 2020	\$ 506.3	\$ 899.1	\$ 58.8	\$ 13.4	\$ 1,477.6

^(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. The Company's asset retirement obligations consist primarily of landfill closure and post-closure costs at certain of our mills. At December 31, 2020 and 2019, the Company had liabilities of \$11.4 million and \$10.1 million, respectively. The liabilities are primarily reflected as Other Noncurrent Liabilities in the Company's Consolidated Balance Sheets.

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, 2020, 2019 and 2018, the Company recognized \$6,536.5 million, \$6,140.8 million and \$6,011.9 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, 2020 and 2019, contract assets were \$15.3 million and \$24.3 million, respectively. The Company's contract liabilities consist principally of rebates, and as of December 31, 2020 and 2019 were \$56.1 million and \$49.6 million, respectively.

The Company did not have a material amount relating to backlog orders at December 31, 2020 or 2019.

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, 2020, 2019 and 2018 were \$10.2 million, \$9.2 million and \$8.7 million, respectively.

GRAPHIC PACKAGING HOLDING COMPANY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

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

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

<i>In millions</i>	2020		2019		2018	
Charges Associated with Business Combinations	\$	(1.1)	\$	4.1	\$	46.8
Shutdown and Other Special Charges		37.8		23.6		6.7
Exit Activities ^(a)		24.6		10.2		—
Gain on Sale of Assets		—		—		(38.6)
Total	\$	61.3	\$	37.9	\$	14.9

^(a) Relates to the Company's CRB mills, converting facility closures and the PM1 containerboard machine exit activities (see "Note 20 — Exit Activities").

2020

During the fourth quarter of 2020, the Company incurred incremental costs associated with paying payroll to employees during necessary quarantines due to COVID-19. During the second quarter of 2020, the Company made one-time payments to front-line production employees and made contributions to local food banks in the communities where our manufacturing operations are located. The charges associated with these costs and payments were recorded in Shutdown and Other Special Charges in the table above.

The Company has established estimated liabilities related to the partial or complete withdrawal from certain multi-employment benefit plans for facilities which have been closed. During the second quarter of 2020, the Company increased its estimated withdrawal liability for these plans by \$12.2 million. During the fourth quarter of 2020, the Company entered into a settlement agreement with one of its closed multi-employment benefit plans and recorded a \$3.9 million reduction in its estimated withdrawal liability for this plan. These items were recorded in Shutdown and Other Special Charges in the table above. For more information, see "Note 8 — Pensions and Other Postretirement Benefits."

On January 31, 2020, the Company acquired a folding carton facility from Quad/Graphics, Inc. ("Quad"), a commercial printing company. The converting facility is located in Omaha, Nebraska and is included in the Americas Paperboard Packaging reportable segment. During the second quarter of 2020, the Company recorded a bargain purchase gain of \$6.6 million as the net fair value of assets acquired and liabilities assumed was greater than the purchase price. The gain associated with this acquisition is included in Charges Associated with Business Combinations in the table above. For more information, see "Note 4 — Business Combinations."

In March 2020, the Company made the decision to close the White Pigeon, Michigan CRB mill and shut down the PM1 containerboard machine in West Monroe, Louisiana. During the second quarter of 2020, the Company closed the White Pigeon, Michigan CRB mill and shut down the PM1 containerboard machine. Charges associated with these projects are included in Exit Activities in the table above. For more information, see "Note 20 — Exit Activities."

On April 1, 2020, the Company acquired the Consumer Packaging Group business from Greif, Inc. ("Greif"), a leader in industrial packaging products and services. The acquisition included seven converting facilities across the United States which are included in the Americas Paperboard Packaging reportable segment. Charges associated with this acquisition are included in Charges Associated with Business Combinations in the table above. For more information, see "Note 4 — Business Combinations."

In June 2020, the Company made the decision to close certain converting facilities that were acquired from Greif. The Burlington, North Carolina converting facility and the Los Angeles, California converting facility were closed in the third quarter of 2020. Charges associated with the shutdown of these converting facilities are included in Exit Activities in the table above. For more information, see "Note 20 — Exit Activities."

GRAPHIC PACKAGING HOLDING COMPANY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

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 paperboard mill located in White Pigeon, Michigan (included in the Paperboard Mills reportable segment).

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."

2018

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).

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 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 \$7.1 million.

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.

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

During 2019, the Company began a three-year program to dismantle and dispose of idle and abandoned assets primarily at the paperboard mills. Charges related to this program in 2019 and 2020 were \$10.4 million and \$13.6 million, respectively. Expected charges for this program for 2021 are approximately \$26 million. Charges associated with this program are included in Shutdown and Other Special Charges in the table above.

Share Repurchases and Dividends

On January 28, 2019, GPHC's board of directors authorized an additional share repurchase program to allow GPHC to purchase up to \$500 million of GPHC'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"). A previous \$250 million share repurchase program was authorized on January 10, 2017 (the "2017 share repurchase program").

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 accumulated deficit.

GRAPHIC PACKAGING HOLDING COMPANY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

The following presents GPHC's share repurchases for the years ended December 31, 2020, 2019, and 2018:

<i>Amount repurchased in millions</i>	Amount Repurchased	Number of Shares Repurchased	Average Price
2020	\$ 315.6	23,420,010	\$ 13.48
2019	\$ 127.9	10,191,257 ^(a)	\$ 12.55
2018	\$ 120.0	10,566,144	\$ 11.35

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

At December 31, 2020, GPHC had approximately \$146.5 million remaining under the 2019 share repurchase program.

During 2020 and 2019, GPHC paid cash dividends of \$84.7 million and \$88.7 million, respectively.

Adoption of New Accounting Standards

Effective January 1, 2020, the Company adopted Accounting Standards Update ("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. 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, 2020, the Company adopted 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 adoption of this standard did not have a material impact on the Company's financial disclosures.

Effective January 1, 2020, the Company adopted ASU No. 2018-15, *Intangibles - Goodwill and Other - Internal-Use Software (Subtopic 350-40): Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract*. This ASU broadens the scope of Accounting Standards Codification ("ASC") 350-40 with an updated definition of a hosting arrangement and clarifies certain aspects of accounting for implementation costs incurred in a cloud computing arrangement that is a service contract. 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, 2020, the Company adopted 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 ASU removes certain disclosures that are not considered cost beneficial, clarifies certain required disclosures and adds additional disclosures. The adoption of this standard did not have a material impact on the Company's financial position, results of operations and cash flows.

Accounting Standards Not Yet Adopted

In December 2019, the FASB issued ASU No. 2019-12, *Income Taxes (Topic 740): Simplifying the Accounting for Income Taxes*. This amendment modifies ASC 740 to simplify the accounting for income taxes. The guidance is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2020. The Company is currently evaluating the impact of this new accounting guidance.

In March 2020, the FASB issued ASU No. 2020-04, *Reference Rate Reform (Topic 848): Facilitation of the Effects of Reference Rate Reform on Financial Reporting*. This standard provides temporary optional expedients and exceptions for applying GAAP guidance on contract modifications and hedge accounting to ease the financial reporting burdens of the expected market transition from the LIBOR and other interbank offered rates to alternative reference rates, such as the Secured Overnight Financing Rate ("SOFR"). The ASU can be adopted after its issuance date through December 31, 2022. The Company is currently evaluating the impact of this new accounting guidance.

GRAPHIC PACKAGING HOLDING COMPANY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

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:

<i>In millions</i>	2020	2019
Trade	\$ 608.5	\$ 462.7
Less: Allowance	(11.9)	(11.5)
	596.6	451.2
Other	57.8	53.3
Total	\$ 654.4	\$ 504.5

Inventories, Net by major class:

<i>In millions</i>	2020	2019
Finished Goods	\$ 471.3	\$ 434.8
Work in Progress	132.5	123.4
Raw Materials	348.5	370.0
Supplies	175.3	167.7
Total	\$ 1,127.6	\$ 1,095.9

GRAPHIC PACKAGING HOLDING COMPANY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

Property, Plant and Equipment, Net:

<i>In millions</i>	2020	2019
Property, Plant and Equipment, at Cost:		
Land and Improvements	\$ 137.2	\$ 130.4
Buildings ^(a)	671.3	655.5
Machinery and Equipment ^(b)	6,082.0	5,832.6
Construction-in-Progress	478.3	202.6
	7,368.8	6,821.1
Less: Accumulated Depreciation ^{(a)(b)}	(3,808.8)	(3,567.3)
Total	\$ 3,560.0	\$ 3,253.8

^(a) Includes gross assets under finance lease of \$105.5 million and related accumulated depreciation of \$10.7 million as of December 31, 2020, and gross assets under finance lease of \$105.5 million and related accumulated depreciation of \$5.4 million as of December 31, 2019.

^(b) Includes gross assets under finance lease of \$36.8 million and related accumulated depreciation of \$9.4 million as of December 31, 2020, and gross assets under finance lease of \$36.6 million and related accumulated depreciation of \$6.8 million as of December 31, 2019.

Other Accrued Liabilities:

<i>In millions</i>	2020	2019
Dividends Payable	\$ 20.1	\$ 21.8
Deferred Revenue	21.1	15.2
Accrued Customer Rebates	40.5	36.5
Fair Value of Derivatives, current portion	8.5	8.5
Other Accrued Taxes	56.5	38.4
Accrued Payables	37.6	31.4
Operating Lease Liabilities, current portion	60.5	54.8
Other	46.2	32.5
Total	\$ 291.0	\$ 239.1

Other Noncurrent Liabilities:

<i>In millions</i>	2020	2019
Deferred Revenue	\$ 6.5	\$ 5.3
Multi-employer Plans	20.0	30.8
Workers Compensation Reserve	8.7	9.5
Fair Value of Derivatives, noncurrent portion	0.4	3.0
Unfavorable Supply Agreement	26.6	28.9
Deferred Compensation	16.5	12.1
Operating Lease Liabilities, noncurrent portion	157.2	151.5
Other	55.4	25.7
Total	\$ 291.3	\$ 266.8

GRAPHIC PACKAGING HOLDING COMPANY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

NOTE 3. SUPPLEMENTAL CASH FLOW INFORMATION

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

<i>In millions</i>	2020	2019	2018
Receivables, Net	\$ (215.7)	\$ (107.6)	\$ (1,158.1)
Inventories, Net	34.8	(72.8)	(82.0)
Other Current Assets	(5.3)	(9.5)	0.3
Other Assets	(21.5)	(7.9)	(1.0)
Accounts Payable	70.9	(8.6)	76.2
Compensation and Employee Benefits	40.3	12.9	26.9
Income Taxes	6.9	(4.2)	0.6
Interest Payable	5.6	8.4	(4.1)
Other Accrued Liabilities	30.9	5.2	11.8
Other Noncurrent Liabilities	33.7	10.6	8.6
Total	\$ (19.4)	\$ (173.5)	\$ (1,120.8)

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

<i>In millions</i>	2020	2019	2018
Interest	\$ 119.5	\$ 126.8	\$ 125.0
Income Taxes	\$ 27.2	\$ 25.8	\$ 25.8

NOTE 4. BUSINESS COMBINATIONS

2020

On January 31, 2020, the Company acquired a folding carton facility from Quad, a commercial printing company. The converting facility is located in Omaha, Nebraska, close to many of the Company's existing food and beverage customers. The Company paid approximately \$41 million using existing cash and borrowings under its revolving credit facility. The purchase price has been allocated to assets acquired and liabilities assumed based on the estimated fair values as of the acquisition date. The Company recorded \$4.7 million related to identifiable intangible assets (customer relationships with useful lives of fifteen years), \$42.8 million related to net tangible assets (primarily working capital, land/buildings and equipment) and a bargain purchase gain of \$6.6 million as the net fair value of assets acquired and liabilities assumed was greater than the purchase price. During 2020, Net Sales and Loss from Operations for the Quad acquisition were \$78.5 million and \$0.7 million, respectively.

On April 1, 2020, the Company acquired the Consumer Packaging Group business from Greif, Inc., a leader in industrial packaging products and services. The acquisition included seven converting facilities across the United States and will allow the Company to increase its mill-to-converting plant integration over time. The Company paid approximately \$80 million using existing cash and borrowings under its revolving credit facility. The purchase price has been preliminarily allocated to assets acquired and liabilities assumed based on the estimated fair values as of the acquisition date and is subject to adjustments in subsequent periods once the third-party valuations are finalized. The Company recorded \$13.2 million related to identifiable intangible assets (customer relationships with useful lives of fifteen years) and \$66.9 million related to net tangible assets (primarily working capital, land/buildings and equipment). During 2020, Net Sales and Loss from Operations for the Consumer Packaging Group acquisition were \$164.5 million and \$14.3 million, respectively.

GRAPHIC PACKAGING HOLDING COMPANY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

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. 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 \$1.2 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.

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 \$4 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 goodwill related to the NACP Combination is not deductible for tax purposes. The goodwill related to the Letica Foodservice and the PFP acquisitions is deductible for tax purposes.

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 \$ million reduction in the value of property, plant and equipment.

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.

During 2018, Net Sales and Loss from Operations from the Letica Foodservice and PFP acquisitions were \$2.4 million and \$1.4 million, respectively.

GRAPHIC PACKAGING HOLDING COMPANY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

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, 2020 for fiber procurement fees and corrugated products were \$12.1 million (related to pass through wood purchases of approximately \$204 million) and \$28.4 million, respectively. There were no payments to IP for transition services during the year ended December 31, 2020. 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 years ended December 31, 2019 and 2018, respectively.

NOTE 5. DEBT

Short-Term Debt is comprised of the following:

<i>In millions</i>	2020	2019
Short Term Borrowings	\$ 3.3	\$ 9.3
Current Portion of Finance Lease Obligations	5.0	4.6
Current Portion of Long-Term Debt	488.9	36.5
Total	\$ 497.2	\$ 50.4

Short-term borrowings are principally at the Company's international subsidiaries. The weighted average interest rate on short-term borrowings as of December 31, 2020 and 2019 was 4.9% and 2.1%, respectively.

GRAPHIC PACKAGING HOLDING COMPANY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

Long-Term Debt is comprised of the following:

<i>In millions</i>	2020	2019
Senior Notes with interest payable semi-annually at 3.50%, effective rate of 3.55%, payable in 2029	\$ 350.0	\$ —
Senior Notes with interest payable semi-annually at 3.50%, effective rate of 3.55%, payable in 2028	450.0	—
Senior Notes with interest payable semi-annually at 4.75%, effective rate of 4.81%, payable in 2027	300.0	300.0
Senior Notes with interest payable semi-annually at 4.125%, effective rate of 4.16%, payable in 2024	300.0	300.0
Senior Notes with interest payable semi-annually at 4.875%, effective rate of 4.90%, payable in 2022	250.0	250.0
Senior Notes with interest payable semi-annually at 4.75%, effective rate of 4.75%, payable in 2021	425.0	425.0
Senior Secured Term Loan Facilities with interest payable at various dates at floating rates (4.67% at December 31, 2020) payable through 2023	1,359.6	1,396.1
Senior Secured Revolving Credit Facilities with interest payable at floating rates (4.50% at December 31, 2020) payable in 2023 ^(a)	84.4	52.8
Finance Leases and Financing Obligations	139.4	134.2
Other	4.9	5.4
Total Long-Term Debt	3,663.3	2,863.5
Less: Current Portion	493.9	41.1
	3,169.4	2,822.4
Less: Unamortized Deferred Debt Issuance Costs	22.4	12.5
Total	\$ 3,147.0	\$ 2,809.9

^(a) The effective interest rates for the Company's Senior Secured Revolving Credit Facilities were 2.06% and 3.40% as of December 31, 2020 and 2019, respectively.

2020

On March 6, 2020, GPIL completed a private offering of \$450.0 million aggregate principal amount of its senior unsecured notes due 2028. The Senior Notes bear interest at an annual rate of 3.50%. 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.

On August 28, 2020, GPIL completed a private offering of \$350.0 million aggregate principal amount of its senior unsecured notes due 2029. The Senior Notes bear interest at an annual rate of 3.50%. 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.

2019

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.

GRAPHIC PACKAGING HOLDING COMPANY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

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

<i>In millions</i>	
2021	\$ 488.9
2022	378.4
2023	1,252.9
2024	300.5
2025	—
After 2025	1,103.2
Total	\$ 3,523.9

Credit Facilities

The following describes the Company's senior secured term loans and revolving credit facilities:

Date	Document ^(a)	Provision	Expiration
January 2018	Third Amended and Restated Credit Agreement	<ul style="list-style-type: none"> •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 •Includes €138 million revolving credit facility for borrowings in Euro and Pound Sterling and a ¥2.5 billion revolving credit facility for borrowings in Yen 	January 2023
January 2018	Amended and Restated Credit Agreement	<ul style="list-style-type: none"> •This term loan indebtedness was assumed by the Company as part of the NACP Combination in an aggregate amount of \$660 million 	January 2023
October 2020	Incremental Facility Amendment to the Third Amended and Restated Credit Agreement	<ul style="list-style-type: none"> •Incremental \$425 million term loan facility under the Third Amended and Restated Credit Agreement with a delayed draw feature, which was exercised in January 2021 	January 2028

^(a)The Company's obligations under the Third Amended and Restated Credit Agreement (as amended by the Incremental Facility Amendment) and the Amended and Restated Credit Agreement (collectively, the "Current Credit Agreement") are secured by substantially all of the Company's domestic assets.

On January 1, 2018 the Company assumed the term loan indebtedness previously incurred by IP (the "Amended and Restated 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 Third Amended and Restated Credit Agreement and having 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 Third Amended and Restated Credit Agreement. The term loan under the Amended and Restated 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 Third Amended and Restated Credit Agreement pursuant to the terms of a customary intercreditor agreement among the parties.

GRAPHIC PACKAGING HOLDING COMPANY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

On October 15, 2020, GPIL entered into a new \$425 million term loan facility under the Third Amended and Restated Credit Agreement with member banks of the Farm Credit System (the "Incremental Term A-2 Facility"). The Incremental Term A-2 Facility had a delayed draw feature, and the Company drew the entire facility on January 14, 2021. On January 15, 2021, the Company used the proceeds, together with cash on hand, to redeem its 4.75% Senior Notes due in 2021 at par. The redemption included the outstanding principal amount plus accrued and unpaid interest. The Incremental Term A-2 Facility bears interest at a fixed rate of 2.67% due quarterly, matures January 14, 2028, and does not amortize. As long as the loan is outstanding, GPIL will be eligible to receive an annual patronage credit from the participating banks, which will be paid in cash and stock in the lead member bank. Patronage payable each year is variable and based on the individual financial performance of each of the member banks then participating in the loan.

At December 31, 2020, the Company and its U.S. and international subsidiaries had the following commitments, amounts outstanding and amounts available under revolving credit facilities:

<i>In millions</i>	Total Commitments	Total Outstanding	Total Available
Senior Secured Domestic Revolving Credit Facility ^(a)	\$ 1,450.0	\$ —	\$ 1,429.3
Senior Secured International Revolving Credit Facilities	193.0	84.4	108.6
Other International Facilities	57.5	8.3	49.2
Total	\$ 1,700.5	\$ 92.7	\$ 1,587.1

^(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 \$0.7 million as of December 31, 2020. 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 2021 unless extended.

The facilities under the Current Credit Agreement and the 4.75% Senior Notes due 2027, the 3.50% Senior Notes due 2028 and the 3.50% Senior Notes due 2029 are guaranteed by GPIP and certain domestic subsidiaries. The 4.75% Senior Notes due 2021 (redeemed January 15, 2021), 4.875% Senior Notes due 2022 and 4.125% Senior Notes due 2024 are guaranteed by GPHC and certain domestic subsidiaries.

The Current 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, 4.75% Senior Notes due 2027, 3.50% Senior Notes due 2028 and 3.50% Senior Notes due 2029 (the "Indentures") limit the Company's ability to incur additional indebtedness. Additional covenants contained in the Current 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, 2020, the Company was in compliance with the covenants in the Current 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 non-lease 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.

GRAPHIC PACKAGING HOLDING COMPANY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

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.

The components of lease costs are as follows:

<i>In millions</i>	Year Ended December 31,	
	2020	2019
Finance lease costs:		
Amortization of right-of-use asset	\$ 7.9	\$ 7.6
Interest on lease liabilities	7.9	7.8
Operating lease costs	72.1	64.8
Short-term lease costs	12.6	12.9
Variable lease costs	10.3	4.4
Total lease costs, net	\$ 110.8	\$ 97.5

Supplemental cash flow information related to leases was as follows:

<i>In millions</i>	Year Ended December 31,	
	2020	2019
Cash paid for amounts included in the measurement of lease liabilities:		
Operating cash flows from operating leases	\$ 71.9	\$ 64.7
Operating cash flows from finance leases	7.9	7.8
Financing cash flows from finance leases	4.6	4.2
Right-of-use assets obtained in exchange for lease obligations:		
Operating leases	70.5	73.1
Finance leases	0.1	15.5

GRAPHIC PACKAGING HOLDING COMPANY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

Supplemental balance sheet information related to leases was as follows:

<i>In millions, except lease term and discount rate</i>	Balance Sheet Classification	December 31,	
		2020	2019
Operating Leases:			
Operating lease right-of-use asset	Other Assets	\$ 208.3	\$ 202.8
Current operating lease liabilities	Other Accrued Liabilities	\$ 60.5	\$ 54.8
Noncurrent operating lease liabilities	Other Noncurrent Liabilities	157.2	151.5
Total operating lease liabilities		\$ 217.7	\$ 206.3
Finance Leases:			
Property, Plant and Equipment		\$ 142.3	\$ 142.1
Accumulated depreciation		(20.1)	(12.2)
Property, Plant and Equipment, net		\$ 122.2	\$ 129.9
Current finance lease liabilities	Short-Term Debt and Current Portion of Long-Term Debt	\$ 5.0	\$ 4.6
Noncurrent finance lease liabilities	Long-Term Debt	134.4	129.6
Total finance lease liabilities		\$ 139.4	\$ 134.2
Weighted Average Remaining Lease Term (Years)			
Operating leases		5	5
Finance leases		16	17
Weighted Average Discount Rate			
Operating leases		3.24 %	3.57 %
Finance leases		5.60 %	5.60 %

Maturities of lease liabilities are as follows:

<i>In millions</i>	Operating Leases		Finance Leases	
Year ending December 31,				
2021	\$	64.1	\$	12.6
2022		53.0		12.2
2023		39.0		12.4
2024		25.6		12.4
2025		18.0		12.5
Thereafter		34.3		145.7
Total lease payments	\$	234.0	\$	207.8
Less imputed interest		(16.3)		(78.2)
Total	\$	217.7	\$	129.6

GRAPHIC PACKAGING HOLDING COMPANY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

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 as amended (the “2014 Plan”). The 2014 Plan allows for granting 20.1 million shares of 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 GPHC’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. As of December 31, 2020, there were 12.6 million shares available to be granted under the 2014 Plan.

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 service or 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:

	2020	2019	2018
RSUs — Employees	1,655,854	2,187,603	1,951,738
Weighted-average grant date fair value	\$ 15.40	\$ 12.37	\$ 14.86
Stock Awards — Board of Directors	71,160	74,760	51,226
Weighted-average grant date fair value	\$ 13.49	\$ 12.84	\$ 15.03

A summary of the changes in the number of unvested RSUs from December 31, 2017 to December 31, 2020 is presented below:

	RSUs	Weighted Average Grant Date Fair Value
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
Granted ^(a)	1,655,854	15.40
Released	(1,415,365)	12.91
Forfeited	(158,473)	14.25
Outstanding — December 31, 2020	5,141,706	\$ 14.02

^(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.

GRAPHIC PACKAGING HOLDING COMPANY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

The initial value of the service-based RSUs is based on the market value of GPHC's common stock on the date of grant. The 2020 performance-based RSU grants were valued using a Monte Carlo simulation as the total shareholder return contains a market condition. RSUs are recorded in Shareholders' Equity. The unrecognized expense at December 31, 2020 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 GPHC's common stock on the date of grant. These awards are unrestricted on the date of grant.

During 2020, 2019, and 2018, \$33.8 million, \$21.7 million and \$13.8 million, respectively, were charged to compensation expense for stock incentive plans and is primarily included in Selling, General and Administrative expenses in the Consolidated Statements of Operations.

During 2020, 2019, and 2018, RSUs with an aggregate fair value of \$22.7 million, \$11.1 million and \$13.7 million, respectively, vested and were paid out. The RSUs vested and paid out in 2020 were granted primarily during 2017.

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 2018, the Company began the process of terminating its largest U.S. pension plan (the "U.S. 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 U.S. 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, using the assets held within the pension trust, purchased a group annuity contract that transferred the remaining pension obligation under the U.S. Plan of approximately \$713 million to an insurance company. The Company incurred an additional non-cash settlement charge of \$153.7 million related to this transfer. These non-cash settlement charges relate to Net Actuarial Loss previously recognized in Accumulated Other Comprehensive Loss.

GRAPHIC PACKAGING HOLDING COMPANY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

Pension and Postretirement Expense

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

<i>In millions</i>	Pension Benefits			Postretirement Benefits		
	Year Ended December 31,					
	2020	2019	2018	2020	2019	2018
Components of Net Periodic Cost:						
Service Cost	\$ 15.4	\$ 14.0	\$ 17.3	\$ 0.5	\$ 0.5	\$ 0.6
Interest Cost	14.0	46.1	41.8	1.0	1.2	1.2
Expected Return on Plan Assets	(21.0)	(54.9)	(63.6)	—	—	—
Amortization:						
Prior Service Cost (Credit)	0.2	0.2	0.4	(0.3)	(0.3)	(0.3)
Actuarial Loss (Gain)	5.4	10.0	5.9	(1.7)	(2.3)	(1.8)
Net Curtailment/Settlement Loss	153.7	39.2	1.0	—	—	—
Other	0.2	0.3	0.5	—	—	—
Net Periodic Cost (Benefit)	\$ 167.9	\$ 54.9	\$ 3.3	\$ (0.5)	\$ (0.9)	\$ (0.3)

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

	Pension Benefits			Postretirement Benefits		
	Year Ended December 31,					
	2020	2019	2018	2020	2019	2018
Weighted Average Assumptions:						
Discount Rate	2.69 %	4.14 %	3.49 %	3.22 %	4.29 %	3.64 %
Rate of Increase in Future Compensation Levels	2.36 %	2.37 %	2.09 %	—	—	—
Expected Long-Term Rate of Return on Plan Assets	4.12 %	4.74 %	4.86 %	—	—	—
Initial Health Care Cost Trend Rate	—	—	—	6.65 %	9.00 %	9.00 %
Ultimate Health Care Cost Trend Rate	—	—	—	4.50 %	4.50 %	4.50 %
Ultimate Year	—	—	—	2028	2028	2027

GRAPHIC PACKAGING HOLDING COMPANY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

Funded Status

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

<i>In millions</i>	Pension Benefits		Postretirement Benefits	
	2020	2019	2020	2019
Change in Benefit Obligation:				
Benefit Obligation at Beginning of Year	\$ 1,255.4	\$ 1,245.2	\$ 35.9	\$ 34.1
Service Cost	15.4	14.0	0.5	0.5
Interest Cost	14.0	46.1	1.0	1.2
Net Actuarial Loss	61.9	157.8	—	1.1
Foreign Currency Exchange	8.9	9.2	—	0.1
Settlements	(742.7)	(150.2)	—	—
Benefits Paid	(20.4)	(67.2)	(1.2)	(1.2)
Other	0.3	0.5	0.1	0.1
Benefit Obligation at End of Year	\$ 592.8	\$ 1,255.4	\$ 36.3	\$ 35.9
Change in Plan Assets:				
Fair Value of Plan Assets at Beginning of Year	\$ 1,172.4	\$ 1,186.5	\$ —	\$ —
Actual Return on Plan Assets	57.8	181.7	—	—
Employer Contributions	19.1	11.3	1.2	1.2
Foreign Currency Exchange	8.1	10.3	—	—
Benefits Paid	(20.4)	(67.2)	(1.2)	(1.2)
Settlements	(720.7)	(150.2)	—	—
Fair Value of Plan Assets at End of Year	\$ 516.3	\$ 1,172.4	\$ —	\$ —
Plan Assets Less than Projected Benefit Obligation	\$ (76.5)	\$ (83.0)	\$ (36.3)	\$ (35.9)
Amounts Recognized in the Consolidated Balance Sheets Consist of:				
Pension Assets	\$ 21.2	\$ 25.6	\$ —	\$ —
Accrued Pension and Postretirement Benefits Liability — Current	\$ (1.8)	\$ (1.7)	\$ (2.5)	\$ (2.4)
Accrued Pension and Postretirement Benefits Liability — Noncurrent	\$ (96.0)	\$ (106.9)	\$ (33.8)	\$ (33.5)
Accumulated Other Comprehensive Income:				
Net Actuarial Loss (Gain)	\$ 105.5	\$ 279.9	\$ (0.9)	\$ (0.8)
Prior Service Cost (Credit)	\$ 3.8	\$ 3.6	\$ (15.3)	\$ (17.3)
Weighted Average Calculations:				
Discount Rate	2.11 %	2.69 %	2.52 %	3.22 %
Rates of Increase in Future Compensation Levels	3.62 %	2.36 %	—	—
Initial Health Care Cost Trend Rate	—	—	6.40 %	6.65 %
Ultimate Health Care Cost Trend Rate	—	—	4.50 %	4.50 %
Ultimate Year	—	—	2028	2028

GRAPHIC PACKAGING HOLDING COMPANY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

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, 2020, the net actuarial loss was \$105.5 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 service period of employees expected to receive benefits.

The discount rate used to determine the present value of future pension obligations at December 31, 2020 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 2.11% and 2.69% in 2020 and 2019, respectively.

The net actuarial loss of \$61.9 million was primarily due to changes in the discount rate of \$51.2 million. The weighted average discount rate at December 31, 2020 was 2.11% compared to 2.69% at December 31, 2019. The net actuarial loss was also impacted by revised census data and actual experience versus expected.

Accumulated Benefit Obligation

The accumulated benefit obligation (“ABO”), for all defined benefit pension plans was \$88.1 million and \$1,249.8 million at December 31, 2020 and 2019, respectively. The projected benefit obligation (“PBO”) and fair value of plan assets where the PBO exceeded plan assets were \$361.1 million and \$266.0 million, respectively. The ABO and fair value of plan assets where the ABO exceeded plan assets were \$356.5 million and \$266.0 million, respectively.

Employer Contributions

The Company made contributions of \$19.1 million and \$11.3 million to its pension plans during 2020 and 2019, respectively. The Company also made postretirement health care benefit payments of \$1.2 million during 2020 and 2019. For 2021, the Company expects to make contributions in the range of \$0 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 on-going 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, 2020 and 2019, 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	2020	2019
Cash	0.4 %	1.2 %	13.6 %
Equity Securities	22.8	24.2	7.7
Fixed Income Securities	60.7	61.9	68.6
Other Investments	16.1	12.7	10.1
Total	100.0 %	100.0 %	100.0 %

GRAPHIC PACKAGING HOLDING COMPANY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

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, 2020 and 2019:

Fair Value Measurements at December 31, 2020					
<i>In millions</i>	Total	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Net Asset Value at December 31, 2020
Asset Category:					
Cash	\$ 6.2	\$ 0.3	\$ 2.3	\$ —	\$ 3.6
Equity Securities:					
Domestic	117.8	4.9	11.6	—	101.3
Foreign	7.2	7.2	—	—	—
Fixed Income Securities	319.6	18.7	300.6	0.3	—
Other Investments:					
Real estate	22.9	—	8.9	14.0	—
Diversified growth fund ^(a)	42.6	—	42.6	—	—
Total	\$ 516.3	\$ 31.1	\$ 366.0	\$ 14.3	\$ 104.9

Fair Value Measurements at December 31, 2019					
<i>In millions</i>	Total	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Net Asset Value at December 31, 2019
Asset Category:					
Cash	\$ 159.6	\$ 0.3	\$ 35.0	\$ —	\$ 124.3
Equity Securities:					
Domestic	82.9	4.7	—	—	78.2
Foreign	7.0	7.0	—	—	—
Fixed Income Securities	852.5	17.0	835.3	0.2	—
Other Investments:					
Real estate	21.9	—	8.9	13.0	—
Diversified growth fund ^(a)	48.5	—	48.5	—	—
Total	\$ 1,172.4	\$ 29.0	\$ 927.7	\$ 13.2	\$ 202.5

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

GRAPHIC PACKAGING HOLDING COMPANY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

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

<i>In millions</i>	2020		2019	
Balance at January 1,	\$	13.2	\$	5.8
Transfers In		1.1		7.4
Balance at December 31,	\$	14.3	\$	13.2

Estimated Future Benefit Payments

The following represents the Company's estimated future pension and postretirement health care benefit payments through the year 2030:

<i>In millions</i>	Pension Plans		Postretirement Health Care Benefits	
2021	\$	24.1	\$	2.5
2022		26.5		2.5
2023		28.8		2.5
2024		30.6		2.6
2025		32.5		2.3
2026—2030		181.0		10.4

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, 2020 and 2019 was \$0.1 million and \$0.6 million, respectively.

Estimated liabilities have been established related to the partial or complete withdrawal from certain multi-employment benefit plans for facilities that have been closed. During the second quarter of 2020, the Company increased its estimated withdrawal liability for these plans by \$12.2 million. During the fourth quarter of 2020, the Company entered into a settlement agreement with one of its closed multi-employment benefit plans and recorded a \$3.9 million reduction in its estimated withdrawal liability for this plan. Under the terms of this settlement agreement, the Company will pay \$17.2 million in the first quarter of 2021. At December 31, 2020, and December 31, 2019, the Company has withdrawal liabilities of \$37.2 million and \$30.8 million, respectively, related to these plans, which is recorded as Compensation and Employee Benefits and Other Noncurrent Liabilities in the Company's Consolidated Balance Sheets, 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.

GRAPHIC PACKAGING HOLDING COMPANY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

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, 2020, 2019 and 2018 is shown in the table below:

Multi-employer Pension Fund	EIN/Pension Plan Number	Pension Protection Act Zone Status		FIP/RP Status Implemented	Company Contributions (in millions)			Surcharge Imposed	Expiration Date of Bargaining Agreement
		2020	2019		2020	2019	2018		
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	Yes	6/15/2022
GCC/IBT ^(a)	52-6118568/001	Red	Red	Yes	—	0.1	0.3	Yes	4/30/2022
Total					\$ 0.1	\$ 0.2	\$ 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 2020 and 2019 is for the plan's year-end at December 31, 2019 and December 31, 2018, 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, 2020, 2019 and 2018 were \$62.0 million, \$57.6 million and \$54.6 million, respectively.

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:

In millions	Year Ended December 31,		
	2020	2019	2018
U.S.	\$ 180.5	\$ 305.4	\$ 298.9
International	63.5	48.6	48.6
Income before Income Taxes and Equity Income of Unconsolidated Entity	\$ 244.0	\$ 354.0	\$ 347.5

GRAPHIC PACKAGING HOLDING COMPANY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

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

<i>In millions</i>	Year Ended December 31,		
	2020	2019	2018
Current Expense:			
U.S.	\$ (23.0)	\$ (10.1)	\$ (13.0)
International	(19.3)	(13.5)	(15.7)
Total Current	\$ (42.3)	\$ (23.6)	\$ (28.7)
Deferred (Expense) Benefit:			
U.S.	(8.5)	(47.7)	(31.6)
International	9.2	(5.0)	5.6
Total Deferred	\$ 0.7	\$ (52.7)	\$ (26.0)
Income Tax Expense	\$ (41.6)	\$ (76.3)	\$ (54.7)

A reconciliation of Income Tax (Expense) Benefit on Income before Income Taxes and Equity Income of Unconsolidated Entity at the federal statutory rate of 21.0% compared with the Company's actual Income Tax (Expense) Benefit is as follows:

<i>In millions</i>	Year Ended December 31,					
	2020	Percent	2019	Percent	2018	Percent
Income Tax Expense at U.S. Statutory Rate	\$ (51.2)	21.0 %	\$ (74.3)	21.0 %	\$ (73.0)	21.0 %
U.S. State and Local Tax Expense	(7.7)	3.2	(12.3)	3.5	(11.7)	3.4
Permanent Items	(1.0)	0.4	(2.8)	0.8	(3.8)	1.1
U.S. Tax Reform	—	—	—	—	10.9	(3.1)
Provision to Return Adjustments	2.2	(0.9)	—	—	—	—
Change in Valuation Allowance	7.0	(2.9)	(4.6)	1.3	13.0	(3.7)
International Tax Rate Differences	(3.0)	1.2	(1.6)	0.5	(1.9)	0.5
Foreign Withholding Tax	(0.8)	0.3	(0.7)	0.2	(0.5)	0.1
Change in Tax Rates	(0.4)	0.1	(1.0)	0.3	1.9	(0.5)
U.S. Federal & State Tax Credits	9.7	(4.0)	9.5	(2.7)	0.3	(0.1)
Uncertain Tax Positions	(2.3)	1.0	(1.9)	0.5	(0.7)	0.2
Capital Loss Expiration	—	—	—	—	(2.7)	0.7
Domestic Minority Interest	5.5	(2.2)	13.7	(3.9)	13.7	(3.9)
Other	0.4	(0.2)	(0.3)	0.1	(0.2)	—
Income Tax Expense	\$ (41.6)	17.0 %	\$ (76.3)	21.6 %	\$ (54.7)	15.7 %

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. As a result of decreases in the minority partner's interest during 2020, the difference between the effective tax rate and the statutory tax also declined.

In addition, during 2020, the Company recognized a tax benefit of approximately \$7.6 million attributable to the release of a valuation allowance recorded against the net deferred tax assets of two of its Canadian subsidiaries as a result of internal restructuring. The Company also recognized a tax benefit related to updates to its 2019 financial statement income tax calculations of approximately \$2.2 million primarily due to new guidance in final U.S. Treasury Regulations issued during 2020.

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

GRAPHIC PACKAGING HOLDING COMPANY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

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 \$0.9 million primarily attributable to the one-time transition tax incurred on its 2017 U.S. federal income tax return. In addition, during 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 subsidiary in France.

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:

<i>In millions</i>	2020	2019
Deferred Income Tax Assets:		
Compensation Based Accruals	\$ 3.6	\$ 3.8
Net Operating Loss Carryforwards	40.3	45.5
Postretirement Benefits	1.4	0.9
Tax Credits	19.3	37.2
Other	8.4	10.9
Valuation Allowance	(34.4)	(41.1)
Total Deferred Income Tax Assets	\$ 38.6	\$ 57.2
Deferred Income Tax Liabilities:		
Property, Plant and Equipment	(20.8)	(18.8)
Goodwill	(2.9)	(2.7)
Other Intangibles	(11.2)	(12.3)
Investment in Partnership	(530.4)	(532.2)
Net Noncurrent Deferred Income Tax Liabilities	\$ (565.3)	\$ (566.0)
Net Deferred Income Tax Liability	\$ (526.7)	\$ (508.8)

The Company has total deferred income tax assets, excluding valuation allowance, of \$73.0 million and \$98.3 million as of December 31, 2020 and 2019, respectively. The Company has total deferred income tax liabilities of \$565.3 million and \$566.0 million as of December 31, 2020 and 2019, respectively.

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. During 2020, IP redeemed a portion of its interest in the partnership. As a result of the redemptions, the Company recorded a decrease in its deferred tax liability of \$16.0 million, which 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.

GRAPHIC PACKAGING HOLDING COMPANY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

The Company reviewed its deferred income tax assets as of December 31, 2020 and 2019, respectively, and determined that it is more likely than not that a portion will not be realized. A valuation allowance of \$ 34.4 million and \$41.1 million at December 31, 2020 and 2019, 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, 2020, \$24.6 million relates to net deferred tax assets in certain foreign jurisdictions, \$0.7 million relates to U.S. federal capital loss carryforwards, \$4.6 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, 2020, 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.

The following table represents a summary of the valuation allowances against deferred tax assets as of and for the three years ended December 31, 2020, 2019, and 2018, respectively:

<i>In millions</i>	December 31,		
	2020	2019	2018
Balance Beginning of Period	\$ 41.1	\$ 36.3	\$ 51.5
Adjustments for (Income) and Expenses	(7.0)	4.6	(13.0)
Additions (Deductions)	0.3	0.2	(2.2)
Balance at End of Period	\$ 34.4	\$ 41.1	\$ 36.3

The Company utilized its remaining U.S. federal net operating losses during 2020. The Company's U.S. state net operating loss carryforwards total \$98.8 million and expire in various years through 2038.

International net operating loss carryforward amounts total \$119.5 million, of which substantially all have no expiration date.

Tax Credit carryforwards total \$19.3 million which expire in various years from 2021 through 2039.

Uncertain Tax Positions

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

<i>In millions</i>	2020	2019	2018
Balance at January 1,	\$ 20.7	\$ 15.5	\$ 10.5
Additions for Tax Positions of Current Year	1.2	3.2	0.8
Additions for Tax Positions of Prior Years	1.4	2.4	5.2
Reductions for Tax Positions of Prior Years	(3.7)	(0.4)	(1.0)
Balance at December 31,	\$ 19.6	\$ 20.7	\$ 15.5

At December 31, 2020, \$19.6 million of the total gross unrecognized tax benefits, if recognized, would affect the annual effective income tax rate. As of December 31, 2020, none 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, 2020 and 2019, respectively.

The Company anticipates that \$0.1 million of the total unrecognized tax benefits at December 31, 2020 could change within the next 12 months.

GRAPHIC PACKAGING HOLDING COMPANY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

The Company files income tax returns in the U.S. federal jurisdiction, and various states and foreign jurisdictions and our income tax filings are regularly examined by federal, state and non-U.S. tax authorities. The Company has been notified that its 2018 U.S. federal corporate and partnership income tax filings will be examined by the Internal Revenue Service. The examinations are scheduled to begin during the first quarter of 2021. With few exceptions, the Company is no longer subject to U.S. federal, state and local tax examinations for years before 2017.

As of December 31, 2020, the Company has provided for deferred income taxes attributable to future foreign withholding tax expense related to the Company's equity investment in the joint venture, Rengo Riverwood Packaging, Ltd. In addition, Company provided deferred income taxes for future Canadian withholding tax to the extent of excess cash available for distribution after consideration of working capital needs and other debt settlement of its Canadian subsidiary, Graphic Packaging International Canada, ULC. During the year ended December 31, 2020, the Company distributed its remaining paid-up capital in Canada and as a result, the Company expects to incur Canadian withholding tax on future distributions. 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. Due to the deemed taxation of all post-1986 earnings and profits required by the Act, the Company has determined that no deferred tax liability should be recorded related to the outside basis difference of its Canadian subsidiary of approximately \$51.4 million as of December 31, 2020.

The Company has not provided for deferred U.S. income taxes on approximately \$5 million of its undistributed earnings in other 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, 2020:

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

GRAPHIC PACKAGING HOLDING COMPANY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

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 2020 and 2019, there were no amounts of ineffectiveness. During 2020 and 2019, 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 44% and 11% of its expected natural gas usage for 2021 and 2022, respectively.

During 2020 and 2019, there were no amounts of ineffectiveness related to changes in the fair value of natural gas swap contracts. 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, 2020 and 2019, multiple forward exchange contracts existed that expire on various dates throughout the following year. Those purchased forward exchange contracts outstanding at December 31, 2020 and 2019, when aggregated and measured in U.S. dollars at contractual rates at December 31, 2020 and 2019, had notional amounts totaling \$101.6 million and \$87.6 million, respectively.

No amounts were reclassified to earnings during 2020 and 2019 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 2020 and 2019.

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, 2020 and 2019, multiple foreign currency forward exchange contracts existed, with maturities ranging up to two months. Those foreign currency contracts outstanding at December 31, 2020 and 2019, when aggregated and measured in U.S. dollars at contractual rates at December 31, 2020 and 2019, respectively, had net notional amounts totaling \$80.0 million and \$77.4 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, 2020, 2019, and 2018, net currency exchange (gains)/losses included in determining Income from Operations were \$0.7 million, \$(2.3) million, and \$1.6 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 third party derivatives brokers, corroborated with information obtained from third party pricing service providers.

GRAPHIC PACKAGING HOLDING COMPANY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

Fair Value of Financial Instruments

As of December 31, 2020 and 2019, 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:

<i>In millions</i>	Derivative Assets ^(a)		Derivative Liabilities ^(b)	
	December 31,		December 31,	
	2020	2019	2020	2019
Derivatives designated as hedging instruments:				
Interest rate contracts	\$ —	\$ —	\$ 6.0	\$ 6.6
Foreign currency contracts	—	—	2.9	1.5
Commodity contracts	2.1	—	—	3.4
Total Derivatives	\$ 2.1	\$ —	\$ 8.9	\$ 11.5

^(a) Derivative assets of \$1.6 million are included in Other Current Assets as of December 31, 2020. Derivative asset of \$0.5 million are included in Other Accrued Assets as of December 31, 2020.

^(b) Derivative liabilities of \$8.5 million and \$8.5 million are included in Other Accrued Liabilities as of December 31, 2020 and December 31, 2019, respectively. Derivative liabilities of \$0.4 million and \$3.0 million are included in Other Noncurrent Liabilities as of December 31, 2020 and December 31, 2019, respectively.

The fair values of the Company's other financial assets and liabilities at December 31, 2020 and 2019 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 \$ 3,624.7 million and \$2,788.6 million, as compared to the carrying amounts of \$3,523.9 million and \$2,729.3 million as of December 31, 2020 and 2019, 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 third party 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, 2020 and 2019 is as follows:

<i>In millions</i>	Amount of Loss (Gain) Recognized in Accumulated Other Comprehensive Loss		Location in Statement of Operations	Amount of (Gain) Loss Recognized in Statement of Operations	
	Year Ended December 31,			Year Ended December 31,	
	2020	2019		2020	2019
Commodity Contracts	\$ 0.9	\$ 1.4	Cost of Sales	\$ 6.3	\$ (1.8)
Foreign Currency Contracts	2.1	0.1	Other Expense, Net	(0.5)	(1.3)
Interest Rate Swap Agreements	5.8	5.8	Interest Expense, Net	6.5	1.4
Total	\$ 8.8	\$ 7.3		\$ 12.3	\$ (1.7)

The effect of derivative instruments not designated as hedging instruments on the Company's Consolidated Statements of Operations for the years ended December 31, 2020 and 2019 is as follows:

<i>In millions</i>	2020	2019
Foreign Currency Contracts	\$ 8.7	\$ (0.9)

GRAPHIC PACKAGING HOLDING COMPANY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

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:

<i>In millions</i>	2020	2019	2018
Balance at January 1	\$ (10.9)	\$ (1.9)	\$ (0.3)
Reclassification to Earnings	12.3	(1.7)	(0.6)
Current Period Change in Fair Value	(8.8)	(7.3)	(1.0)
Balance at December 31	\$ (7.4)	\$ (10.9)	\$ (1.9)

At December 31, 2020, the Company expects to reclassify \$5.9 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:

<i>In millions</i>	Year Ended December 31,								
	2020			2019			2018		
	Pretax Amount	Tax Effect	Net Amount ^(a)	Pretax Amount	Tax Effect	Net Amount ^(a)	Pretax Amount	Tax Effect	Net Amount
Derivative Instruments Gain (Loss)	\$ 4.1	\$ (0.6)	\$ 3.5	\$ (6.7)	\$ 1.4	\$ (5.3)	\$ (1.1)	\$ 0.1	\$ (1.0)
Pension and Postretirement Benefit Plans	126.0	(26.1)	99.9	10.1	(2.5)	7.6	(24.8)	5.4	(19.4)
Currency Translation Adjustment	16.5	—	16.5	9.8	—	9.8	(18.7)	—	(18.7)
Other Comprehensive Income (Loss)	\$ 146.6	\$ (26.7)	\$ 119.9	\$ 13.2	\$ (1.1)	\$ 12.1	\$ (44.6)	\$ 5.5	\$ (39.1)

^(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:

<i>In millions</i>	December 31,	
	2020	2019
Accumulated Derivative Instruments Loss	\$ (13.1)	\$ (16.6)
Pension and Postretirement Benefit Plans	(138.6)	(238.5)
Currency Translation Adjustment	(94.2)	(110.7)
Accumulated Other Comprehensive Loss	\$ (245.9)	\$ (365.8)

GRAPHIC PACKAGING HOLDING COMPANY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

NOTE 13. COMMITMENTS

The Company has entered into other long-term contracts principally for the purchase of fiber and chip processing along with commitments associated with building the new CRB paper machine in Kalamazoo, Michigan. The minimum purchase commitments extend beyond 2025. At December 31, 2020, total commitments under these contracts were as follows:

<i>In millions</i>		
2021	\$	379.4
2022		90.5
2023		67.0
2024		48.4
2025		47.7
Thereafter		58.8
Total	\$	691.8

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, the recycling of packaging 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.

GRAPHIC PACKAGING HOLDING COMPANY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

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, GPIIP issued 79,911,591 common units to IP. In connection with the closing, the Company, GPIIP, 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 had the ability to call such common units exercisable starting on the same date. Upon an election of an exchange, GPHC may choose to satisfy the exchange using shares of its common stock, cash, or a combination thereof.

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

On August 6, 2020, the Company announced that IP had notified the Company of its intent to exchange additional partnership units. Per the agreement between the parties, on August 13, 2020, GPIIP purchased 17.4 million partnership units from IP for \$250 million in cash, which included all of the remaining portion of IP's redeemable ownership interest that was required to be redeemed for cash. As a result, IP's ownership interest in GPIIP decreased to 14.5% as of August 13, 2020.

At December 31, 2020, the redeemable noncontrolling interest was determined as follows:

<i>In millions</i>		
Balance at December 31, 2018	\$	275.8
Net Income Attributable to Redeemable Noncontrolling Interest		16.3
Other Comprehensive Loss, Net of Tax		0.8
Redeemable Noncontrolling Interest Redemption Value Adjustment		30.2
Reclassification to Noncontrolling Interest for Share Repurchases ^(a)		(12.5)
Distributions of Membership Interest		(6.3)
Balance at December 31, 2019	\$	304.3
Net Loss Attributable to Redeemable Noncontrolling Interest		(3.2)
Other Comprehensive Income, Net of Tax		8.9
Redemption of IP's Ownership Interest		(296.1)
Redeemable Noncontrolling Interest Redemption Value Adjustment		(12.2)
Distributions of Membership Interest		(1.7)
Balance at December 31, 2020	\$	—

^(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 was recorded at the greater of carrying amount or redemption value at the end of each period until it was fully redeemed. 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 eight North American paperboard mills that 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 represents 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") 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 2020, 2019 or 2018.

GRAPHIC PACKAGING HOLDING COMPANY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

Business segment information is as follows:

<i>In millions</i>	Year Ended December 31,		
	2020	2019	2018
NET SALES:			
Paperboard Mills	\$ 988.1	\$ 1,094.8	\$ 1,078.1
Americas Paperboard Packaging	4,650.1	4,233.7	4,098.3
Europe Paperboard Packaging	764.6	689.3	695.9
Corporate/Other/Eliminations ^(a)	157.1	142.3	157.1
Total	\$ 6,559.9	\$ 6,160.1	\$ 6,029.4
(LOSS) INCOME FROM OPERATIONS:			
Paperboard Mills ^(b)	\$ (109.9)	\$ 33.1	\$ 30.6
Americas Paperboard Packaging	638.5	477.7	420.1
Europe Paperboard Packaging	65.9	60.3	46.1
Corporate and Other ^(c)	(70.2)	(37.0)	(38.6)
Total	\$ 524.3	\$ 534.1	\$ 458.2
CAPITAL EXPENDITURES:			
Paperboard Mills	\$ 444.2	\$ 208.0	\$ 240.1
Americas Paperboard Packaging	119.7	94.7	104.3
Europe Paperboard Packaging	39.7	34.5	19.5
Corporate and Other	42.7	15.7	31.3
Total	\$ 646.3	\$ 352.9	\$ 395.2
DEPRECIATION AND AMORTIZATION:			
Paperboard Mills	\$ 248.7	\$ 224.4	\$ 197.5
Americas Paperboard Packaging	163.0	165.1	165.4
Europe Paperboard Packaging	41.1	36.7	48.9
Corporate and Other	23.0	21.0	18.8
Total	\$ 475.8	\$ 447.2	\$ 430.6

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

^(b) Includes Augusta, Georgia mill outage in 2018.

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

<i>In millions</i>	December 31,		
	2020	2019	2018
ASSETS AT DECEMBER 31:			
Paperboard Mills	\$ 3,096.5	\$ 2,912.2	\$ 3,005.6
Americas Paperboard Packaging	3,326.7	3,392.3	3,143.6
Europe Paperboard Packaging	745.9	686.3	603.4
Corporate and Other	635.5	299.1	306.6
Total	\$ 7,804.6	\$ 7,289.9	\$ 7,059.2

GRAPHIC PACKAGING HOLDING COMPANY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

Business geographic area information is as follows:

<i>In millions</i>	Year Ended December 31,		
	2020	2019	2018
NET SALES:			
United States	\$ 5,199.9	\$ 4,913.2	\$ 4,780.9
International ^(a)	1,360.0	1,246.9	1,248.5
Total	\$ 6,559.9	\$ 6,160.1	\$ 6,029.4

<i>In millions</i>	2020	2019	2018
	LONG-LIVED ASSETS AT DECEMBER 31:		
United States	\$ 3,252.7	\$ 2,975.9	2,954.3
International ^(a)	307.3	277.9	285.4
Total	\$ 3,560.0	\$ 3,253.8	\$ 3,239.7

^(a) Net Sales and long-lived assets of individual countries outside of the United States are not material.

NOTE 17. QUARTERLY FINANCIAL INFORMATION (UNAUDITED)

Results of operations for the four quarters of 2020 and 2019 are shown below.

<i>In millions, except per share amounts</i>	2020				
	First	Second	Third	Fourth	Total
Statement of Operations Data:					
Net Sales	\$ 1,599.1	\$ 1,611.0	\$ 1,697.7	\$ 1,652.1	\$ 6,559.9
Gross Profit	320.8	262.1	255.5	261.8	1,100.2
Business Combinations, Shutdown and Other Special Charges and Exit Activities, Net	18.7	20.5	9.0	13.1	61.3
Income from Operations	160.0	114.8	119.1	130.4	524.3
Net (Loss) Income	(19.8)	66.7	79.3	77.1	203.3
Net (Loss) Income Attributable to Graphic Packaging Holding Company	(12.7)	52.1	63.7	64.2	167.3
Net (Loss) Income Per Share Attributable to Graphic Packaging Holding Company — Basic ^(a)	\$ (0.04)	\$ 0.19	\$ 0.23	\$ 0.24	\$ 0.60
Net (Loss) Income Per Share Attributable to Graphic Packaging Holding Company — Diluted ^(a)	\$ (0.04)	\$ 0.19	\$ 0.23	\$ 0.24	\$ 0.60

^(a) Does not cross foot due to rounding.

GRAPHIC PACKAGING HOLDING COMPANY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

<i>In millions, except per share amounts</i>	2019				
	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 Exit Activities, 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.

NOTE 18. EARNINGS PER SHARE

<i>In millions, except per share data</i>	Year Ended December 31,		
	2020	2019	2018
Net Income Attributable to Graphic Packaging Holding Company	\$ 167.3	\$ 206.8	\$ 221.1
Weighted Average Shares:			
Basic	278.8	294.1	309.5
Dilutive effect of RSUs	0.8	0.7	0.6
Diluted	279.6	294.8	310.1
Earnings Per Share — Basic	\$ 0.60	\$ 0.70	\$ 0.71
Earnings Per Share — Diluted	\$ 0.60	\$ 0.70	\$ 0.71

GRAPHIC PACKAGING HOLDING COMPANY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

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, 2020 ^(a):

<i>In millions</i>	Derivatives Instruments	Pension and Postretirement Benefit Plans	Currency Translation Adjustments	Total
Balance at December 31, 2019	\$ (16.6)	\$ (238.5)	\$ (110.7)	\$ (365.8)
Other Comprehensive (Loss) Income before Reclassifications	(5.8)	12.9	17.7	24.8
Amounts Reclassified from Accumulated Other Comprehensive Income ^(a)	9.9	125.9	—	135.8
Net Current-period Other Comprehensive Income	4.1	138.8	17.7	160.6
Less:				
Net Current-period Other Comprehensive Income Attributable to Noncontrolling Interest ^(b)	(0.6)	(38.9)	(1.2)	(40.7)
Balance at December 31, 2020	\$ (13.1)	\$ (138.6)	\$ (94.2)	\$ (245.9)

^(a) See following table for details about these reclassifications.

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

GRAPHIC PACKAGING HOLDING COMPANY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

The following represents reclassifications out of Accumulated Other Comprehensive Loss for the year ended December 31, 2020:

In millions

Details about Accumulated Other Comprehensive Loss Components	Amount Reclassified from Accumulated Other Comprehensive Loss	Affected Line Item in the Statement Where Net Income is Presented
Derivatives Instruments:		
Commodity Contracts	\$ 6.3	Cost of Sales
Foreign Currency Contracts	(0.5)	Other Expense, Net
Interest Rate Swap Agreements	6.5	Interest Expense, Net
	<u>12.3</u>	Total before Tax
	<u>(2.4)</u>	Tax Expense
	<u>\$ 9.9</u>	Net of Tax
Amortization of Defined Benefit Pension Plans:		
Prior Service Costs	\$ 0.1 ^(a)	
Actuarial Losses	<u>159.1 ^(a)</u>	
	159.2	Total before Tax
	<u>(31.7)</u>	Tax Benefit
	<u>\$ 127.5</u>	Net of Tax
Amortization of Postretirement Benefit Plans:		
Prior Service Credits	\$ (0.3) ^(a)	
Actuarial Gains	<u>(1.7) ^(a)</u>	
	(2.0)	Total before Tax
	0.4	Tax Expense
	<u>\$ (1.6)</u>	Net of Tax
Total Reclassifications for the Period	<u>\$ 135.8</u>	

^(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

During 2019, the Company announced its plans to invest approximately \$600 million in a new CRB paper machine 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.

In March 2020, the Company made the decision to close the White Pigeon, Michigan CRB mill and shut down the PM1 containerboard machine in West Monroe, Louisiana. During the second quarter of 2020, the Company closed the White Pigeon, Michigan CRB mill and shut down the PM1 containerboard machine.

In June 2020, the Company made the decision to close certain converting facilities that were acquired from Greif. The Burlington, North Carolina converting facility and the Los Angeles, California converting facility were closed during the third quarter of 2020.

GRAPHIC PACKAGING HOLDING COMPANY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

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 \$50.6 million and \$14.9 million of exit costs during 2020 and 2019, respectively. Other costs associated with the start-up of the new CRB paper machine will be recorded in the period in which they are incurred. These costs are included in the Corporate and Other caption in "Note 16 - Business Segment and Geographic Area Information."

The following table summarizes the costs incurred during 2020 and 2019 related to these restructurings:

<i>In millions</i>	Location in Statement of Operations	Year Ended December 31,	
		2020	2019
Severance costs and other ^(a)	Business Combinations, Shutdown and Other Special Charges, Exit Activities and Gain on Sale of Assets, Net	\$ 10.4	\$ 7.7
Accelerated depreciation	Cost of Sales	26.0	4.7
Inventory and asset write-offs	Business Combinations, Shutdown and Other Special Charges, Exit Activities and Gain on Sale of Assets, Net	14.2	2.5
Total		\$ 50.6	\$ 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:

<i>In millions</i>	Total
Balance at December 31, 2018	\$ —
Costs incurred	7.7
Payments	(0.6)
Balance at December 31, 2019	\$ 7.1
Costs incurred	11.2
Payments	(5.9)
Adjustments ^(a)	(0.8)
Balance at December 31, 2020	\$ 11.6

^(a) Adjustments related to changes in estimates of severance costs.

In conjunction with the closure of the two smaller CRB Mills in 2022, 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. Additionally, the Company expects to incur start-up charges of approximately \$15 million for the new CRB paper machine in 2021. Through December 31, 2020, the Company has incurred cumulative exit activity charges for post-employment benefits, retention bonuses and incentives of \$12.1 million and accelerated depreciation and inventory and asset write-offs of \$27.3 million.

For the closures of the White Pigeon, Michigan CRB mill and the shutdown of the PM1 containerboard machine in West Monroe, Louisiana, the Company has incurred cumulative exit activity charges for post-employment benefits of \$2.3 million and accelerated depreciation and inventory and asset write-offs of \$16.6 million through December 31, 2020. The Company does not expect to incur any additional significant costs charges related to these closures.

For the closure of the facilities acquired from Greif, the Company has incurred cumulative exit activity charges for post-employment benefits of \$1.4 million and for accelerated amortization of operating lease assets of \$3.6 million through December 31, 2020. The Company does not expect to incur any additional significant costs charges related to these closures.

NOTE 21. SUBSEQUENT EVENTS

On January 14, 2021, the Company drew the \$425 million Incremental Term A-2 Facility and used the proceeds, together with cash on hand, to redeem its 4.75% Senior Notes due in 2021. For more information, see "Note 5 — Debt."

Report of Independent Registered Public Accounting Firm

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

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated balance sheet of Graphic Packaging Holding Company and its subsidiaries (the "Company") as of December 31, 2020, and the related consolidated statements of operations, comprehensive income, shareholders' equity and cash flows for the year then ended, including the related notes (collectively referred to as the "consolidated financial statements"). We also have audited the Company's internal control over financial reporting as of December 31, 2020, based on criteria established in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2020, and the results of its operations and its cash flows for the year then ended in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2020, based on criteria established in *Internal Control - Integrated Framework (2013)* issued by the COSO.

Basis for Opinions

The Company's management is responsible for these consolidated financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in Management's Report on Internal Control Over Financial Reporting appearing under Item 9A. Our responsibility is to express opinions on the Company's consolidated financial statements and on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (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 the consolidated financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audit of the consolidated financial statements included performing procedures to assess the risks of material misstatement of the consolidated 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 consolidated financial statements. Our audit also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audit also included performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinions.

As described in Management's Report on Internal Control Over Financial Reporting, management has excluded the Consumer Packaging Group business of Greif, Inc. and the folding carton facility of Quad/Graphics, Inc. from its assessment of internal control over financial reporting as of December 31, 2020 because they were acquired by the Company in purchase business combinations during 2020. We have also excluded the Consumer Packaging Group business of Greif, Inc. and the folding carton facility of Quad/Graphics, Inc. from our audit of internal control over financial reporting. The Consumer Packaging Group business of Greif, Inc. and the folding carton facility of Quad/Graphics, Inc. are wholly-owned subsidiaries whose total assets and total net sales excluded from management's assessment and our audit of internal control over financial reporting represent 1.2% and 0.7% of total assets, respectively and 2.5% and 1.2% of total net sales, respectively, of the related consolidated financial statement amounts as of and for the year ended December 31, 2020.

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 (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) 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 (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.

Critical Audit Matters

The critical audit matter communicated below is a matter arising from the current period audit of the consolidated financial statements that was communicated or required to be communicated to the audit committee and that (i) relates to accounts or disclosures that are material to the consolidated financial statements and (ii) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters 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 Assessment – Foodservice Reporting Unit

As described in Note 1 to the consolidated financial statements, the Company's consolidated goodwill balance was \$1,477.6 million as of December 31, 2020. As disclosed by management, the goodwill associated with the Foodservice reporting unit was \$42.9 million as of December 31, 2020. Management 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. An impairment charge is recognized for the amount by which the carrying amount of a reporting unit exceeds its fair value. 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. In estimating the fair value of the Foodservice reporting unit, management considers 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.

The principal considerations for our determination that performing procedures relating to the goodwill impairment assessment for the Foodservice reporting unit is a critical audit matter are the significant judgment by management when determining the estimated fair value of the reporting unit; this in turn led to a high degree of auditor judgment, subjectivity, and effort in performing procedures and evaluating management's significant assumptions related to economic projections of revenues and operating margins, the weighted average cost of capital, and the terminal year EBITDA multiple. In addition, the audit effort involved the use of professionals with specialized skill and knowledge.

Addressing the matter involved performing procedures and evaluating audit evidence in connection with forming our overall opinion on the consolidated financial statements. These procedures included testing the effectiveness of controls relating to management's goodwill impairment assessment, including controls over the valuation of the Company's Foodservice reporting unit. These procedures also included, among others, testing management's process for determining the fair value estimate; evaluating the appropriateness of the discounted cash flow analysis and evaluating the reasonableness of significant assumptions related to economic projections of revenues and operating margins, the weighted average cost of capital, and the terminal year EBITDA multiple. Evaluating assumptions related to economic projections of revenues and operating margins involved evaluating whether the assumptions used by management were reasonable considering (i) the current and past performance of the reporting unit, (ii) the consistency with external market and industry data, and (iii) whether these assumptions were consistent with evidence obtained in other areas of the audit. Professionals with specialized skill and knowledge were used to assist in evaluating the appropriateness of the discounted cash flow analysis and evaluating the reasonableness of the assumptions related to the weighted average cost of capital and terminal year EBITDA multiple.

/s/ PricewaterhouseCoopers LLP
Atlanta, Georgia
February 16, 2021

We have served as the Company's auditor since 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 sheet of Graphic Packaging Holding Company (the Company) as of December 31, 2019, the related consolidated statements of operations, comprehensive income, shareholders' equity and cash flows for each of the two 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 the results of its operations and its cash flows for each of the two years in the period ended December 31, 2019, in conformity with U.S. generally accepted accounting principles.

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.

/s/ Ernst & Young LLP

We served as the Company's auditor from 2008 to 2020.

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 December 31, 2020, 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 for the Consumer Packaging Group business of Greif Inc. ("Greif") and the folding carton facility of Quad/Graphics, Inc. ("Quad"), which were acquired by the Company in business combinations in 2020 and are included in the Company's results for the year ended December 31, 2020. As of December 31, 2020, the Greif and Quad acquisitions total assets represent 1.2% and 0.7% of the Company's consolidated total assets, respectively. Net Sales attributable to the Greif and Quad acquisitions represented 2.5% and 1.2% of the Company's consolidated Net Sales for the twelve months ended December 31, 2020, respectively.

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, 2020 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, 2020.

The effectiveness of the Company's internal control over financial reporting as of December 31, 2020 has been audited by PricewaterhouseCoopers LLP, an independent registered public accounting firm, as stated in their report which appears herein.

Changes in Internal Control Over Financial Reporting

There were no changes in our internal control over financial reporting during the quarter ended December 31, 2020 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

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 2021 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, 2020.

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 2021 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, 2020.

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 2021 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, 2020.

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 2021 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, 2020.

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 2021 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, 2020.

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, 2020
Consolidated Statements of Comprehensive Income for each of the three years in the period ended December 31, 2020
Consolidated Balance Sheets as of December 31, 2020, and 2019
Consolidated Statements of Shareholders' Equity for each of the three years in the period ended December 31, 2020
Consolidated Statements of Cash Flows for each of the three years in the period ended December 31, 2020
Notes to Consolidated Financial Statements
Reports of Independent Registered Public Accounting Firms
 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, 2020.

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.](#)
- 4.10 [Fourth Supplemental Indenture dated March 6, 2020, by and among Graphic Packaging International, LLC, the guarantors listed therein and U.S. Bank National Association, as Trustee, with respect to the 3.5% Senior Notes due 2028. Filed as Exhibit 4.2 to the Registrant's Form 8-K filed on March 6, 2020 and incorporated herein by reference.](#)
- 4.11 [Fifth Supplemental Indenture dated August 20, 2020, by and among Graphic Packaging International, LLC, the guarantors listed therein and U.S. Bank National Association, as Trustee, with respect to the 3.5% Senior Notes due 2029. Filed as Exhibit 4.2 to the Registrant's Form 8-K filed on August 31, 2020 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.](#)
- 10.5* [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 January 1, 2020.](#)

- 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 incorporated 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.](#)
- 10.13 [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.](#)
- 10.16 [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.](#)
- 10.25 [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.](#)
- 10.26 [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.
10.30	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.
10.31	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.
10.32	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.
10.35	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.
10.36	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 effective as of January 1, 2017. Filed as Exhibit 10.44 to the Registrant's Annual report on Form 10-K filed on February 11, 2020 and incorporated herein by reference.
10.45	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.
10.46	Incremental Facility Amendment dated October 15, 2020 by and among Graphic Packaging International, LLC, the guarantors listed therein, Bank of America, N.A., as Administrative Agent, and COBANK ACB, as the Incremental Term A-2 Facility Lead Arranger. Filed as Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed on October 20, 2020 and incorporated herein by reference.

10.47	Consent and Waiver Agreement dated as of August 6, 2020 by and among Graphic Packaging International Partners, LLC, Graphic Packaging Holding Company, 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 August 10, 2020 and incorporated herein by reference.
10.48	Consent and Waiver Agreement dated as of January 23, 2020 by and among Graphic Packaging International Partners, LLC, Graphic Packaging Holding Company, 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 28, 2020 and incorporated herein by reference.
10.49	Non-Participating Single Premium Group Annuity Contract Proposal dated January 16, 2020 by and among Graphic Packaging International, LLC, American General Life Insurance Company and The United States Life Insurance Company in the City of New York. Filed as Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q filed on April 21, 2020 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.
22.1	Guarantors and Issuers of Guaranteed Securities.
23.1	Consent of Independent Registered Public Accounting Firms.
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
104	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

ITEM 16. FORM 10-K SUMMARY

None.

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)

<u>/s/ Stephen R. Scherger</u> Stephen R. Scherger	Executive Vice President and Chief Financial Officer (Principal Financial Officer)	February 16, 2021
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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.

<u>/s/ Michael P. Doss</u> Michael P. Doss	President and Chief Executive Officer (Principal Executive Officer)	February 16, 2021
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<u>/s/ Stephen R. Scherger</u> Stephen R. Scherger	Executive Vice President and Chief Financial Officer (Principal Financial Officer)	February 16, 2021
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<u>/s/ Charles D. Lischer</u> Charles D. Lischer	Senior Vice President and Chief Accounting Officer (Principal Accounting Officer)	February 16, 2021
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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>
<u>/s/ Laurie Brlas</u> Laurie Brlas	Director	February 16, 2021
<u>/s/ David D. Campbell</u> David D. Campbell	Director	February 16, 2021
<u>/s/ Paul D. Carrico</u> Paul D. Carrico	Director	February 16, 2021
<u>/s/ Michael P. Doss</u> Michael P. Doss	Director, President and Chief Executive Officer	February 16, 2021
<u>/s/ Robert A. Hagemann</u> Robert A. Hagemann	Director	February 16, 2021
<u>/s/ Philip R. Martens</u> Philip R. Martens	Chairman of the Board	February 16, 2021
<u>/s/ Dean A. Scarborough</u> Dean A. Scarborough	Director	February 16, 2021
<u>/s/ Larry M. Venturelli</u> Larry M. Venturelli	Director	February 16, 2021
<u>/s/ Lynn A. Wentworth</u> Lynn A. Wentworth	Director	February 16, 2021



Management Incentive Plan

As Amended and Restated as of November 19, 2020

MANAGEMENT INCENTIVE PLAN

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I. PLAN PURPOSE:

The purpose of the Management Incentive Plan (the "Plan") is to offer a short-term incentive award opportunity for eligible global employees ("Participants") who make significant contributions to the growth and profitability of Graphic Packaging Holding Company (together with its subsidiaries, the "Company") and who demonstrate the performance that the Company desires to encourage. The Plan is designed to emphasize management's commitment to financial success and to a superior return on investment of its stockholders.

Each "Plan Year" for the Plan is January 1st to December 31st.

II. ELIGIBILITY

Regular full-time and regular part-time salaried employees will be advised of their eligibility for the Plan based on their position. In addition, eligibility for participation in the Plan for a Plan Year will be subject to the following conditions:

- i. Date of hire – A Participant must be employed by the Company on or before September 30 of the Plan Year in a Salaried, eligible position;
- ii. Active employment – A Participant must be an active employee on the date of the management incentive plan payout or if not active, terminated under a status that allows for payout.

Company employees who work outside the United States or who are not paid on a U.S.-based payroll ("International Employees") are eligible to participate in the Plan to the extent permitted under rules and guidelines for such participation as are established by the Compensation and Management Development Committee.

III. FINANCIAL PERFORMANCE:

The amounts of any award payouts under the Plan are substantially financially-driven and will be based in large part on the results of the Company as a whole and/or any subsidiary,

affiliate or business unit of the Company, or a combination of these results. One or a combination of the following performance measures may be used to measure such results:

- Net earnings or net income (before or after taxes)
- Earnings per share
- Net sales growth
- Net operating profit
- Return measures (including, but not limited to, return on assets, capital, equity or sales)
- Cash flow (including, but not limited to, operating cash flow, free cash flow, and cash flow return on capital)
- Earnings before or after taxes, interest, depreciation and/or amortization
- Gross or operating margins
- Productivity ratios
- Share price (including, but not limited to, growth measures and total shareholder return)
- Expense targets
- Margins
- Operating efficiency
- Customer satisfaction
- Working capital targets
- Cost eliminations;
- Debt reduction;
- Employee engagement and cultural effectiveness; and
- Ratios combining any of the performance measures.

The performance measures may, without limitation, be based upon the attainment of specified levels of performance under one or more of the measures described above during the Plan Year, relative to performance in prior periods, relative to pre-established targets, or relative to the performance of other entities (or indices covering multiple entities).

Each Participant's incentive award opportunity for any given Plan Year is based on the specific corporate performance measures established during the annual operating plan approval process and approved by the Company's Compensation and Management Development Committee for that Plan Year.

I. AWARD DETERMINATION AND APPROVAL:

The Plan is specifically designed to create substantial incentive opportunity for the achievement of the Company's most important financial goals and for continued service and sustained effort through the date of payment of any award (the "Payment Date"). After the conclusion of a Plan Year, the President and Chief Executive Officer ("CEO") will make a recommendation to the Compensation and Management Development Committee of Graphic Packaging Holding Company regarding the payout under the Plan. This recommendation will be based upon the President and CEO's assessment of the degree to which the Company achieved the performance measures applicable to that Plan Year. The Compensation and Management Development Committee approves the percentage of target payout under the Plan and the award payout amounts for those officers designated as Executive Officers by the Board of Directors, except for the President and CEO. Separately, the Company's Compensation and Management Development Committee will make a recommendation to the full Board of Directors regarding the payout under the Plan for the President and CEO.

II. INDIVIDUAL AND TEAM PERFORMANCE FACTORS:

Award opportunities (before individual performance factors) range from 0% to 200% of an individual's target award. Individual and team performance factors can further adjust a Participant's award payout by up to 35%, either up or down. All adjustments to award payouts based on individual performance factors are reviewed and approved by the President and CEO.

III. CURRENCY:

All financial results will be stated on a U.S. dollar reporting basis for purposes of determining actual performance against the applicable performance measures for any given Plan Year.

IV. PARTICIPATION LEVEL AND NEW PARTICIPANTS:

Participation level is defined as the “target” incentive award opportunity provided to Participants under the Plan. Each Participant's approved participation level is determined and communicated annually. The target incentive award opportunity is expressed as a percentage of a Participant's annual base salary as of December 31 of the applicable Plan Year.

Participation level changes during the Plan Year will result in any awards earned being calculated on a prorated basis for the number of days assigned to each participation level during that Plan Year.

New Participants shall have any awards earned prorated by the number of days of participation in their first Plan Year, subject to eligibility guidelines.

V. REVISIONS TO PLAN:

Revisions to applicable performance goals and the resulting payout percentage for any given Plan Year may be considered to recognize circumstances beyond the control of Participants. Such revisions will be rare in practice and only respond to extraordinary and unforeseeable events. It is understood that revisions may adjust for positive windfalls as well as negative shortfalls. Revisions must be approved by the President and CEO of the Company, the Compensation and Management Development Committee of the Board of Directors and the full Board of Directors.

VI. FORM AND TIMING OF AWARDS:

All awards under the Plan will be paid in cash and in local currency. Awards will be subject to all applicable social insurance, income tax and other withholding requirements effective at the time of payment.

Awards paid to Participants in hyper-inflationary countries may be monetarily corrected to adjust for currency devaluation between the close of the plan year and the award payment date.

All awards will be paid between January 2 and March 15 of the calendar year following the close of each Plan Year.

I. EMPLOYEES ON LEAVE:

Award payouts for employees who, during the plan year, have been on a paid or unpaid leave of absence pursuant to the Family and Medical Leave Act (“FMLA”), the Company’s workers’ compensation program, the Company’s short-term disability policy, or any other type of leave will be prorated to exclude the time away from work.

II. TERMINATION, DEATH, OR DISABILITY:

Awards for a given Plan Year will be paid only to Participants who are actually employed on the Payment Date. A Participant whose employment terminates, whether by resignation or by discharge, for any reason (or no reason) prior to the Payment Date for a Plan Year shall not earn or have any right to an award from the Plan for such Plan Year and shall not be deemed to have earned or become vested in any such award, except for Participants (i) who terminate employment due to death, disability, or retirement (“retirement” for this purpose means an employee whose age on the effective date of termination is at least 55 and whose combination of age and years of service on that date is equal to or greater than 65); or (ii) who are eligible for benefits under the Graphic Packaging International, Inc. Supplemental Unemployment Benefits Plan or the Graphic Packaging International, Inc. Executive Severance Plan, under Employment Agreements, and who sign and return (and do not revoke) a Release under that Plan (“Special Circumstance Participants”). Under this provision, Special Circumstance Participants may be paid a pro rata portion of any award earned based on their date of termination, and all such prorated payments, if any, will be made at the time and in the form received by all other Participants. Notwithstanding the foregoing, any Participant who is entitled to a payment in lieu of annual incentive compensation for the Plan Year upon termination of employment under an employment agreement or any similar arrangement with the Company shall not also be entitled to an award under the Plan for such year.

III. MIP TOP-UP AWARDS

In addition to the annual incentive award opportunities described in this Plan, the Company also offers incentive award opportunities to recognize and reward adoption of specific growth behaviors and/or initiatives adopted by the Company to drive the Company's Growth Strategy & Vision 2025. These awards (referred to as MIP "Top-Up Awards") will offer highly selective and differentiated incentive award opportunities during each calendar year for Plan participants that are over and above amounts that may otherwise be paid as annual incentive awards under this Plan. Top-Up Awards may be paid to selected Plan Participants in the following job classifications, and amounts:

- Manager/Senior Manager (job grades 96-98): \$20,000
- Directors and above (job grades 99-103, excluding job grades 104-110): \$40,000.

The following procedure will be used to identify Top-Up Award recipients. Candidates for a Top-Up Award may be nominated each year by direct reports to the Executive Leadership Team. Potential candidates will be evaluated by applying a rigorous process based on agreed-upon behaviors. The Executive Leadership Team will consider the Top-Up Award recommendations and will make final recommendations to the President and CEO for review and approval.

Top-Up Awards approved by the President and CEO during each year pursuant to this process will be paid to each recipient in a single lump-sum cash payment in the local currency between May 1 and June 30 of such year. In order to be eligible for a Top-Up Award payout, a selected Participant must remain an active employee of the Company on the date the Top-Up Award payout is made, or if not active, the Participant must have terminated under a status that allows for payout with respect to Special Circumstance Participants as defined in paragraph XI of this Plan document.

I. **OTHER PLAN DESIGN CONSIDERATIONS:**

The Plan will be administered by the EVP-Human Resources. Each determination of financial performance or other action made or taken by the Compensation and Management Development Committee hereunder will be final and conclusive for all purposes and upon all persons.

No Participant shall have the right to anticipate, alienate, sell, transfer, assign, pledge, or encumber his or her right to receive any award payable under the Plan.

No Participant shall have any lien on any assets of the Company by reason of any award payable under the Plan.

The Company specifically reserves the right to amend, modify, or terminate the Plan at any time for any reason. Neither the Plan nor any award under the Plan shall create any employment contract or imply any relationship between the Company and any Participant, other than employment terminable by either party at will.

The terms of the Plan are governed by the laws of the State of Georgia without regard to conflict of laws principles.

The Company reserves the right for the President and Chief Executive Officer to recommend to the Compensation and Management Development Committee and Board of Directors of Graphic Packaging Holding Company that the Company increase, decrease, or eliminate any and all Plan awards, including but not limited to any individual award, if, in the exercise of his business judgment, such modifications would be in the best interest of the Company. The Board of Directors of Graphic Packaging Holding Company (with respect to an award to the President and Chief Executive Officer) and the Compensation and Management Development Committee (with respect to all other awards) shall have absolute discretion in determining whether or not to issue an award and in determining the amount of each award paid.

I. INTERNAL REVENUE CODE SECTION 409A:

The Plan is designed and intended to provide only for payments that are exempt from Section 409A of the Internal Revenue Code (the "Code") under the exception in Treasury Regulation Section 1.409A-1(b)(4) for certain short-term deferrals. Nevertheless, if any amount under the Plan is subject to 409A of the Code, the Plan shall be interpreted and administered so as not to cause the acceleration of (or the imposition of additional) taxes provide for in Section 409A of the Code.

II. CLAWBACKS:

If the Company is required to prepare an accounting restatement due to the material non-compliance of the Company, as a result of misconduct, with any financial reporting requirement under the securities laws, and if the Participant (i) is determined by the Compensation and Management Development Committee to have knowingly or grossly negligently engaged in the misconduct, or knowingly or grossly negligently failed to prevent the misconduct, or (ii) is one of the individuals subject to automatic forfeiture under Section 304 of the Sarbanes-Oxley Act of 2002 or any other regulation, the Participant shall reimburse the Company the amount of any payment in settlement of an award earned or accrued under this Plan during the twelve month period following the first public issuance or filing with the United States Securities and Exchange Commission (whichever just occurred) of the financial document embodying such financial reporting requirement. In addition, any officer of the Company subject to Section 16 of the Securities Exchange Act, as amended, who has received a larger payment in settlement of an award earned or accrued under this Plan than would have been paid or accrued pursuant to an accounting restatement arising as a result of misconduct as set forth above (an "Excess Award"), shall reimburse the Company the amount of any Excess Award, as determined by the Compensation and Management Development Committee.

In addition, the Participant's rights, payments and benefits with respect to an award granted pursuant to this Plan may be subject to reduction, cancellation, forfeiture or recoupment upon the occurrence of the Participant's termination for cause, violation of material Company, its Affiliates, and/or its Subsidiaries policies, breach of non-competition, confidentiality, or other restrictive covenants that apply to the Participant, or other conduct

by the Participant that is detrimental to the business or reputation of the Company, its Affiliates and/or its Subsidiaries.

III. EFFECTIVENESS OF AMENDMENT AND RESTATEMENT:

The Management Incentive Plan as amended and restated as set forth herein, shall be effective for the 2020 Plan year and thereafter until terminated or further amended by the Compensation and Management Development Committee of the Board of Directors of the Company.

* * * *

SUBSIDIARIES OF THE REGISTRANT

Subsidiary Name	Jurisdiction of Incorporation
Altivity Packaging Grupo, S. de R.L. de C.V.	Mexico
Altivity Packaging Servicios, S. de R.L. de C.V.	Mexico
Bond Project Holdings, LLC	Delaware
Field Container Queretaro (USA), L.L.C.	Delaware
Gbox SA de C.V.	Mexico
GPI Converting, LLC	Delaware
GPI Funding LLC	Delaware
GPI Funding II, LLC	Delaware
GPI Holding I, Inc.	Delaware
GPI Holding II, Inc.	Delaware
GPI Holding III, LLC	Delaware
GPI Netherlands Finance B.V.	Netherlands
GPI Scotland Limited	UK
Graphic Packaging Flexible Holdings, LLC	Delaware
Graphic Packaging International (Shanghai) Co., Ltd.	China
Graphic Packaging International Australia Converting Limited	Australia
Graphic Packaging International Australia Pty Limited	Australia
Graphic Packaging International Bardon Limited	UK
Graphic Packaging International Box Holdings Limited	UK
Graphic Packaging International Bremen GmbH	Germany
Graphic Packaging International Canada, ULC	British Columbia
Graphic Packaging International Cartons Santander, S.A.	Spain
Graphic Packaging International Distribution Limited	UK
Graphic Packaging International do Brasil - Embalagens Ltda.	Brazil
Graphic Packaging International Enterprises, LLC	Delaware
Graphic Packaging International Europe Carton Design Limited	UK
Graphic Packaging International Europe Cartons B.V.	Netherlands
Graphic Packaging International Europe Finance & Real Estate B.V.	Netherlands
Graphic Packaging International Europe Holdings B.V.	Netherlands
Graphic Packaging International Europe Netherlands B.V.	Netherlands
Graphic Packaging International Europe Netherlands Holdings B.V.	Netherlands
Graphic Packaging International Europe N.V.	Belgium
Graphic Packaging International Europe Spain Holding, S.L.	Spain
Graphic Packaging International Europe UK Holdings Limited	UK
Graphic Packaging International Europe UK Limited	UK
Graphic Packaging International Foodservice Europe Ltd	UK
Graphic Packaging International France	France
Graphic Packaging International Gateshead Limited	UK
Graphic Packaging International Holding Company, LLC	Delaware
Graphic Packaging International Holdings Mexico, S. de R.L. de C.V.	Mexico
Graphic Packaging International Ireland Designated Activity Company	Ireland
Graphic Packaging International Japan Ltd.	Japan
Graphic Packaging International Limited	UK
Graphic Packaging International, LLC	Delaware

Graphic Packaging International Mexicana, S. de R.L. de C.V.	Mexico
Graphic Packaging International New Zealand Limited	New Zealand
Graphic Packaging International Operadora de Mexico, S. de R.L. de C.V.	Mexico
Graphic Packaging International Partners, LLC	Delaware
Graphic Packaging International Philanthropic Fund	Delaware
Graphic Packaging International S.p.A.	Italy
Graphic Packaging International Servicios, S. de R.L. de C.V.	Mexico
Graphic Packaging International Spain, S.A.	Spain
Graphic Packaging International UK Finance Limited	UK
Graphic Packaging International US Finance LLC	Delaware
Graphic Packaging UK Pension Trustee Company Ltd.	UK
Handschy Holdings, LLC	Delaware
Handschy Industries, LLC	Delaware
New Materials Limited	UK
Print Design & Graphics Limited	UK
PrinTech Systems B.V.	Netherlands
Rengo Riverwood Packaging, Limited	Japan
Riverdale Industries, LLC	Delaware
Riverwood International Pension Trustee Company Ltd.	UK
Shoo 553 Limited	UK
Spur Development, LLC	Delaware

Guarantors and Issuers of Guaranteed Securities

Each of the following entities has fully and unconditionally guaranteed the 4.75% Senior Notes due 2021 and the 4.875% Senior Notes due 2022 issued by Graphic Packaging International, Inc. (predecessor to Graphic Packaging International, LLC):

Name of Guarantor	Role	Jurisdiction of Incorporation or Organization
Graphic Packaging Holding Company	Parent Guarantor	Delaware
Graphic Packaging Corporation*	Parent Guarantor	Delaware
Bluegrass Container Canada Holdings, LLC*	Subsidiary Guarantor	Delaware
Bluegrass Labels Company, LLC*	Subsidiary Guarantor	Delaware
Field Container Queretaro (USA), L.L.C.	Subsidiary Guarantor	Delaware
Handschy Holdings, LLC	Subsidiary Guarantor	Delaware
Handschy Industries, LLC	Subsidiary Guarantor	Delaware
Riverdale Industries, LLC	Subsidiary Guarantor	Delaware

Each of the following entities has fully and unconditionally guaranteed the 4.125% Senior Notes due 2024 issued by Graphic Packaging International, Inc. (predecessor to Graphic Packaging International, LLC):

Name of Guarantor Subsidiary	Role	Jurisdiction of Incorporation or Organization
Graphic Packaging Holding Company	Parent Guarantor	Delaware
Field Container Queretaro (USA), L.L.C.	Subsidiary Guarantor	Delaware
Handschy Holdings, LLC	Subsidiary Guarantor	Delaware
Handschy Industries, LLC	Subsidiary Guarantor	Delaware
Riverdale Industries, LLC	Subsidiary Guarantor	Delaware
GPI WG Acquisition Sub, LLC*	Subsidiary Guarantor	Delaware
Walter G. Anderson, Inc.*	Subsidiary Guarantor	Minnesota

*Each of these entities has been merged out of existence or sold as of 12/31/2020.

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the Registration Statements on Form S-3 (No. 333-240119) and on Form S-8 (Nos. 333-234291 and 333-197677) of Graphic Packaging Holding Company of our report dated February 16, 2021 relating to the financial statements and the effectiveness of internal control over financial reporting, which appears in this Form 10-K.

/s/ PricewaterhouseCoopers LLP
Atlanta, Georgia
February 16, 2021

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in the following Registration Statements:

- (1) Registration Statement (Form S-3 No. 333-240119) of Graphic Packaging Holding Company,
- (2) Registration Statement (Form S-8 No. 333-234291) of Graphic Packaging Holding Company pertaining to the Graphic Packaging Holding Company 2014 Omnibus Stock and Incentive Compensation Plan, and
- (3) Registration Statement (Form S-8 No. 333-197677) of Graphic Packaging Holding Company pertaining to the Graphic Packaging Holding Company 2014 Omnibus Stock and Incentive Compensation Plan;

of our report dated February 10, 2020, with respect to the consolidated financial statements of Graphic Packaging Holding Company included in this Annual Report (Form 10-K) of Graphic Packaging Holding Company for the year ended December 31, 2020.

/s/ Ernst & Young LLP

Atlanta, Georgia
February 16, 2021

CERTIFICATION

I, Michael P. Doss certify that:

1. I have reviewed this Annual Report on Form 10-K of Graphic Packaging Holding Company;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

/s/ Michael P. Doss

Michael P. Doss,
President and Chief Executive Officer
(Principal Executive Officer)
February 16, 2021

CERTIFICATION

I, Stephen R. Scherger certify that:

1. I have reviewed this Annual Report on Form 10-K of Graphic Packaging Holding Company;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

/s/ Stephen R. Scherger

Stephen R Scherger
Executive Vice President and Chief Financial Officer
(Principal Financial Officer)
February 16, 2021

CERTIFICATION

Pursuant to 18 United States Code Section 1350,

As adopted pursuant to Section 906 of the

Sarbanes-Oxley Act of 2002

The undersigned hereby certifies that, to my knowledge, the Annual Report on Form 10-K for the period ended December 31, 2020 of Graphic Packaging Holding Company (the "Company") filed with the Securities and Exchange Commission on the date hereof fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934 and that the information contained in such report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ Michael P. Doss

Name: Michael P. Doss,

Title: President and Chief Executive Officer

February 16, 2021

CERTIFICATION

Pursuant to 18 United States Code Section 1350,

As adopted pursuant to Section 906 of the

Sarbanes-Oxley Act of 2002

The undersigned hereby certifies that, to my knowledge, the Annual Report on Form 10-K for the period ended December 31, 2020 of Graphic Packaging Holding Company (the "Company") filed with the Securities and Exchange Commission on the date hereof fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934 and that the information contained in such report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ Stephen R. Scherger

Name: Stephen R. Scherger

Title: Executive Vice President and Chief Financial Officer

February 16, 2021